

# Saskatchewan Greenhouse Gas Offset Program Proposal Paper

February 2021

## Table of Contents

Introduction and Background .....	3
Proposed Approach.....	4
Program Eligibility.....	5
Start Dates .....	5
Approved Offset Protocols.....	7
Eligible GHGs and Global Warming Potential.....	8
Location .....	8
Additionality .....	8
Aggregation .....	10
Crediting Periods .....	10
Crediting Period Extensions .....	11
Program Rules and Administration .....	11
Project Registration.....	11
Verification .....	12
Validation .....	13
Ownership .....	13
Reporting Periods.....	13
Permanence and Risk of Reversal.....	14
Record Retention.....	15
Public Information.....	15
Offset Protocols .....	16
Protocol Development .....	16
Protocol Requirements .....	17
Registry and Credit Use .....	17
The Greenhouse Gas Credit Registry .....	17
Public Reporting .....	18
Asking Prices.....	18—
Credit Tracking.....	19
Classification of Offset Credits.....	19
Participation in the Program.....	20
External Trade .....	20
Expiration of Offset Credits.....	20
Appendix A: Summary of Saskatchewan’s Proposed Offset Program .....	22
Appendix B: Greenhouse Gases and Global Warming Potentials.....	24
Glossary.....	25

## Introduction and Background

The Government of Saskatchewan is developing a provincial greenhouse gas (GHG) offset program to provide recognition for non-regulated reductions in provincial GHG emissions<sup>1</sup>. The program will issue offset credits to project developers who use approved methodologies to sequester or reduce GHG emissions. Those offset credits can then be sold to individuals or organizations to account for their own GHG emissions. Offset credits created within this program will serve as a compliance option for regulated emitters subject to *The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations* (the Regulations). Implementing a provincial offset program fulfills the commitment to incentivize actions that sequester carbon or reduce emissions, outlined in Saskatchewan's [Prairie Resilience](#) climate change strategy, and increases opportunities for Saskatchewan's participation in future national and international markets for GHG credits.

This proposal paper presents Saskatchewan's key offset program elements refined based on feedback received to date. It outlines the potential rules and criteria for the administration and operation of the program. The offset program presented in this paper reflects what we heard in past engagement sessions, best practices in offset program development, and Saskatchewan's economic and regulatory environment.

The distribution of this paper continues the offset engagement process that the ministry began in 2019 with the distribution of the *Saskatchewan Offset Framework Discussion Paper*. Feedback from the 2019 engagement is summarized in the [Offset Program Engagement Summary Report](#). The ministry intended to conduct further engagement throughout 2020 and implement the provincial offset program in 2021. However, due to the extraordinary circumstances caused by the COVID-19 pandemic the ministry has deferred the implementation of the offset program to 2022. This will ensure sufficient time for engagement and development of a robust and credible offset program.

The ministry values public input and welcomes feedback on all aspects of the offset program. The ministry has planned the following engagement activities to gather input on the offset program:

- **Web-based engagement session:**

The ministry is holding web-based engagement sessions in March 2021 to discuss the proposed approach for Saskatchewan's offset program with interested participants.

- **Written Feedback:**

In addition to comments received during the web-based engagement sessions, the written feedback on this paper will be used to support decision-makers and help refine the requirements of Saskatchewan's GHG offset program. Please provide any feedback you have on the proposed offset program until **April 16, 2021** to [prairie.resilience@gov.sk.ca](mailto:prairie.resilience@gov.sk.ca). When submitting written comments, use the subject line: Saskatchewan Offset Credit Program 2021.

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<sup>1</sup> Throughout this paper, use of the term "GHG emission reductions" is used to refer to both GHG emission reductions and GHG removal enhancements that may be achieved by offset projects.

## Proposed Approach

Saskatchewan's offset program will provide incentives for developing clean technologies and new economic opportunities. Saskatchewan's offset program is intended to achieve two objectives:

1. Provide a flexible compliance mechanism for provincially regulated emitters.
2. Incent incremental GHG reductions across the province, particularly in sectors not covered by the Regulations.

Because uncertainty can present a barrier to investment in offset projects, credibility and equivalency to other Canadian offset programs have been considered within the program design. While there will be some demand for offset credits within Saskatchewan, the greater opportunity for offset project developers will be selling their credits outside provincial borders and participating in other offset programs. Expanding markets available to offset project developers in Saskatchewan can help achieve greater GHG emission reductions within the province. Saskatchewan offset credits must be comparable and equivalent to offset credits throughout Canada to participate in markets elsewhere.

There have been significant developments in Canadian GHG programs since the ministry first engaged on a provincial offset program. In June 2019, Environment and Climate Change Canada (ECCC) finalized the federal *Output-based Pricing System (OBPS) Regulations*<sup>2</sup>, including criteria that allow provincially generated offset credits to be used within the federal OBPS. In August 2020, ECCC announced that offset programs in Alberta and British Columbia satisfy the federal criteria. In September 2020, ECCC also announced the acceptance of climate change plans in Ontario and New Brunswick, allowing these jurisdictions to exit the federal OBPS once their programs are established.

### **The Saskatchewan offset program will align with the rules and criteria used within current Canadian offset programs.**

Criteria applied in provinces such as British Columbia, Alberta, and Quebec<sup>3</sup> as well as the criteria proposed by ECCC for the federal offset system, promote principles based on the creation of real, verifiable, and additional offset credits. Upholding these same principles within the Saskatchewan offset program will provide the credibility needed to permit participation in other offset programs and future international markets as well as justify the use of Saskatchewan offsets by provincially regulated emitters.

**Real:** an offset credit is real if it represents an actual net reduction or sequestration of emissions.

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<sup>2</sup> The federal *OBPS Regulations* were published in Canada Gazette, Part II, Volume 153, Number 14.

<sup>3</sup> Ontario implemented regulations for an offset program in 2018 that closely aligned with the program in Quebec. However, the act under which these regulations were implemented was repealed later that same year.

**Verifiable:** the project should be well documented and transparent and involve the review of an offset project report by an independent third-party verifier.

**Additional:** requires that an activity generates incremental GHG emission reductions or removal enhancements and go beyond what is required by law to earn offset credits.

Ensuring credits are real and verifiable can be achieved by using appropriate quantification methods and data management processes. Ensuring credits are additional means that activities required by law, and those that already reflect business-as-usual practices will not be eligible for the program. Some existing activities, such as zero tillage farming practices, may not be eligible to earn offset credits, even if they continue to reduce GHG emissions year-over-year.

The remainder of this paper outlines the potential methodologies and administrative aspects of Saskatchewan's offset program. This includes program eligibility, program rules, administration, offset protocols, credit registry, and credit use. A summary of the proposed program can be found in Appendix A.

## Program Eligibility

### Start Dates

There are typically three types of start dates identified in an offset program: the program start date, the activity start date, and the crediting start date. Each start date is uniquely defined. Together, they are used to determine an activity's eligibility as an offset project in the offset program and when an eligible offset project can begin generating offset credits.

