



Carbon Neutral Report

for

Wakefield Canada Inc. Greenhouse Gas Corporate Footprint 2009

Version 1.1

Prepared May 10, 2011

1. Summary

Wakefield Canada Inc. has completed the quantification and reporting of the 2009 corporate greenhouse gas (GHG) footprint. This 2009 carbon inventory marks the third year of quantification for Wakefield Canada, with 2008 establishing the base year for the 2009 Inventory. The 2008 base year is a rolling base year, as is described in the 2009 Corporate GHG Inventory Report.

Wakefield's GHG Inventory was compiled using the Operational Control consolidation approach, where as Wakefield accounted for all emissions under its operation control.

Along with quantifying required *direct* and *energy indirect* emissions, Wakefield has also included and accounted for significant *other indirect* emissions; such as emissions resulting from Wakefield's required business travel. To this end, the corporate GHG inventory includes the following sources of emissions, representing the entire footprint of running the Wakefield operation in 2009.

1. Truck Fleet
2. Car Fleet
3. Employee Air Travel
4. Energy Usage in Buildings
 - a. GHG from Offsite Electricity Production (grid electricity)
 - b. Direct Fuel burning (Natural Gas for Heating)
5. Propane Vehicles

After quantification, reporting, and third party verification of the 2009 corporate GHG Inventory, Wakefield has purchased and retired emission offsets to become carbon neutral for 2009 operations. This is the second year of full offsetting that Wakefield has undergone to become carbon neutral. Emission offset units have been purchased from a project that has undergone third-party verification to the CSA/ISO14064-3 Standard, and are publically posted and retired on a GHG Registry.

This Carbon Neutral report transparently showcases the steps taken to obtain and retire emission offset units purchased for this inventory year. This report further supports Wakefield's ability to claim Carbon Neutral status for 2009 through means of transparently showcasing steps taken to achieve full offsetting for all corporate emissions. For further details regarding emission quantification methods and reporting parameters conducted for the 2009 inventory, please refer to Wakefield's full GHG report (as well as the third party verification report) available on CSA's GHG CleanStart Registry for Corporate Inventories;

http://www.ghgregistries.ca/cleanstart/listings_e.cfm.

2. Directed Actions

Directed actions are defined as specific and documented actions, taken at a corporate level, to positively affect the quantity of emissions resulting from corporate operations. Directed actions are important to move toward reducing direct emissions and mitigating reliance on emission offsetting.

Wakefield Canada realizes that the main goal of carbon management is taking action to reduce dependence on energy and fossil fuel consumption, not simply offsetting the balance of their emissions profile. To this end, Wakefield Canada has committed to implementing significant steps to reduce their internal energy consumption. These *directed actions* were implemented to show leadership in the environmental sector and highlight Wakefield's commitment to a cleaner, more sustainable future.

After quantifying and reporting the 2009 carbon footprint, Wakefield was able to identify a number of opportunities to reduce energy dependence, and associated GHG emissions. The following actions were taken in light of findings from both the inventory quantification as well as the energy audit processes as Wakefield continues to expand and increase 2008 actions into 2009:

- More energy efficient trucks and cars are being purchased to replace older ones.
 - \$270,000 spent for a new trucks and \$58,000 for additional vehicles.
- All vehicles in Toronto are being refilled on-site by a service provider (4Refuel (Petroleum provider)). This avoids short trips and detours to service stations and saves GHG emissions.
- Video conferencing is increasingly being used to reduce the need for travel.
- Employees are encouraged to telework.
- Thermostat programming devices have been installed. Temperature has been set to 22 degrees during the week (5AM to 6PM) and to 18 degrees during the week-end when the facilities are not occupied. This has resulted in reduced heating costs.
- Best in class energy efficient computer equipment is being purchased to replace older equipment.
 - \$28,000 spent in 2009.
- Upgraded block heater, with a calibrated timer, at Laval facility to reduce energy
- Heating removed to outside storage tanks at the Laval facility
- Laval warehouse temperature reduced to 15 degrees
- Additional green measures have been implemented such as:
 - Large recycling program introduced for waste light bulbs. 2009 recycling program, as confirmed from Aevitas, of 424 bulbs resulted in:

