



Environment  
Canada

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Canada

# Offset Trading and Carbon Accounting in Canada

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# Canada's approach to climate change

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- Canada supports an approach to climate change that emphasizes:
  - Real environmental and economic benefits for all Canadians
  - The importance of harmonizing with the U.S. to reduce GHG emissions while maintaining economic competitiveness and prosperity
- Canada's Copenhagen Accord target is aligned with the U.S. target, and is subject to adjustment to stay consistent with the U.S. target
  - 2020 economy-wide target is a 17 per cent reduction from 2005 levels
- The content and timing of Canada's approach on climate change will be driven by our national interests, while also accounting for what our trading partners, including the U.S., are doing
  - The Government is committed to working with provincial and territorial governments and our partners to develop our climate change policies



# Canada's approach to climate change (cont')

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- The Government has already taken important steps to address climate change and harmonize with the U.S., including
  - The Canada-U.S. Clean Energy Dialogue
  - Harmonized passenger vehicle emission standards
- Canada's Economic Action Plan includes billions in green investments designed to protect the environment, stimulate our economy and develop clean technologies
  - Canada is a world leader in carbon capture and storage (CCS)
  - The Action Plan established the Clean Energy Fund and the Green Infrastructure Fund which provide close to \$2 billion for the development of clean energy technologies and green infrastructure



# Canada's Offset System

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- Helps Canada meet its goal of 17% reduction in total GHG emissions from 2005 by 2020
- Provides an incentive for voluntary GHG reduction projects in non-regulated sectors by issuing offset credits
  - 1 offset credit equals 1 tonne of carbon dioxide equivalent reduced or removed from the atmosphere
- Draft program rules published June 2009; final rules under development



# Eligibility Criteria for Offset Projects

- Offset credits will be issued for GHG reductions that satisfy the following six eligibility criteria:

Scope

Real

Incremental

Quantifiable

Verifiable

Unique



# Eligibility: Scope, Real

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## Scope

- Reductions must occur in Canada
- Project must achieve reductions in one of the following six greenhouse gases: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>

## Real

- Project must be a **specific** and **identifiable action** that results in a **net reduction** of GHGs
- Project and baseline must be “functionally equivalent” – i.e. cannot achieve reductions simply by reducing production



# Eligibility: Quantifiable, Verifiable, Unique

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## Quantifiable

- Eligible reductions must be quantified as specified in an Offset System Quantification Protocol (OSQP)

## Verifiable

- Eligible Verification Body must be able to provide a reasonable level of assurance that reductions have been monitored, quantified, and reported as set out in the OSQP

## Unique

- The GHG reduction can only be used once to create an offset credit



# Eligibility: Incremental

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- Five components:
  1. Projects must have started on or after January 1, 2006
  2. Reductions must have occurred on or after January 1, 2011
  3. Reductions must go beyond the baseline defined for the project type
  4. Reductions must be surplus to all legal requirements (federal, provincial/territorial and regional)
  5. Reductions are beyond what is expected from receipt of other climate change incentives (federal, provincial/territorial)



# Offset System Quantification Protocols

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- Developed for each project type
  - Developed by third parties, reviewed and approved by Environment Canada
  - Available free for use by any project proponent
- Provides the quantification approach and monitoring and data management requirements to be followed
- Based on the framework and principles of the international standard ISO 14064-2: GHG quantification, monitoring and reporting for projects
  - Consistent with approaches being developed for the carbon accounting of products



# Proposed Eligibility List of Project Types

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- Priority for development set through listing on Protocol Submission Schedule
- Initial proposal of project types
  - Afforestation
  - Landfill Gas Capture & Combustion
  - Reduced or No Tillage
  - Wind Power
  - Forest Management activities
  - Wastewater Management
  - Anaerobic biodigesters



# Projects

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- Registration
  - Eight year period; typically from the date of project registration
- Implementation – as per OSQP specified monitoring and data management requirements
- Reporting – 1<sup>st</sup> report within 1 year or 100,000 tonnes, then at discretion of Project Proponent (some exceptions)
- Verification – Eligible Verification Body provides a reasonable level of assurance that reductions claimed are accurate, and that the project satisfies eligibility criteria



# Issuance, Use and Trading

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- Offset System will certify reductions, issue credits into Project Proponent's account in the tracking system
  - Tradable and bankable
- Trading will take place in the private sector
- Financial value of offset credits will be determined by supply and demand in the marketplace



# Draft program rules for Canada's Offset System

- Draft program rules set out in three guides
- 127 submissions received

Guide Name	Published Date
Program Rules and Guidance for Protocol Developers	August 2008
Program Rules and Guidance Project Proponents	June 2009
Program Rules and Guidance for Verification	June 2009



# Carbon Footprinting

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- A carbon footprint refers to the calculation of the amount of GHG emissions associated with a company, event, activity, or the lifecycle of a product / service,
- Emissions have the same impact on the atmosphere, irrespective of country of origin – however similar products can have very different carbon footprints
- One example is carbon footprints of products:
  - Quantification of the carbon footprint of products enables a company to ascertain and manage the emissions of GHGs along the supply chain and furthers the understanding of the risks and opportunities in the supply chain.
  - Labelling is the visible outcome of carbon footprinting of products.
- EC experts participate in development of voluntary international standards by ISO on carbon footprinting



# Why are standards important?

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- Standardization process is bottom-up, not top-down, so standards are developed by professionals in the field with real experience of what works
- Standards are fair and transparent and can be practically applied in a cost-effective manner
- Standards are non-discriminatory between products, producers and countries.
- International standards are a powerful tool for:
  - disseminating new technologies and good practices,
  - developing global markets,
  - sharing internationally of environmental expertise and experience; and
  - supporting the harmonization of government policies on a global scale.
- Environment Canada is playing an active role in international standards development as the Vice-Chair of Canadian Advisory Committee to ISO TC 207 / SC7 (GHG Management and related activities).



# ISO 14067 – Carbon Footprint of Products

## Standard Title:

- ISO 14067-1 Carbon Footprint of Products: Quantification
- ISO 14067-2 Carbon Footprint of Products: Communication

This is an opportunity to standardize the approach taken globally to product carbon footprinting to reduce confusion and reduce costs.

- **Competing Standards?** PAS 2050, the product carbon footprinting standard has already been published, and WRI/WBCSD is also in the process of developing a comparable standard which deals with carbon footprints of products. Efforts to harmonize underway.
- **Overlapping Standards?** Existing LCA standards (ISO 14040 and 14044) provide the starting point and there continues to be discussions about the coverage of ISO 14067.



# ISO 14069 – Carbon Footprint of Organizations (Technical Report)

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## ISO Technical Report Title:

- Quantification and reporting of GHG emissions for organizations (Carbon footprint of organizations) – Guidance for the application of ISO 14064-1.

## Highlights:

- This is a technical report (to accompany ISO 14064-1), and not a stand-alone standard
- Will provide a common framework, describing a consistent method and associated tools to support the quantification and report of direct, electricity indirect and other indirect GHG emissions of an organization
- Under development