**Program start date** determines whether or not a project is eligible to participate in the program. It does not determine when an offset project can begin generating offset credits. Program start dates are often set to align with the date when the offset program was first announced.

**The ministry is proposing that Saskatchewan's offset program start date be May 20, 2010. This aligns with when *The Management and Reduction of Greenhouse Gases Act*<sup>4</sup> first received royal assent, and was the first indication that offset credits could be generated in Saskatchewan.**

For the Saskatchewan offset program, demonstrating offset project credibility through verifiable records and data that can substantiate GHG reduction claims is crucial. The ministry has proposed the program start date of May 20, 2010, to provide greater opportunity for projects to participate in the offset program. Alternatively, the program start date could align with **December 4, 2017**, to coincide with Saskatchewan's release of *Prairie Resilience*, both of which provide for the generation and use of offset credits.

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<sup>4</sup> While the original *Management and Reduction of Greenhouse Gases Act* received royal assent, it was not proclaimed and so never brought into force.

**Activity start date** identifies when a project first began. It is compared to the program start date to determine if the project is eligible for the offset program. The activity start date must occur on or after the program start date for the project to be eligible for the offset program.

For example, the activity start date for a landfill gas capture and combustion project could be identified as the date that the project first began capturing methane gas at the landfill. If the landfill gas project had an activity start date of June 1, 2012, and met all other criteria for the program, it would be eligible for the offset program. However, if the activity start date is June 1, 2008, the landfill gas project would not be eligible for the offset program because the activity start date occurs before May 2010, the proposed program start date.

**Crediting start date** determines the date from which an offset project can generate offset credits. The crediting start date for an offset project must occur on or after the project's activity start date and signals the start of the crediting period for a project.

Some programs allow crediting start dates to predate the implementation of the offset program. This allows offset project developers to generate credits for early actions taken to reduce GHG emissions. With a proposed program start date of May 20, 2010, it is unlikely that offset projects will have the necessary, verifiable records to substantiate GHG reduction claims for actions occurring back to 2010.

**Recognizing that the release of *Prairie Resilience* brought renewed interest in offset project development to the province and the release date would allow for recognition to early actors without compromising program credibility, the ministry proposes to allow the generation of offset credits for actions that occurred on or after January 1, 2018.**

Project developers seeking recognition for early action would have a burden of proof, just like all project developers, to demonstrate that the project satisfies all program requirements to prevent questionable credits from entering the program. Further, any risk related to the generation of credits from early actions can be mitigated in Saskatchewan's offset program by imposing the proposed program requirements and proper protocol design, including robust quantification methods and project verification.

The following table outlines the proposed start date requirements for the offset program, where '≤' indicates that the date on the right side of the sign occurs on or after the date on the left side. Included in this table are project example to illustrate activity and crediting start dates requirements for proposed projects. In summary, an offset project may not be eligible for the offset program if the activity start date occurs before May 2010, which is the proposed program start date. Credits may not be generated for eligible offset programs for actions taken earlier than January 2018.

<b>Program Start Date</b>	<b>≤</b>	<b>Activity Start Date</b>	<b>≤</b>	<b>Crediting Start Date</b>
The ministry proposes an offset program start date of May 20, 2010.		Unique to each project and identifies when a project first began.		The ministry proposes an offset crediting date of January 1, 2018.
<b>Example 1 – Landfill Gas Capture and Combustion</b>				
<b>May 20, 2010</b>		Eligible landfill gas capture and combustion project has an activity start date of <b>June 1, 2012.</b>		The project developer may be able to generate credits for actions taken as early as <b>January 1, 2018.</b>
<b>Example 2 – Aerobic Composting Project</b>				
<b>May 20, 2010</b>		Eligible aerobic composting project has an activity start date of <b>September 1, 2019.</b>		The aerobic composting project cannot earn credits before it's activity start date, but could generate credits starting on its activity start date of <b>September 1, 2019.</b>

### Approved Offset Protocols

The ministry recognizes that there are numerous opportunities to achieve GHG emission reductions and removal enhancements in Saskatchewan. However, to generate offset credits, offset projects must follow an applicable offset protocol. The methodologies in such offset protocols must be supported by scientific evidence that allows for accurate and verifiable quantification of GHG emissions and removals. This will ensure that offset credits created from similar projects are comparable and all offset credits created are credible. While activities may be backed by sound science, they must also satisfy all other offset program requirements, including additionality.

**Offset protocols will need to be approved by the ministry to ensure they meet the requirements of Saskatchewan's offset program.**

**Offset projects will only be eligible for the program if an applicable offset protocol is approved for use in the program.**

**Offset protocols that may be developed for and used in other offset programs cannot generate offset credits for Saskatchewan's offset program.**

You can find additional information on proposed requirements for offset protocols in the Offset Protocols section below.

## Eligible GHGs and Global Warming Potential

Offset programs must identify which GHGs are eligible to generate offset credits to define a clear scope for the program and provide certainty for offset project developers. The global warming potential<sup>5</sup> (GWP) associated with each eligible GHG must also be determined. Saskatchewan's GHG reporting regulations and the Regulations for large emitters currently cover the same set of GHGs as those used by ECCC in the National Greenhouse Gas Inventory and the National Inventory Report<sup>6</sup>. Consistent use of eligible GHGs and GWPs across programs will allow for uniform accounting of emissions at the provincial and national levels. This will be an important prerequisite to any future recognition and trading of offset credits. The list of eligible GHGs and GWPs may be revised in the future in parallel with changes in other provincial GHG programs

**Saskatchewan's offset program will adopt the same set of GHGs and associated GWPs as Saskatchewan's GHG reporting and large emitter regulations.**

The proposed list of eligible GHG species and their respective GWPs can be found in Appendix B.

## Location

**The ministry will only recognize and allow offset projects located in the province to generate offset credits in Saskatchewan's offset program.**

Recognizing GHG emission reductions achieved outside Saskatchewan would be complicated to administer and enforce, and increase the risk of double-counting GHG emissions across programs and borders. There is an increasing opportunity for project developers in other jurisdictions to generate offset credits through other offset programs, such as ECCC's planned federal offset system. Hence, there is less of a need for Saskatchewan's offset program to recognize offset projects that occur in other jurisdictions.

## Additionality

Recall that additionality is one of the main principles on which offset programs<sup>7</sup> and similar initiatives, like the Clean Development Mechanism developed under the Kyoto Protocol<sup>8</sup>, are based. Additionality requires that offset credits are only awarded for activities that are not required to occur and result in GHG reductions beyond those that would occur in business-as-usual scenarios. The use of additionality

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<sup>5</sup> GWPs convert tonnes of GHGs into a common unit of tonnes of carbon dioxide-equivalent (CO<sub>2</sub>e) emissions. This allows for the comparison of different types of GHGs and facilitates the calculation of the amount of GHG emission reductions achieved by an offset project.