- 220.1 kg of glass recycled
- 1.65 kg of metal recycled
- 3.44 kg of phosphor and 0.023 kg mercury being reclaimed and recycled
- The elimination of plastic bottles, the purchase of mugs and the installation of two energy efficient dishwashers to reduce waste.
- Campaigns to reduce the use of paper products and to purchase recycled paper.
- Contract with Foundation Mira to recycle inkjet cartridges at the Laval facility
- Use of green cleaning products.
- Overhead presentations are promoted as opposed to paper hand outs.
- Stretch wrap is recycled and segregated into Gaylord boxes. Those are sold for profit which also reduced garbage disposal bin requirements by two yard bins and result in \$1,000 annual savings.

3. Renewable Energy Purchases

The second step, after quantifying and reducing emission related activity, is to invest and purchase clean energy. By purchasing renewable energy, Wakefield would be able to reduce the indirect energy emissions component of the GHG inventory.

During the 2009 reporting year, no renewable energy purchases were made on Wakefield's behalf. As a result, all energy consumption at Wakefield facilities has been assessed using common practise energy production rates, such as the Provincial electricity Grid emissions utilized throughout Canada.

4. Offset Projects

Wakefield has purchased emissions reductions, or offset units, from the **Landfill Gas Recovery and Utilization Project** completed by Integrated Gas Recovery Services. This project, located in Niagara Falls Ontario, has been third party verified to confirm the emission reduction activity claimed. This verification was completed in conformance with the CSA/ISO 14064-3 Standard. The project is currently posted on a publically available registry with all project documentation posted for viewing. This project may be viewed on CSA's Clean Projects Registry.

http://www.ghgregistries.ca/cleanprojects/masterprojectdetails_e.cfm?pid=912

Wakefield has purchased enough emission reduction units to offset the entirety of their 2009 carbon footprint, in order to obtain carbon neutral status for this reporting year. Please refer to Section 5 for further information.

5. Offsets

Wakefield has purchased 2,752 tonnes CO₂e offset units from the Landfill Gas Recovery and Utilization Project. This quantity fully offsets the carbon footprint for Wakefield 2009 operations.

The listing for this GHG project shows that the emission reductions have been verified and now retired to the environment on the behalf of Wakefield Canada Inc. 2008 vintage year offsets have been purchased and utilized for offsetting the 2009 footprint as is the same tonnage vintage year in 2008.

The project GHG report, as well as the corresponding verification report, are available for viewing and all retired tonnage has been accounted for with unique serial numbers through CSA's GHG CleanProjects Registry. *Retirement* of emission reductions ensures that these tonnes cannot be used for a secondary purpose.

Wakefield's final 2009 Corporate GHG emissions were calculated to be **2,751.89 tonnes of CO₂e**. These emissions are a result of truck and car fleets, employee air travel, building energy usage as well as propane vehicles used at Wakefield's warehouses, as described in full detail within the GHG Inventory report.

Canadian Project:

Name:	Landfill Gas Recovery and Utilization Project
Project Type:	Landfill Gas Utilization
Location:	Niagara Fall, Ontario
Registry:	Clean Projects
Website:	

http://www.ghgregistries.ca/cleanprojects/masterprojectdetails_e.cfm?pid=912

Project Description:

Integrated Gas Recovery Services Inc. (IGRS) operates the East Landfill - Landfill Gas Recovery and Utilization Project located at Niagara Waste System Landfill. The landfill gas (LFG) end-user, Abitibi Bowater Paper Mill is located approximately 5km away in Thorold, Ontario. The IGRS project captures and processes LFG originating at the East Landfill. After collecting the LFG, IGRS cleans, dehydrates and compresses the recovered LFG and conveys processed LFG via dedicated pipeline (owned and operated by Enbridge Gas Distribution Inc. (EGD)) to the Abitibi

Bowater Paper Mill (the Mill). At the Mill the processed LFG is directed to one of two boilers, located in the Mill's steam plant. The LFG is commingled with natural gas to achieve the target blended heating value then combusted. The end-user sets LFG usage criteria to ensure compliance with its boiler operation specifications and product quality objectives. The consumption of LFG in the Mill's boilers significantly reduces the Mill's requirement for natural gas.

