sustainable WATERLOO REGION

# Carbon Offsets:
## Domestic Limits and Quality Assurance

Sustainable Waterloo Region is a not-for-profit that advances the environmental sustainability of organizations across Waterloo Region through collaboration. The current work of Sustainable Waterloo Region is focused on the Regional Carbon Initiative, which facilitates voluntary target-setting and reductions of carbon emissions by organizations across Waterloo Region.

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# 1 | Introduction

Carbon offsets can be an integral part of how some Regional Carbon Initiative (RCI) members meet their greenhouse gas (GHG) reduction targets. But offsets are generally misunderstood. There are questions about the usefulness and effectiveness of carbon offsets as a solution to climate change as there is currently no Federal or Ontario price on carbon or regulatory oversight. There is some concern that offsets are not serving the intention of reducing GHG emissions. As real and measurable results are key components to the integrity of the RCI framework, offsets are an issue we need to stay informed on. In this way, this document outlines the rationale behind the two offset requirements within the RCI Framework:

1. Setting minimum quality standards for Pledging Partners to use offsets against their GHG reduction commitment.
2. Setting a minimum use of domestic offsets; 90% of offsets must come from Canadian projects

A carbon offset is a tradable certified reduction in carbon emissions that occurred in another project purchased to compensate for emission gains in another location. Within carbon offsets, there are two types of credits: compliance carbon credits and voluntary carbon credits. The compliance carbon credits are part of carbon reduction compliance schemes, such as Kyoto or the European Trading Scheme, among others. Voluntary carbon credits are offsets which are not part of any compliance schemes, and therefore do not require specific compliance methodologies in their creation. The credits/offsets that are applicable to RCI members are voluntary carbon credits and renewable energy credits. This document deals specifically with the quality and geographic controls applied to voluntary carbon credits/offsets, and the procedures for RCI members to follow.

RCI Framework Advisory Committee identified that a policy was required due to the concern that the voluntary carbon market does not yet have sufficient oversight to ensure quality of all offsets. The Framework Advisory Committee did not recommend details for the policy. The RCI team prepared this document based on secondary research and consultation with several offset professionals and reviews from RCI members. More information about the decisions and rationale of the RCI Framework Advisory Committee can be found in Appendix 1.

## 2 | Finding and Ensuring Quality Offset

The voluntary carbon market consists of many offset providers/vendors and it is often difficult to discern from their online materials alone whether they are achieving the designed result. The Regional Carbon Initiative defines a quality offset as one that meets the quality standards established by the David Suzuki Foundation report on purchasing carbon offsets (2009), as follows:

- Additionality (project must not have happened without carbon offsets market incentives)
- Accurate quantification
- Third party auditing (includes pre and post project validation and verification)
- Unique ownership
- Permanence (GHG reductions are not temporary)
- No leakage (GHG reductions in one region cannot cause an increase in emissions elsewhere)
- Social and environmental considerations (impacts on wildlife and on communities should be minimized)
- Stakeholder consultation
- Timing (the offset must have already occurred)

## How to ensure these standards are met

There are several ways to ensure these quality standards are met. We outline two here. The first method is to purchase offsets that are stamped with appropriate certifications, and the second method is to purchase offsets from certain providers who ensure these quality standards are met. Below is a flow chart to show this process on a high level, followed by a more detailed description below.


Projects not listed in the CSA Clean Projects Registry and which are without 3rd party standardization; need to be approved by a certified third party that they meet the offset quality standards. Consult with the Regional Carbon Initiative before purchasing.

### Method 1: Using Established Quality Standards

The following is a list of established standards for quality control which can be used by members of the RCI to ensure that the offsets purchased meet quality standards. The exception is the ISO-14064-2 standard, which meets some, but not all, quality criteria. Additional verification is required for any offsets that are only certified with ISO-14064-2.

The Gold Standard was developed by the World Wildlife Fund and a group of other environmental organizations. This standard follows the Clean Development Mechanism process (a process for creating Certified Emission Reduction units), but adds additional criteria to promote sustainable development. The Gold Standard Verified Emission Reduction (VER)+ has been developed for voluntary projects. This standard is supported by many environmental non-governmental organizations internationally.

The Voluntary Carbon Standard (VCS) was developed by stakeholders from industry and is considered less strict than CDM and the Gold Standard on quality criteria such as additionality.

The Climate, Community, and Biodiversity Alliance (CCBA) is a collaboration of research institutions, industry and NGOs that evaluates land-based carbon mitigation projects in the early stages of development. The standard considers typical quality mechanisms, as well as the impact on communities and biodiversity.

