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GREENHOUSE GAS OFFSET PROJECTS AND CARBON MARKETS

Braiding Environmental Knowledge
Brokenhead Ojibway First Nation
March 20, 2024



Canada

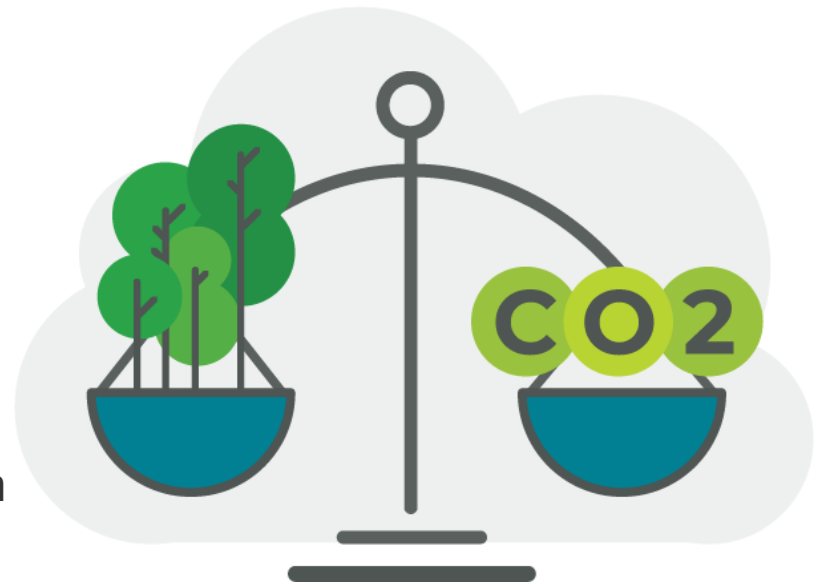


GHGs, OFFSET CREDITS AND CARBON MARKETS: THE BASICS

OFFSET CREDITS

A GHG offset credit (also called a carbon credit):

- is a tradeable unit
- represents one tonne of reduced GHG emissions or GHGs removed from the atmosphere
- is issued to project proponents that voluntarily reduce GHGs if they meet the requirements of a GHG offset system
- can be sold in a carbon market .



CARBON MARKETS



- A carbon market refers to the buying and selling of tradeable units that represent GHG emissions, reductions or removals.
- Organizations or individuals buy tradeable units in a carbon market in order to meet a GHG emissions limit or objective.
- Price is based on factors such as supply and demand, the type and quality of tradeable unit, and the risk attached to them.

WHAT IS AN OFFSET SYSTEM?

- An offset system is a set of rules / processes for how offset credits can be generated
- Can also be called a GHG Offset Program or Standard;
- Most systems have a registry that will track offset projects and record ownership of credits and assign serial numbers to each verified offset credit
- Examples:
 - Canada's GHG Offset Credit System
 - Alberta Emission Offset System
 - Verra's Verified Carbon Standard (VCS) Program
 - Gold Standard



COMMON PRINCIPLES OF OFFSET SYSTEMS

- Common principles of offset systems are that in order to generate offset credits, GHG reductions must be:
 - **Real:** from a specific measurable activity
 - **Additional:** beyond business-as-usual
 - **Quantifiable:** accurately measured and calculated
 - **Permanent:** GHG reductions must be maintained
 - **Unique:** only registered in one system and credited once
 - **Verifiable:** any claims made must be able to be confirmed by a third party



POTENTIAL BENEFITS OF OFFSET PROJECTS

- Revenue stream
- Employment opportunities related to offset project implementation and monitoring
- Climate change mitigation
- May have co-benefits for soil/water quality, habitat and land conservation
- Reinforce land steward relationship
- Does not exclude hunting, use of foods and medicines





CANADA'S GHG OFFSET CREDIT SYSTEM

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- [Canada's Greenhouse Gas Offset Credit System](#) was launched on June 8, 2022 as part of Canada's 2030 Emissions Reduction Plan.
- Participation in the system is voluntary.
- In order to generate credits, proponent **must meet all the requirements of the Regulations and the applicable protocol.**

KEY ELEMENTS OF CANADA'S GHG OFFSET CREDIT SYSTEM

1

Offset Credit System Regulations

Contains rules to establish and operationalize the system, and the general requirements applicable to all project types

2

Federal Offset Protocols

Sets out requirements and the approach for quantifying GHG reductions for a given project type