Total Offsets Purchased: 2,752 tonnes of CO₂e

Serialized VERRs:

8047-8047-000-000-050-349 to 8047-8047-000-000-050-717	(369 tonnes)
8047-8047-000-000-051-084 to 8047-8047-000-000-053-102	(2,019 tonnes)
8047-8047-000-000-124-103 to 8047-8047-000-000-124-466	(364 tonnes)

Vintage Year: 2008

6. Carbon footprint table for carbon neutral reporting

Category	Emissions (tonnes)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Direct Emissions	2,362.06	0.13	0.07	2,387.74
Indirect Energy Emissions	n/a	n/a	n/a	250.49
Other Indirect Emissions	110.48	0.00	0.01	113.66
Total	2,472.54	0.1363	0.0839	2,751.89

Table 1: 2009 Emissions Summary by Category and by Gas

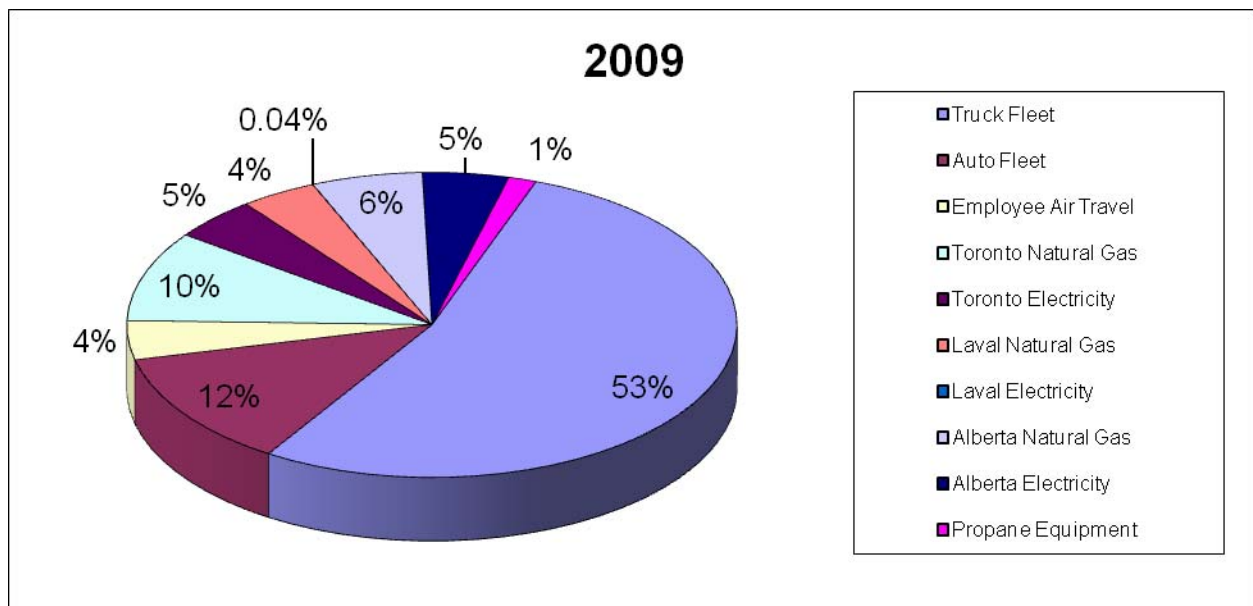


Figure 1: 2009 Emission Summary

Offsets (tonnes of CO₂e)	In total 2,752 offsets (tonnes of CO ₂ e) were purchased to offset the emissions of the 2009 Wakefield Corporate GHG Emissions, as outlined within the GHG Inventory Report. These offsets have been retired
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7. Final Assertion

After completing the 2009 quantification, and third party verification of the corporate GHG emissions stemming from Wakefield Canada Inc. operations, as well as the subsequent emission offsetting that has taken place (as outlined transparently within this document)

Wakefield hereby asserts to have transparently attained Carbon Neutral Status for the scope of 2009 operations.