<sup>6</sup> The set of GHGs and GWPs used by ECCC for the National Greenhouse Gas Inventory and the National Inventory Report are taken from the Intergovernmental Panel On Climate Change Fourth Assessment Report which was adopted by the United Nations Framework Convention on Climate Change.

<sup>7</sup> [https://ghginstitute.org/wp-content/uploads/2010/01/OQI\\_Ensuring\\_Offset\\_Quality\\_Exec\\_Sum\\_Jul08.pdf](https://ghginstitute.org/wp-content/uploads/2010/01/OQI_Ensuring_Offset_Quality_Exec_Sum_Jul08.pdf)

<sup>8</sup> [https://unfccc.int/files/cooperation\\_and\\_support/capacity\\_building/application/pdf/unepcdmintro.pdf](https://unfccc.int/files/cooperation_and_support/capacity_building/application/pdf/unepcdmintro.pdf)

in offset programs such as Alberta and California<sup>9</sup> has been studied, and while there is debate as to how additionality should be implemented in offset programs, its necessity is clear. To ensure that Saskatchewan offset credits are both credible and create the opportunity for Saskatchewan to link with existing and future programs in other jurisdictions, Saskatchewan's offset program must align with the criteria and requirements of those other programs.

**Saskatchewan's offset program will require offset activities satisfy the following set of additionality criteria.**

- 1. Offset credit cannot be awarded for an activity that is required by law.** This includes GHG emission reductions required by regulation, such as Saskatchewan's large emitter program, and any legal obligation, such as existing contractual agreements. This criterion embodies the voluntary nature of offset programs.
- 2. The GHG emission reductions or removal enhancements achieved must be greater than those achieved in a comparable baseline scenario.** The baseline scenario is a hypothetical scenario that considers the level of GHG emissions or removals that would be expected under business-as-usual conditions if the offset project activity was not implemented. Baseline scenarios may be based on project-specific historical data, estimated future GHG emissions, or a sector-wide performance standard. The applicable baseline options will be indicated in the relevant approved offset protocol and chosen in consideration of accuracy, reliability, and feasibility of the method.
- 3. It can be demonstrated that the activity or technology used has not been broadly adopted based on a 40% adoption rate threshold.** An activity may not be eligible if it has already been widely adopted within a sector or region. The wide adoption of an activity likely means that there is already incentive or an absence of barriers for the activity to occur. The activity would therefore be considered business-as-usual. If an activity is business-as-usual it should be reflected in the baseline scenario, meaning it is not additional and not eligible to generate offset credits. As an example, Alberta currently uses, and ECCC has proposed an adoption rate of 40%. There must be supporting evidence to show that the adoption of an activity is below 40% in the relevant sector or region for it to be considered additional in the offset program.

The ministry expects to assess additionality in the review of proposed offset protocols. Any offset protocols that are approved for use in the program will be considered additional. Therefore, any offset projects using an approved offset protocol will also be additional and eligible to generate offset credits if all other program requirements are met.

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<sup>9</sup> T. Ruseva, E. Marland, C. Szymanski, J. Hoyle, G. Marland, T. Kowalczyk. "Additionality and permanence standards in California's Forest Offset Protocol: A review of project and program level implications." *Journal of Environmental Management* 198 Part 1. 2017, 277-288.

## Aggregation

Aggregation involves combining multiple similar small-scale offset projects into a single aggregated project. Aggregation of projects can lower per-project verification costs and make it easier to find a buyer for the offset credits that are generated<sup>10</sup>. Aggregation may be undertaken with the support of a service provider or through a cooperative established by project developers. While working with a service provider can reduce the work required by project developers, there are costs for the service and potential concerns related to price transparency. While it is possible to operate an offset program without aggregation, the ministry recognizes the added benefits aggregation can bring to small-scale offset projects.

**The ministry proposes to allow, but not require, the aggregation of offset projects in Saskatchewan's offset program.**

**The ministry will also implement procedures to increase price transparency in the offset program (See Public Reporting).**

## Crediting Periods

Crediting periods define the length of time over which an offset project remains eligible to generate offset credits. The length of the crediting period may be stated in regulation or the applicable offset protocol. It should be long enough to allow for the generation of a material number of offset credits, but short enough to ensure that the project activity remains additional. Having a predetermined crediting period provides added certainty for offset project developers.

The Canadian Council of Ministers of the Environment (CCME)<sup>11</sup> has proposed the length of a crediting period be set at a maximum of 10 years, with exceptions for projects involving sequestration and permanent storage, which were proposed to have crediting periods between 20 and 30 years. The longer crediting periods reflect the need for these GHG sinks and reservoirs to be maintained for an extended period of time to ensure substantial GHG emissions are removed from the atmosphere.

**The ministry proposes to align crediting periods with the recommendations made by the CCME with a crediting period of eight years for non-sequestration projects and 25 years for sequestration projects, including any permanent storage projects.**

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<sup>10</sup> Potential buyers, especially regulated emitters, are more likely to purchase offset credits in larger quantities from a single seller than to purchase smaller volumes of credits from multiple sellers. This reduces the administrative burden associated with negotiating sales with multiple sellers.

<sup>11</sup> In 2017 and 2018 a cross-jurisdictional offset working group was established under the CCME to provide recommendations on offset program design and opportunities for shared infrastructure. These recommendations were summarized in the publication of a [Pan-Canadian Greenhouse Gas Offset Framework](#) report.

The proposed crediting period of eight years aligns with crediting periods used and proposed, respectively, by Alberta and ECCC. The Western Climate Initiative also uses 25 years for crediting periods associated with sequestration projects.

**While the proposed crediting periods are shorter than the maximums proposed by the CCME, Saskatchewan proposes extending crediting periods to help address additionality concerns while providing opportunities for continued credit generation.**

### Crediting Period Extensions

Offset programs may allow project developers to extend or renew the crediting period for an offset project, allowing the project to generate offset credits for a longer period of time. For example, if an offset project had an initial crediting period of eight years, it may be eligible for a crediting period extension of, say, another eight years, for a combined total of 16 years. Crediting period extensions may not be awarded if the GHG emission reductions are no longer additional or other program requirements are no longer satisfied.

**The ministry proposes to allow crediting period extensions for projects that continue to satisfy all eligibility requirements for the program and the current approved protocol.**

Crediting period extensions for projects must immediately follow the end of the current crediting period for a project so that the offset project is continuously subject to the offset program's requirements.

### Program Rules and Administration

The following sections outline the rules that offset project developers must follow when entering and participating in the Saskatchewan offset program.

#### Project Registration

To participate in Saskatchewan's offset program, an offset project developer must prove that the proposed offset project meets the program's eligibility requirements.