3

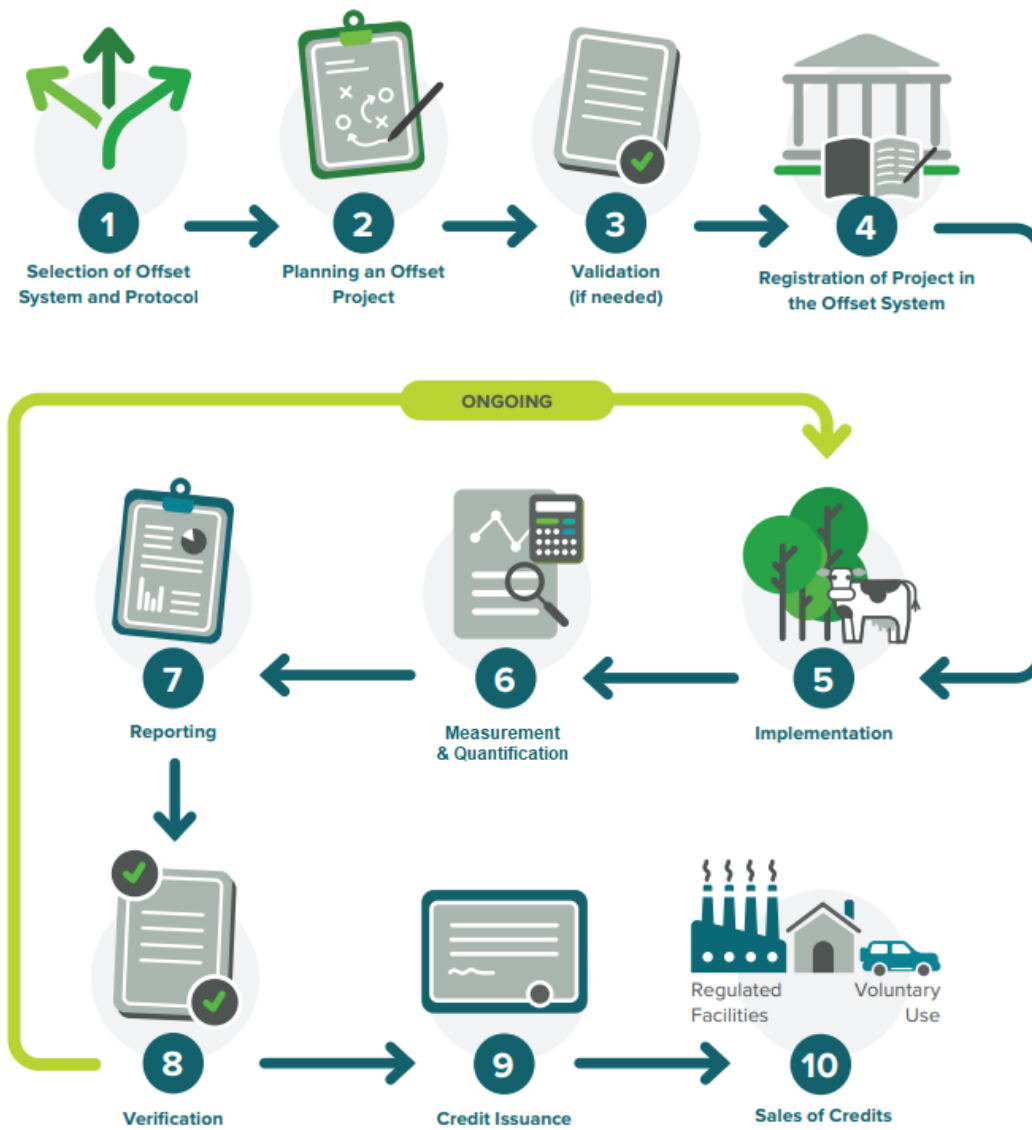
Credit and Tracking System (CATS)

Enables registration of offset projects, issuance and tracking of offset credits, and sharing of key information through a public registry

FEDERAL OFFSET PROTOCOLS

- Developed by ECCC with input from experts within and outside government.
- Published federal offset protocols :
 - *Landfill Methane Recovery and Destruction, Version 1.1*
 - *Reducing GHG Emissions from Refrigeration Systems, Version 1.0*
- Protocols currently under development:
 - Improved Forest Management on Private Land (Draft published)
 - Livestock Feed Management (Draft published)
 - Direct Air Carbon Dioxide Capture and Sequestration
 - Enhanced Soil Organic Carbon
 - Avoidance of Manure Methane Emissions through Anaerobic Digestion and Other Treatments
- ECCC will be initiating the development of an Improved Forest Management on Public Land protocol in 2024.

STEPS IN AN OFFSET PROJECT



INFORMATION RESOURCES

- Information on the federal GHG Offset Credit System on the ECCC website
- GHG Offsets Toolkit available at Canada.ca/GHG-Offsets-Toolkit.
 - Available in English, French, Ojibwe, Mi'kmaq and Woods Cree
 - Future potential to expand and publish in additional languages
 - Contains links to other related resources



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