International Organization for Standardization use standard number **ISO-14064-2** for project accounting and auditing of carbon offsets. This is typically used for offsets projects located in Canada. ISO-14064-2 does not guarantee that a project has met all of the quality criteria listed above. However, many offset developers use other tools in addition to ISO-14064-2, such as the Clean Development Mechanism Additionality Tool, to ensure that their projects are additional as well as financially sound. In Canada, the Canadian Standards Association (CSA) Clean Projects Registry is a list of all Canadian projects that are ISO-14064 compliant. The CSA CleanProjects Registry provides a transparent audit trail for all projects in Canada that have complied with ISO-14064-2 and 14064-3.

### Method 2: Vetted offsets from Third Party Providers

Pre-established certifications are not the only way to ensure quality offsets. Sometimes, certifications are prohibitively expensive and good-quality projects are left uncertified. This approach can often lead to even more robust and quality standards but requires some diligence to ensure this. Here are things to do if your organization uses this method:

- Use projects that have met the ISO 14064-2 standard
- Ask for documentation from the offset provider/vendor on what quality control measures are required for the projects that they sell and/or validate
- If the project does not use transparent accounting processes and is not provided by a vendor with quality control tenets that conform to those mentioned above, then a third party should be obtained to verify that the project meets the quality criteria described

# 3 | Geographic Limit on Carbon Offsets

## Need for a geographic limit

The RCI requires that at least 90% of offsets purchased by RCI members must be developed in Canada and a maximum of 10% of offsets can be from foreign projects. This policy was adopted by the community leaders who first established the GHG reduction framework for the RCI in 2008 and follows the protocol established by the Western Climate Initiative (WCI) (SWR 2012, Appendix 4) and the then- active federal climate change document, "Turning the Corner". The WCI and the then government of Canada chose this limit in order to ensure that funding for carbon reductions remain within the designated jurisdictions and promote low carbon economic activity (WCI 2008, p.10 and Government of Canada 2008, p.18).

## 2012 Review of the Need for a Geographic Limit

The RCI Framework Advisory Committee examined the need for this policy and decided to continue to support the geographic limit on carbon offsets.

The main reasons for continued support of the geographic limit included:

- Need to support local opportunities in carbon offsets
- Offsets are more meaningful when local
- Method complies with existing North American standards (namely the Western Climate Initiative)

## Purchasing Carbon Offsets Projects Outside of Canada

The Clean Development Mechanism (CDM), Gold Standard, Voluntary Carbon Standard (VCS), Climate Action Reserve and Climate, Community and Biodiversity Alliance (CCBA) are all internationally recognized certification standards. In addition, projects can decide to adhere to the International Carbon Reduction and Offset Alliance (ICROA), which is a voluntary not-for-profit alliance of organizations that sign on to a "Code of Best Practice". However, the Code of Best Practice is voluntary and not verified. It is recommended that the standards of CDM, Gold Standard, VCS, or CCBA be used to verify the quality of an offset created overseas.

It is recommended that members proceed with applying offsets purchased overseas as reductions in one of the following ways:

- Use vendors that are certified by CDM, the Gold Standard, the Gold Standard VER+, VCS, or CCBA
- If a vendor does not meet any of the above listed certification standards, then the vendor must follow ISO-14064-2 and have a third-party verify that they meet the quality criteria described above

RCI members will be expected to use the same quality control standards as listed above for foreign carbon offsets, but only 10% of the total amount of emissions reduced through carbon offsets may be from projects outside of Canada. The source of the carbon offset will need to be submitted along with all other quality control paperwork in the offset process.

# 4 | The Role of RCI members in Recording Offsets for GHG Reductions

The RCI will require that members present proof that the reductions they have purchased are associated with the quality control standards referenced above. When an offset is purchased, the member will receive a receipt from the offset vendor. Either the receipt/certificate of purchase or the vendor website will contain information about the certification standards used. If there are no certification standards that verify quality control measures, the member should ask the offset provider/vendor for quality control documentation specific to their company. The member must also verify that the offset has been retired (i.e. that the member does not intend to re-sell the offset).

# 5 | Conclusion

The RCI needs to ensure that if members use carbon offsets to meet their reduction targets, the carbon offsets are real and benefit the creation of a low carbon economy. The voluntary carbon market has been widely criticized for its ability to be used as "green-washing", but there are still aspects of the market that are useful for combatting climate change. By keeping RCI's geographic limit and enforcing a quality standard for members to adhere to, we help to ensure that our members make real reductions in GHG emissions. The geographic limit of 10% (i.e. 10% of offsets may come from foreign sources) means that the RCI complies with existing standards and practices (such as with the Western Climate Initiative), and works actively to promote a local low carbon economy. The adoption of quality criteria for the evaluation of all carbon offsets, whether local or foreign, ensures that the projects members fund are real, beneficial, transparent, and permanent carbon offsets.