**The ministry will require offset project developers to register an offset project in the offset program prior to generating offset credits.**

Registration and review of eligibility will be accomplished by submitting required information, such as an offset project plan outlining details of the project. The ministry will review the information submitted to ensure all program requirements are met. The ministry envisions this process occurring through the credit registry that will be developed. As a result, the submission of information to the ministry to register the offset project will also serve the purpose of creating an account for the offset project in the program.

## Verification

Verification of an offset project occurs after the offset project has taken place and involves the review of an offset project report by an independent third party. Verification has associated costs but is an integral part of the offset credit generation process and is a required step in all regulatory offset programs in Canada. Verification provides increased confidence, to project developers and buyers, that the offset credits generated will not be revoked or found to be invalid in the future. Less inherent risk can lead to increased demand for offset credits from potential buyers.

Verification requirements adopted in Canadian offset programs often use the International Organization for Standardization (ISO) 14064-3 standard, which provides guidance on the verification of GHG assertions<sup>12</sup>. In addition, some programs require that verification be carried out by verification bodies accredited under the ISO 14065 standard, which outlines requirements of verification bodies. Accreditation to the ISO 14065 standard is awarded by accreditation bodies such as the Standards Council of Canada (SCC) and the American National Standards Institute (ANSI).

Saskatchewan's Regulations for large emitters require information to be verified in accordance with the ISO 14064-3 standard by third-party verification bodies accredited to the ISO 14065 standard. Similarly, ECCC's recognized unit criteria require verification to be done by a third-party verification body accredited to ISO 14065 by the SCC, ANSI, or another International Accreditation Forum member. Provincial offset programs in Alberta, Quebec, and British Columbia also implicitly or explicitly align with the ISO 14064-3 standard.

Under the ISO 14064-3 Standard a verification body must verify an offset project to a specific level of assurance. This determines the degree of confidence the verification body must have with respect to the correctness and completeness of the information contained in the offset project report. A limited level of assurance allows the verification body to accept, with less certainty, that the offset project report is correct and complete. A reasonable level of assurance requires the verification body to have higher degree of certainty. The level of assurance used in an offset program is usually identified in the program criteria and determined based on the intent of the program.

**Given the intended use of Saskatchewan offset credits in Saskatchewan's large emitter program and the verification requirements used in other Canadian offset programs, the ministry will require verification of offset project information to a reasonable level of assurance in accordance with the ISO 14064-3 standard by a third-party verification body accredited to the ISO 14065 standard by SCC or ANSI.**

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<sup>12</sup> GHG assertions are reports that provide a statement of the quantified GHG emission reductions or removal enhancements achieved by a project over a period of time. In this discussion paper GHG assertions are referred to as offset project reports.

## Validation

**The ministry will not require validation in the offset program.**

Validation of offset projects typically involves review of an offset project plan by an independent third party before the offset project begins. Validation of offset projects can provide certainty that a project will meet all the offset program requirements and result in real GHG emission reductions. However, when offset programs have strict requirements for data collection, quantification and verification, like those proposed for Saskatchewan's offset program, validation can become an unnecessary financial and administrative burden for offset project developers.

## Ownership

Confirming and tracking ownership of offset credits is key to maintaining transparency and ensuring that offset credits cannot be used more than once or held by more than one person at the same time. Offset projects can involve multiple parties. In such situations, ownership of the resulting GHG emission reductions or removal enhancements must be determined before offset credits can be generated. For example, a person leasing land to carry out an offset project may require a contract, signed by the land owner, stating that the land owner is forgoing ownership of any GHG emission reductions associated with the project. This reduces the risk that ownership of offset credits will be disputed and, in turn, provides added confidence for potential buyers.

**The ministry will require offset project developers provide evidence to clearly establish the legal ownership of any GHG emission reductions or removal enhancements prior to the generation of offset credits in Saskatchewan's offset program.**

Such evidence could include title to the land on which a project is occurring, legal agreement between all partial owners of a project identifying ownership of the GHG emission reductions or removals, or documentation confirming that the project developer is the sole owner of the particular offset project.

## Reporting Periods

Reporting periods are timelines within which offset project developers must verify and submit data for offset projects. Although offset project developers may prefer flexibility in reporting, periodic verification and submission of data can help offset project developers improve their data collection and quantification methods. This can increase the likelihood that an offset project will meet the offset program's criteria and allow offset credits to be generated for the duration of the project.

**The ministry proposes that data from the first year of operation of an offset project be verified and submitted to the ministry within five months of completing the first year of the crediting period.**

**The ministry further proposes that subsequent verified offset project reports cover at most two years of data and be submitted within 5 months of the final day covered by the project report.**

**The final reporting deadline will be five months after the end of the current crediting period for the project, unless a crediting period extension is granted.**

Providing offset project developers up to two years between reports, after the initial report, addresses some of the administrative and financial burdens offset project developers are likely to face. The proposed approach will also provide assurance that a reliable influx of offset credits will be available for purchase. Exceptions for some project types may be considered if annual or biennial reporting is not appropriate. Such exceptions would be included in the applicable approved offset protocol.

### **Permanence and Risk of Reversal**

The GHG emission reductions or removal enhancements resulting in offset credits must be permanent to ensure a real benefit to the atmosphere is achieved. The risk of reversal associated with some offset projects, such as biological sinks or permanent storage projects, means that measures need to be put in place to ensure permanence.

A common approach to guard against reversals is the use of a discount factor applied to the GHG emission reductions claimed by a project. A portion of the offset credits generated by a project are set aside in a contingency account held by the offset program administrator. In the event of a reversal from the project, the offset credits placed in the contingency account would be retired before offset credits in the credit market would be affected. The magnitude of the discount applied to an offset project would be based on the likelihood and magnitude of a reversal. Although this can be an efficient way to address reversals, it can act as a barrier to entry for offset project developers if the discount factor is too great.

An alternative approach to address permanency is the use of tonne-year accounting which amortizes the benefit of the GHG reductions over the time horizon (proposed to be 100 years for Saskatchewan's offset program). A portion of the offset credits earned in a given year are awarded each subsequent year that the GHG reduction is maintained. If a reversal does occur, offset credits do not need to be revoked or replaced because the benefit to the atmosphere has already been realized. While the value generated at the start of an offset project is small, the compounding generation of offset credits year-over-year creates an incentive to maintain the GHG reductions into the future.

**To address permanency and risk of reversal, the ministry will allow the option of discount factors or tonne-year accounting for offset projects. Offset project developers for projects susceptible to GHG reversals must use one method consistently and would be restricted to the option(s) outlined in the applicable offset protocol.**

The ministry may also consider alternative mechanisms included in offset protocols that guard against the risk of reversals.

Depending on the circumstances under which a reversal occurs, the offset project developer may be held liable and required to surrender offset credits to the ministry.

**If a reversal is determined to be unintentional, the ministry proposes to retire from the contingency account the number of offset credits equal to the number of tonnes of GHG emissions released to the atmosphere.**

**If a reversal is determined to be intentional<sup>13</sup>, the ministry proposes to retire offset credits from the contingency account up to the number of credits originally deposited from the offset project. If this is not sufficient to cover the reversal, the offset project developer will be responsible for surrendering additional offset credits to the ministry or using other compliance mechanisms, such as payments to the Saskatchewan technology fund, to account for outstanding reversals.**

Offset project developers may also be required to monitor their projects for any potential reversals after the end of the final crediting period. This requirement would be outlined in the applicable offset protocol. Offset protocols that apply discount factors to account for expected reversals can limit future liabilities for project developers and may not require continuous monitoring after the offset project has ended.

## **Record Retention**

Records can include any written, photographed, recorded, or stored information that relates to the operation of an offset project, regardless of the medium in which it is kept. Retention of records associated with an offset project in Saskatchewan's offset program will be necessary to allow for proper verification by third parties as well as retroactive review and audit by the ministry. Record retention can also be beneficial when a potential reversal has occurred or if offset credits need to be revoked. Offset projects for which reversals are more likely to occur, such as in sequestration-based projects, may be required to maintain records for longer periods of time.

**The ministry proposes that an offset project developer must maintain records related to an offset project for at least seven years after the final crediting period for the offset project or longer as determined by the approved offset protocol.**

## **Public Information**

Publication of offset protocols and information related to projects, such as project plans and verified project reports, promotes program transparency. While the ministry does not anticipate collecting sensitive or proprietary information, the ministry recognizes that offset project developers may want certain information to remain confidential.

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<sup>13</sup> Aside from being liable for replacing the offset credits resulting from the project that were subsequently revoked or removed from the offset program, an offset project developer who has intentionally reversed the GHG emission reductions or removal enhancements may face additional legal implications beyond the offset program.

**The ministry will make approved offset protocols and information related to offset projects publicly available.**

**The ministry will also allow program participants to submit confidentiality requests to withhold specific information from publication.**

However, information requested to remain confidential by a participant may be subject to a freedom of information request. In such cases, the confidentiality of the information will be subject to Saskatchewan's [Freedom of Information and Protection of Privacy Act](#).

## Offset Protocols

Offset protocols provide the activity-specific methodologies for undertaking projects and quantifying GHGs. Offset projects must follow the methodology in and meet the requirements of a protocol to generate offset credits. The following sections outline how offset protocols will be developed for use in Saskatchewan's offset program.

### Protocol Development

Offset protocol development can be a time-intensive activity. It requires research into the science behind the quantification method used, input from experts knowledgeable of the activity and GHG quantification, coordination to comply with existing laws and offset program requirements, and engagement with the public. This process can take several months for simple protocols and well over a year for more complex protocols. It may be possible to expedite the process by adapting existing protocols for use in a new offset program.

**The ministry has selected two offset protocols to develop and implement at the start of the offset program. The ministry will develop one offset protocol covering landfill gas capture and combustion and a second protocol covering aerobic composting activities.**

The development of these two protocols aligns with the goals of Saskatchewan's [Solid Waste Management Strategy](#). Enabling opportunities to earn credits for aerobic composting will contribute to the diversion of organic waste from landfills, while landfill gas capture will help manage the environmental impact of waste that is already in place. The ministry recognizes that there are other opportunities for offset projects in Saskatchewan and that new and innovative ideas are brought about when people can propose solutions based on where they see opportunities.

**As a result, the ministry will develop an external protocol development process that will allow interested parties to propose and develop offset protocols for adoption in Saskatchewan's offset program.**

It is expected that any proposals to adapt existing offset protocols used in other offset programs would be required to complete the external protocol development process to ensure that the protocols meet the requirements of Saskatchewan's offset program.

If the ministry determines that a proposal is acceptable, the protocol developer would then be permitted to develop the proposal into a full draft offset protocol. The protocol developer would be required to meet certain requirements, both in the protocol development process and in its content. The ministry will be conducting further engagement on this process and will consider feedback from participants.

### **Protocol Requirements**

Offset protocols serve as guides for offset projects and typically identify: the applicable project type and eligible GHGs; the appropriate sources, sinks and reservoirs for baseline and project scenarios; the quantification methods to be used; and requirements for documentation and monitoring. An offset protocol should also be designed to allow for assessment of leakage risks and use best practices for quality assurance and quality control.

**The ministry proposes that approved offset protocols in the provincial program incorporate best available science and practices to identify:**

- (i) The applicability and flexibility of the protocol with respect to project type and eligible GHGs;**
- (ii) The sources, sinks and reservoirs of GHGs for baseline and project conditions;**
- (iii) Quantification methods for sources, sinks, and reservoirs of GHGs;**
- (iv) Procedures for monitoring permanence and assessing leakage risks;**
- (v) Proper documentation and data management requirements; and,**
- (vi) Quality assurance and quality control processes.**

When evaluating an offset project against an offset protocol to determine which GHGs are eligible, it must be clear that the GHGs have not already contributed to a claim of GHG emission reductions through any other means, such as reducing emissions at a regulated facility. Failing to confirm this could lead to two separate parties claiming GHG emission reductions and the resulting benefits. This overstatement of the benefit to the atmosphere cannot occur within an offset program. In cases, where two or more parties are involved in a project, or there is a transfer in ownership of the GHG emissions, the two parties must coordinate their activities to ensure that the emissions are only claimed once.

### **Registry and Credit Use**

The following sections describe the registry's intended function and outlines plans for reporting to increase price transparency in the credit market. Details on how offset credits generated within Saskatchewan's offset program will be handled and how they may be used are also included below.

#### **The Greenhouse Gas Credit Registry**

A registry used to house offset credits and administer an offset program. The complexity of registries can vary significantly depending on the functions they are required to perform. At a minimum, registries

are used to register accounts for program participants and track offset credits from generation through to retirement. Registries are valued for the transparency and improved record-keeping they provide.

It is possible that if Saskatchewan links offset programs with other jurisdictions in the future, the linked programs could take advantage of shared infrastructure, including a shared registry, to improve administrative efficiencies of all programs involved. With the potential to increase complexity of the registry in the future, the ministry will develop a registry that fulfills the initial needs of Saskatchewan's offset program. This will include providing publically available information for offset projects and tracking offset credits in the program.

The registry will not function as an exchange in which money will be transferred between accounts as part of a transaction. Agreements to buy credits and the transfer of funds are expected to occur outside the registry. For added certainty, the ministry will not participate in the marketing or sale of offset credits in the program.

### Public Reporting

The expected design of the registry will result in bilateral agreements that occur independent of the registry, which can make it difficult for program participants to determine the market price for credits or the level of activity occurring at any given time.

To address this concern and increase price transparency, the ministry anticipates requiring parties involved in an agreement to inform the registrar of the agreement to transfer credits before credits are transferred on the registry. The ministry intends to incorporate two-role authentication as part of the transaction process in the registry. The buyer and seller in the transaction must both submit transaction-related information for corroboration by the registrar. This will allow the ministry to collect information on the number of credits being transacted and the price paid for credits over time.