# References

**Climate Action Reserve:** *http://www.climateactionreserve.org/*

**Climate, Community and Biodiversity Standard:**
*http://www.climate-standards.org/standards/*

**Clean Development Mechanism:** *cdm.unfccc.int*

**CSA GHG Clean Projects Registry:**
*http://www.ghgregistries.ca/cleanprojects/index_e.cfm*

**David Suzuki Foundation and the Pembina Institute (2009). Purchasing Carbon Offsets: A Guide for Canadian Consumers, Businesses and Organizations**. Accessed January 15 2012 from: *http://www.davidsuzuki.org/publications/downloads/2009/climate_offset_guide_web.pdf*

**Gold Standard:** *www.cdmgoldstandard.org*

**Government of Canada (2008). Turning the Corner: Regulatory Framework for Industrial Greenhouse Gas Emissions.** ISBN 978-0-662-05525-9. Accessed January 22 2012 from:
*http://www.ec.gc.ca/doc/virage-corner/2008-03/541_eng.htm*

**Sustainable Waterloo Region (2012). Guide to the Regional Carbon Initiative.** Accessed July 7 2013 from: *http://www.sustainablewaterlooregion.ca/files/downloads/2010/Guide%20to%20the%20Regional%20Carbon%20Initiative%201.5.pdf*

**Verifiable Carbon Standard:** *http://www.v-c-s.org/*

**Western Climate Initiative (WCI) (2008). Section 1: Design Recommendations for the WCI Regional Cap-and-Trade Program.** Accessed January 2 2012 from: *http://www.westernclimateinitiative.org/component/remosotory/general/design-recommendations/Design-Recommendations-Section-1/*

## *Appendix 1: Key Points of the RCI Framework Advisory Committee Decisions*

| | Minimum Requirements | Key Points |
|---|---|---|
| **Operational Geographic Boundaries** | Waterloo Region Wide | • Avoid Pledging Partners selecting only the 'greenest' facilities |
| **Temporal Baselines** | Up to 3 years before joining the program | • To encourage reductions, not 'reward' previous reductions<br>• Keep targets comparable<br>• Limit the amount of backcasting required |
| **Scope** | Scopes 1 and 2<br>Scope 3: Business Travel | • Major contributors to footprint and activity source data is relatively easy to collect |
| **Type** | Absolute or Intensity Targets; Mandatory absolute reporting | • Maintain flexibility in a growing economy |
| **Intervals & Dates** | 10 year commitment, 2 year 'check point' targets (guidelines) | • Keep targets on a business schedule<br>• Encourage immediate reductions/ avoid procrastination |
| **Target achieved below baseline levels** | Gold: 60%<br>Silver: 40%<br>Bronze: 20% | • Ambitious yet realistic |
| **Offsets** | Max 49% reductions from offsets<br>Only 10% foreign offsets | • Inspire a culture of conservation<br>• Require and encourage actual reductions before purchased reductions |

## *Appendix 2: RCI Guiding Principles*

### *The Regional Carbon Initiative is only a first step:*

A carbon reduction target itself is not enough to achieve environmental sustainability, but is an important and logical first step.

### *A spirit of collaboration:*

It is important to work together in the spirit of collaboration, knowledge sharing, and transparency to solve environmental issues.

### *Participation in the low-carbon economy:*

It is important - economically and environmentally - to develop, foster, and participate in the low-carbon economy.

### *A culture of conservation:*

In addition to reducing carbon emissions, it is also important to foster a more general culture of conservation.

### *Time lines must have implications for decision-makers:*

Reduction targets should be achievable within a timeline that has implications for the decision-makers and the organizations involved.

### *General target frameworks must be as flexible, inclusive, and simple as possible:*

- Reduction targets should be flexible enough to allow Pledging Partners to meet other carbon accounting standards.
- Specific reduction opportunities can only be fully assessed at the facility level.
- It is intended that our reporting framework will encourage Pledging Partners.

## *Appendix 3: Key Points of the RCI Framework Advisory Committee*

The RCI Framework Advisory Committee was presented with information and options on two issues: quality control of offsets, and a domestic minimum for offsets purchased. On the issue of quality control, the responses from the Advisory Committee came back wholly in support of quality assurance for carbon offsets, with all support going to using third party certification standards, and some additional support for having SWR conduct the quality assurance verification as well.

Regarding the issue of the domestic limit, the Advisory Committee was mandated to decide whether to keep or change the domestic minimum on offset purchases. Of the four members of the Advisory Commitee who participated in this discussion, three voted for keeping the domestic limit, and one voted for removing the limit altogether.

## *Appendix 4: Offsets and Purchased Reductions*

Within the Regional Carbon Initiative Framework, offsets are seen as a last resort 'purchased reduction', along with Renewable Energy Credits (RECs) and the feed-in-tariffs your organization may receive from the government of Ontario.

An REC is not specifically a carbon offset, but it is the carbon dioxide equivalent reduction associated with switching from fossil-fuel intense electricity generation to renewable energy. The RCI framework limits quantities of RECs and offsets that may be applied to emissions reductions by member organizations.