**To ensure transparency in the registry and credit market, the ministry proposes providing monthly reports that include statistics on credit prices and the number of transactions.**

These reports would include statistics such as the range in credit prices, the median credit price, and the weighted mean credit price during the period as well as total number of credits transacted. These public reports will not include specific information such as the names of the parties involved or the prices paid in individual transactions.

### Asking Prices

While average prices reported by the ministry can give participants an idea of how much their credits are worth, they may want to sell their credits at different prices. One person may be willing to sell their credits at a slightly lower price to make them more attractive to potential buyers while another may try to sell their credits above the average price if they believe their credits are worth more than the reported average price. Allowing program participants to publicly post asking prices for their credits can increase competitiveness in the market and further add to price transparency in the program.

**In addition to public reporting, the ministry proposes to increase price transparency by allowing participants to post an asking price for offset credits they own.**

Bilateral agreements between parties for the sale of offset credits would not be required to adhere to the asking price on the registry.

### **Credit Tracking**

Offset credits can trade hands numerous times in the credit market. Tracking an offset credit from creation through to retirement can facilitate verification of ownership and prevent the double-listing and double-use of credits in the program. Tracking credits can also be useful if Saskatchewan links with other offset programs to make certain that a credit does not appear on two registries at the same time.

**To efficiently track and identify offset credits, the ministry will use unique serial numbers for each offset credit generated or approved for sale in Saskatchewan's offset program.**

### **Classification of Offset Credits**

Offset credits can be assigned a particular status based on their current availability in the offset program. The status of a credit can identify whether it is active and available for sale, if it has already been retired by another program participant, or if it has been traded outside the program. A status may also exist to identify when a credit has been revoked from an offset program participant for failure to comply with program requirements; in this way, the status of a credit can also be used as an accountability mechanism for offset project developers.

**The ministry proposes the following categories for offset credits in the offset program:**

<i>Active</i>	Offset credits that have been serialized and posted on the registry. These credits can be sold multiple times and will remain in this category until there is a request to retire the credit or the credit is removed or transferred from the registry.
<i>Transferred</i>	Offset credits that have been transferred out of the program either through purchase by an entity outside provincial borders or registration of the credits on another registry. These credits are no longer available for sale.
<i>Submitted for Retirement</i>	Offset credits that have been submitted for retirement and are pending approval. This includes non-regulated entities submitting credits for voluntary retirement. These credits are no longer available for sale.
<i>Retired</i>	Offset credits that have been confirmed as being retired. Credits in this category are no longer available for sale.
<i>Withdrawn / Revoked</i>	Offset credits generated as a result of errors identified by the project developer or through government audit can either be voluntarily withdrawn by the project developer or revoked by the offset program administrator. Credits in this category are no longer available for sale.

## Participation in the Program

The generation of offset credits will be restricted to offset credits located in Saskatchewan. However, provincial offset credits may be purchased by participants from outside the province. This means that Saskatchewan offset credits will be available for purchase as a compliance option for regulated emitters subject to Saskatchewan Regulations and non-regulated participants (general public/companies) within and outside the province. For example, a non-regulated entity may want to buy offset credits to offset their household GHG emissions or emissions associated with travel.

**In addition to Saskatchewan's regulated emitters, the ministry will allow non-regulated participants from both within and outside Saskatchewan to purchase Saskatchewan offset credits.**

Like regulated emitters, non-regulated participants would purchase and retire offset credits in the registry. The increased number of buyers in the program would increase the amount of credits demanded, helping to incent additional projects and achieve further overall GHG reductions.

## External Trade

Linking Saskatchewan's credit market with those in other jurisdictions can provide offset project developers more opportunities to sell their offset credits and can help achieve emission reductions across Canada in an economically efficient manner. Linking markets with other jurisdictions will require Saskatchewan offset credits be credible and held to the same standards as those in other programs. Aligning Saskatchewan's offset program criteria with those in existing Canadian offset programs will help achieve this prerequisite.

Current inter-jurisdictional trade of offset credits is limited, as programs have been developed independently, and jurisdictions have put in place requirements on which credits can be used in those programs. However, by ensuring Saskatchewan offset credits are comparable to those in other programs, the province and participants in the provincial offset program will be well positioned to engage in linkage discussions and participate in any future markets that develop.

**The ministry will explore opportunities for linkages with other programs once Saskatchewan's offset program is operational.**

## Expiration of Offset Credits

Expiry dates on offset credits can be an effective tool to achieve further GHG emission reductions in an offset program. Regulated emitters would no longer be able to use expired credits towards compliance obligations which would provide continuous demand for new offset credits. However, expiration of offset credits can result in offset project developers failing to see full value for the offset credits they produce.

**As a result, the ministry proposes not to implement expiration dates on offset credits in Saskatchewan's offset program.**

Upon future review of the offset program and credit market, expiration dates on credits may be considered to ensure GHG emission reductions continue to occur.

## Next Steps

This proposal paper forms only part of the process necessary for establishing an offset program in Saskatchewan. The ministry will be seeking further feedback throughout the upcoming year on more detailed aspects of the offset program. The next steps, and engagement opportunities, for the program will include development and public review of:

- Draft offset protocols referenced on page 16 (Summer 2021);
- An external protocol development process (Fall 2021);
- An offset program standard under the Regulations (Fall 2021); and
- Guidance documents (Fall 2021).

We will keep engagement participants informed about program development and opportunities for engagement as the program progresses.

The Government of Saskatchewan thanks all participants for contributing to the development of Saskatchewan's GHG offset program.

## Appendix A: Summary of Saskatchewan's Proposed Offset Program

Table 1: Proposed Criteria and Approaches for Saskatchewan's Offset Program

Criteria	Proposal
<b>Start Dates</b>	The offset program start date will be May 20, 2010. The Activity start date must occur on or after program start date. The crediting start date for a project must occur on or after the activity start date, but no earlier than January 1, 2018.
<b>Approved Protocols</b>	Offset protocols must be approved by the ministry prior to use in the program.
<b>Eligible GHGs and GWPs</b>	The same set of GHGs and global warming potentials used in existing Saskatchewan GHG regulations will be adopted. See Table 2 in Appendix B for details.
<b>Location</b>	Offset credits may only be generated from offset projects located in Saskatchewan.
<b>Additionality</b>	All offset activities must satisfy the following criteria: (1) The activity is not required by law. (2) The GHG emission reductions or removal enhancements are beyond those achieved in a relevant baseline scenario. (3) It can be demonstrated that the activity or technology used has not been broadly adopted based on a 40% adoption rate threshold.
<b>Aggregation</b>	Aggregation will be permitted, but not required in the offset program.
<b>Crediting Periods</b>	Crediting periods will be eight years for non-sequestration projects and 25 years for sequestration-based projects.
<b>Crediting Period Extension</b>	Crediting period extensions will be permitted if all program and current approved protocol requirements are met.
<b>Project Registration</b>	Projects must be registered in the program prior to generating offset credits.
<b>Verification</b>	Verification of project data must be completed to a reasonable level of assurance by verification bodies accredited to the ISO 14065 standard by the SCC or ANSI in accordance with the ISO 14064-3 standard.
<b>Validation</b>	Validation will not be required in the program.
<b>Ownership</b>	Clear ownership of offset credits is required before credits can be generated.
<b>Reporting Periods</b>	First project reports must be submitted after the first year of operation. Subsequent project reports may be submitted within 2-year intervals. Reports are to be submitted five months after the reporting period ends. Alternate reporting timelines may be considered to accommodate special types of projects.