## *Appendix 5: Uploading Carbon Offsets in the Carbon Accounting Tool*

**Step 1:** Navigate to the "forecast" tab and select "Offsets"
**Step 2:** Select the company period the offset is valid for and click "Add Offset"
**Step 3:** Ensure the name in the "Relevant for" box is correct and then fill in all required fields (see below)

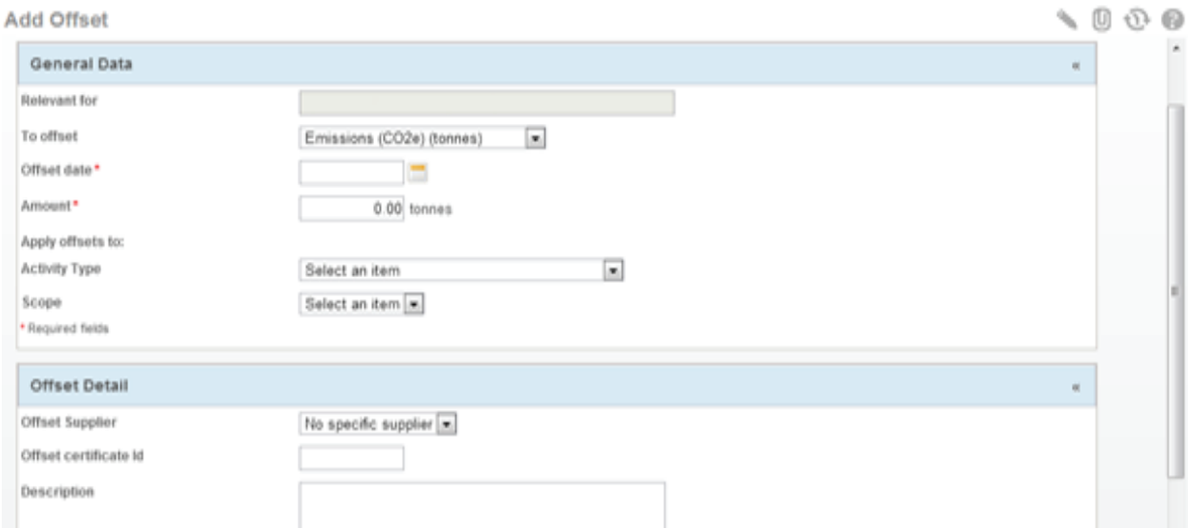


Figure 1: Carbon Offset screen in the Carbon Accounting Tool.

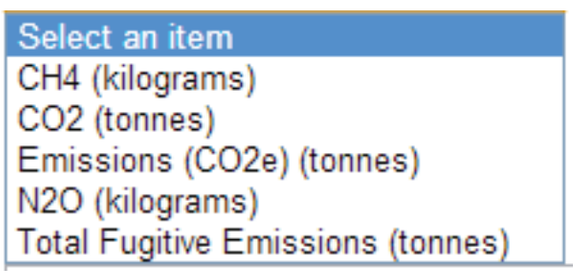


Figure 2: Drop down menu of the "To offset" selection. These are the types of emissions you are able to offset and track in the tool. You are likely to use "Emissions (CO2e)

**Note:** Description of which activities fall under which scopes can be found in the Guide to the RCI

**Step 4:** Click "Save" or "Save and Enter Next" to add your offset. Note: The offset will not be visible on the Overview Dashboard until the morning after the day you uploaded the information.

## *Appendix 6: Offset vendors*

During the research and consultation process of developing the carbon offsets policy, the RCI came across several offset vendors that meet the quality standards that are described in this document. This list represents vendors that have quality tenets and/or sell offsets with the certification standards described within this document. This is not a complete list of all offset vendors who meet our quality standards, and picking one of these vendors does not necessarily ensure that the offsets purchased will meet the quality standards. Nonetheless, here are some vendors you may wish to contact to get more information from and potentially use to purchase carbon offsets that meet our quality control standards:

| Carbon Offset Provider | Type of Certified Offsets Offered | Location of Projects | Notes |
|---|---|---|---|
| **Carbonzero** | VER+, CCBS | Canada and International | |
| **Failsafe Emissions** | VCS, Gold Standard | Canada | Verify offsets for the Alberta offsets market |
| **Less Emissions** | VER+, Gold Standard CER | Canada and International | Subsidiary of Bullfrog Power |
| **Livclean** | CSA CleanProjects Registry | Canada and US | |
| **Offsetters** | CSA CleanProjects Registry, Gold Standard, VCS | Canada and International | |
| **Planetair** | Gold Standard, VER+ | International | |
| **Renewable Choice** | VCS | Mostly within Canada | They do not verify projects, they source projects to sell |
| **Sustainable Carbon** | Gold Standard, VCS | International | |

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