Table 1 (continued)

Criteria	Proposal
<b>Permanence and Risk of Reversal</b>	Discount factors or tonne-year accounting must be used in coordination with project monitoring. Alternative mechanisms to address risk of reversal may be considered.
<b>Record Retention</b>	Records must be kept for at least seven years after the end of final crediting period or longer as determined by the approved offset protocol.
<b>Public Information</b>	All information related to projects, protocols and credits will be public unless confidentiality is requested and approved. All information is subject to the provisions of the <i>Freedom of Information and Protection of Privacy Act</i> .
<b>Protocol Development</b>	Ministry will develop protocols for (1) landfill gas capture and combustion and (2) aerobic composting for use at the start of the program. An external protocol development process will be developed to onboard additional protocols.
<b>Protocol Requirements</b>	Approved offset protocols in the provincial program must incorporate best available science and practices to identify: <ul style="list-style-type: none"> <li>(1) Applicability and flexibility with respect to project type and eligible GHGs;</li> <li>(2) Sources, sinks and reservoirs of GHGs for baseline and project conditions;</li> <li>(3) Quantification methods for GHGs;</li> <li>(4) Procedures for monitoring permanence and assessing leakage risks;</li> <li>(5) Proper documentation and data management requirements; and</li> <li>(6) Quality assurance and quality control processes.</li> </ul>
<b>Registry</b>	Saskatchewan will develop a registry that meets the basic needs of Saskatchewan's offset program to house and track offset credits.
<b>Credit Tracking</b>	Offset credits will be given unique serial numbers for identification and tracking purposes.
<b>Classification of Credits</b>	Offset credits will hold one of several classifications to facilitate tracking in the program: Active, Transferred, Submitted for Retirement, Retired, or Withdrawn/revoked.
<b>Participation in the Program</b>	Participation of non-regulated entities in the offset program will be permitted. Participants located both within and outside Saskatchewan will be able to purchase Saskatchewan offset credits.
<b>Price Transparency</b>	Asking prices for credits may be listed on the registry. The ministry will publish monthly reports that include statistics on credit prices and quantity of credits transacted.
<b>External Trade</b>	The ministry will explore opportunities for linkages with other programs once Saskatchewan's offset program is operational.
<b>Expiration of Credits</b>	Offset credits will not have expiration dates.

## Appendix B: Greenhouse Gases and Global Warming Potentials<sup>14</sup>

Table 2: Eligible Greenhouse Gases and Global Warming Potentials

Greenhouse Gas	Chemical Formula	100 Year Global Warming Potential
Carbon Dioxide	CO <sub>2</sub>	1
Methane	CH <sub>4</sub>	25
Nitrous Oxide	N <sub>2</sub> O	298
Sulphur Hexafluoride	SF <sub>6</sub>	22,800
<b>Perfluorocarbons (PFCs)</b>		
Perfluoromethane	CF <sub>4</sub>	7,390
Perfluoroethane	C <sub>2</sub> F <sub>6</sub>	12,200
Perfluoropropane	C <sub>3</sub> F <sub>8</sub>	8,830
Perfluorobutane	C <sub>4</sub> F <sub>10</sub>	8,860
Perfluorocyclobutane	c-C <sub>4</sub> F <sub>8</sub>	10,300
Perfluoropentane	C <sub>5</sub> F <sub>12</sub>	9,160
Perfluorohexane	C <sub>6</sub> F <sub>14</sub>	9,300
<b>Hydrofluorocarbons (HFCs)</b>		
HFC-23	CHF <sub>3</sub>	14,800
HFC-32	CH <sub>2</sub> F <sub>2</sub>	675
HFC-41	CH <sub>3</sub> F	92
HFC-43-10mee	CF <sub>3</sub> CHFCHFCF <sub>2</sub> CF <sub>3</sub>	1,640
HFC-125	CHF <sub>2</sub> CF <sub>3</sub>	3,500
HFC-134	CHF <sub>2</sub> CHF <sub>2</sub>	1,100
HFC-134a	CH <sub>2</sub> FCF <sub>3</sub>	1,430
HFC-143	CH <sub>2</sub> FCHF <sub>2</sub>	353
HFC-143a	CH <sub>3</sub> CF <sub>3</sub>	4,470
HFC-152a	CH <sub>3</sub> CHF <sub>2</sub>	124
HFC-227ea	CF <sub>3</sub> CHFCF <sub>3</sub>	3,220
HFC-236fa	CF <sub>3</sub> CH <sub>2</sub> CF <sub>3</sub>	9,810
HFC-245ca	CH <sub>2</sub> FCF <sub>2</sub> CHF <sub>2</sub>	693

<sup>14</sup> Global warming potentials taken from IPCC's Fourth Assessment Report See: [https://www.ipcc.ch/site/assets/uploads/2018/05/ar4\\_wg1\\_full\\_report-1.pdf](https://www.ipcc.ch/site/assets/uploads/2018/05/ar4_wg1_full_report-1.pdf)

## Glossary

<b>Activity Start Date</b>	For an offset project, the first day that the activity in question first began.
<b>Additionality</b>	In an offset program, refers to the concept that the GHG emission reductions or removal enhancements achieved by an offset project should be beyond legal requirements as well as what was already or expected under business-as-usual conditions.
<b>Adoption Rate</b>	Used to assess additionality of potential offset project activities, it is a proxy that indicates the prevalence of a specific activity or technology within a specified sector or region.
<b>Aerobic Composting</b>	Aerobic (with oxygen) decomposition of organic material (such as food waste) that reduces the amount of methane produced when compared to the same material placed in a landfill.
<b>Aggregation</b>	Refers to the grouping of similar small-scale offset projects into a single aggregated project for the purpose of collecting, verifying and reporting data in the offset program.
<b>Baseline</b>	For an offset project, the hypothetical scenario, representing the most likely alternative scenario and GHG emissions, against which offset project GHG emissions are compared to determine the level of GHG reductions achieved.
<b>Business-as-usual</b>	Refers to the normal operations of a business or activity that would be undertaken without the presence of additional incentives to change behaviour.
<b>Compliance option</b>	May refer to offset credits, best performance credits, or payments to the Saskatchewan technology fund that can be used by regulated emitters to account for GHG emissions at a regulated facility.
<b>Credible</b>	With respect to an offset program, is the concept that the offset credits produced in the program represent real reductions in GHG emissions determined using good science having been verified by independent parties and posted publicly in a transparent manner.
<b>Crediting Period</b>	Refers to the period of time over which an offset project is eligible to generate offset credits in the offset program.

<b>Crediting Start Date</b>	For an offset project, it is the date from which an offset project can begin to generate offset credits for the GHG emission reductions or removal enhancements achieved.
<b>Double Counting</b>	May occur when more than one offset credit is awarded for a single tonne of GHG emission reductions or when an offset credit is used for compliance, is revoked, or is voluntarily retired and is used again by the same or another entity for one of the same purposes.
<b>Greenhouse Gas (GHG)</b>	Means any one or combination of carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), sulfur hexafluoride (SF <sub>6</sub> ), prescribed hydrofluorocarbons (HFCs), and prescribed perfluorocarbons (PCFs).
<b>GHG Emission Reduction</b>	Refers to a decrease in GHG emissions to the atmosphere between a baseline and project scenario.
<b>GHG Removal Enhancement</b>	Refers to an increase in GHG removals from the atmosphere between a baseline and project scenario.
<b>GHG Sources, Sinks, Reservoirs</b>	<p>A GHG Sink is something that absorbs GHGs.</p> <p>A GHG source is something that releases GHGs.</p> <p>A GHG reservoir is something, other than the atmosphere, that has the capacity to accumulate, store and release GHGs.</p>
<b>Global Warming Potential (GWP)</b>	A factor used to convert tonnes of GHGs into a common unit of tonnes of carbon dioxide-equivalent (CO <sub>2</sub> e) emissions for comparison purposes.
<b>Independent Third Party</b>	is a person or team of persons who are independent of an offset project and possess the skills and experience necessary to carry out an objective verification on an offset project.
<b>ISO 14064-3</b>	Refers to the International Organization for Standardization Standard 14064 Part 3: Specification with guidance for the verification and validation of greenhouse gas statements.
<b>ISO 14065</b>	Refers to the International Organization for Standardization Standard 14065: Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition.

<b>Landfill Gas Capture and Combustion</b>	Accumulated organic waste at landfills leads to anaerobic (without oxygen) decomposition and the production of methane gas. This gas can be captured and burned to convert it to carbon dioxide, a less harmful GHG.
<b>Leakage</b>	For an offset project, the concept that the implementation of a project may result in increased GHG emissions outside the scope of the project.
<b>Level of Assurance</b>	<p>Level of assurance is the degree of confidence an independent third party has as to the correctness and completeness of information contained within an offset project report undergoing verification.</p> <p>A limited level of assurance reflects a reduced level of assurance as to the correctness and completeness of the information contained in an offset project report undergoing verification.</p> <p>A reasonable level of assurance reflects a high, but not absolute, level of assurance as to the correctness and completeness of the information contained in an offset project report undergoing verification.</p>
<b>Offset Credit</b>	A credit, representing one tonne of GHG that is awarded to an offset project developer through the offset program for an eligible activity that reduces, removes, or sequesters GHG emissions.
<b>Offset Program Administrator</b>	The entity in charge of administering the offset program, in this case, the Ministry of Environment.
<b>Offset Project</b>	A project based around an activity that reduces or removes GHGs from the atmosphere that is registered in the offset program to generate offset credits.
<b>Offset Project Developer</b>	The person, such as the owner of the facility carrying out the offset project, who is responsible for registering the project, submitting reports to the registry, and ultimately is responsible for any non-compliance that may occur.
<b>Offset Project Plan</b>	A written report prepared by a potential offset project developer that outlines the details of the proposed offset project and how it meets the requirements of the offset program.
<b>Offset Project Report</b>	A written report prepared by the offset project developer that details the required information that supports a claim of GHG emission reductions from the offset project.

<b>Offset Protocol</b>	A document that outlines a specific type of offset project activity eligible for generating offset credits in the offset program. It outlines how to quantify GHG emissions from a project and other requirements offset project developers must follow.
<b>Participant</b>	With respect to the Saskatchewan offset program, a person who is participating in the offset program, including an offset project developer, a regulated emitter, an aggregator, or non-regulated entity involved in the generation, sale or retirement of credits.
<b>Permanence</b>	GHG emission reductions from an offset project should be permanent or guarded against reversal. If reversals are identified, there should be provisions in place to ensure the reduction or removal is replaced and the environmental integrity of the offset program is maintained.
<b>Price Transparency</b>	Refers to the ability for participants in the offset program to identify the prices paid for offset credits to inform their business decisions.
<b>Program Start Date</b>	Typically, the date on which the offset program was first announced. A potential offset project is only eligible for the program if the activity start date for the project occurs on or after the program start date.
<b>Real</b>	An offset credit should represent a one tonne reduction or removal of GHG emissions contributing to a net decrease in GHG emission in the atmosphere resulting from a clearly defined action or decision with minimal associated uncertainty as to the authenticity of the reduction or removal.
<b>Recognized Units</b>	Offset credits from provincial offset programs that meet all requirements of ECCC and are eligible to be used by regulated emitters under the federal output-based performance standards program to fulfil compliance owed, similar to how offset credits can be used as a compliance option by Saskatchewan's regulated emitters.
<b>Registrar</b>	The entity designated to operate the day to day functions of the registry, including customer service, the creation of accounts and the generation, transfer and retirement of credits.
<b>Registration</b>	The act of registering an offset project in the offset program through the GHG credit registry.
<b>Registry</b>	Refers to the GHG credit registry that will house offset credits generated in the offset program.

<b>Regulated Emitter</b>	An entity that emits GHGs through the operation of a regulated facility.
<b>Regulated Facility</b>	Refers to a large facility that emits GHG emissions and is subject to legislation that regulates those emissions, such as a large facility that is subject to <i>The Management and Reduction of Greenhouse Gases (Standards and Compliance) Regulations</i> .
<b>Reporting Period</b>	The period of time within the crediting period for an offset project that is included in an offset project report.
<b>Retirement</b>	With respect to the offset program, refers to the action of an entity claiming an offset credit against GHG emissions. Once an offset credit is retired, it cannot be sold to or used by any other entity.
<b>Reversal</b>	Occurs when the GHG emissions that were captured or prevented from entering the atmosphere due to the offset project and for which offset credits were generated are later released or escape into the atmosphere.
<b>Sequestration</b>	Refers to the activity of capturing and storing GHG emissions. This can be done for example through soil, forests, or carbon capture and storage in which the greenhouse gases are stored in geological formations deep underground.
<b>Validation</b>	The process for assessing an offset project plan to determine if a proposed offset project will achieve the estimated claim of GHG reductions and conform to criteria of the program.
<b>Verification</b>	The process for evaluating historical emission data reported as part of an offset project, to determine if the reported information and associated claims are materially correct and conform to criteria of the program.