



Canadian Office and Professional Employees Union
Local 378 Operations
(COPE378)

2009 Greenhouse Gas Emissions Inventory

Data Report and Recommendations

Prepared for
The COPE378 Environment Committee

By
Timothy E. Weigelt
Executive Board Member, Component 'E'

24 November 2010



Acknowledgements

Many thanks to COPE378 Environment Committee member and office staff worker Shelley Lockart for the collection of data. Thanks also to COPE378 Treasurer Lori Mayhew for giving her time to summarize various expense accounts. A special thanks to Genevieve Tardif and the team at Climate Smart™ who facilitated my training and guidance without which this report would not be possible. And finally thanks to COPE378 president Andy Ross for giving me the opportunity to do this work.

1.0 Executive Summary

The Canadian Office and Professional Employees Union Local 378 is assessed for greenhouse gas (GHG) emissions – a.k.a. *carbon footprint* – for its Union operations. In 2007, COPE378 was estimated to have been responsible for the released of 274 tonnes of CO₂. In 2008 it was estimated at 247 tonnes of CO₂. For the year 2009 it's estimated at 359 tonnes of CO₂. The main sources of GHG releases are: Union travel (51%), heating and cooling (13%) and paper use (12%).

Recommendations for offsetting and reducing GHG emissions provided in last year's report are currently in implementation and need to be fully implemented to be effective for the 2010 audit. As in the previous GHG reports, 2009 GHG accounting was difficult to summarize: paid travel was integrated with other miscellaneous expenses and Executive Council travel is under-reported. Business Representatives automobile travel is not accurately tracked. These are important issues, as travel is still the Union's largest footprint.

In conclusion, it is recommended that COPE378:

- Continue its efforts to implement the 2007 and 2008 Audit report recommendations; and
- Improve the accounting of greenhouse gas emitting activities.

2.0 Background

The Canadian Office and Professional Employees Union Local 378 (COPE378) represents over 10,000 employees across British Columbia. Its operations are based out of Burnaby, BC, where 39 people are employed to administrate Union activities. In 2008, the Union developed and adopted a Waste and Energy Management Strategy (COPE 378 2008), and formally created the Environment Committee to oversee its implementation. In March 2009, the committee formally adopted all components of the 2008–2009 Waste and Energy Management Program (WEMP), namely:

- 1) Expand the greenhouse gas auditing program to include all waste and energy uses
- 2) Establish an Action Team to implement office policies and practices
- 3) Develop a policy and purchasing program to reduce energy use and waste disposal
- 4) Establish a Carbon Trust Fund to fund future programs

This document reports on the outcome of the greenhouse gas audit completed for the 2009 calendar year of Union operations. A greenhouse gas audit was completed for the 2007 and 2008 calendar years of operations which set the format for following year's activities.

Greenhouse gases (GHGs) are molecules (including most notably, carbon dioxide and methane) released to the atmosphere through both natural and anthropogenic (human caused) processes.

However, increases in GHG concentrations recorded in recent years have been shown both to be wholly due to human activity, and most importantly, resulted in changes to the earth's climate (see the [2001-2004 IPCC Synthesis Reports](http://www.grida.no/climate/ipcc_tar/vol4/english/index.htm) for example; http://www.grida.no/climate/ipcc_tar/vol4/english/index.htm).

3.0 Objectives

The objectives of this greenhouse gas audit are:

- provide a preliminary assessment of the carbon footprint of Union operations for the 2009 calendar year;
- identify opportunities for improving GHG accounting for the Union and;
- recommend alternatives to GHG reductions and/or offsets for future implementation.

4.0 Approach

As of January 1, 2008 the Greenhouse Gas Reduction Targets Act (GGRTA)¹ has been in effect. Although the Act does not affect the Union's operations directly as it only applies to the public sector, it does set some goals.

As per the 2008 audit, the B.C. Government has not developed standards for quantifying and reporting GHG emissions for BC private sector organizations and households. However, in its Climate Action website (<http://www.climateactionsecretariat.gov.bc.ca>), the government has endorsed the World Resources Institute's (WRI's) GHG Protocol Corporate Standard for conducting a GHG inventory for businesses (<http://www.ghgprotocol.org/standards/corporate-standard>).

The Standard divides GHG emissions for businesses into 3 groups:

- Scope 1 emissions – are direct business-generated emissions such as those from company owned natural gas heaters, and company owned cars;
- Scope 2 emissions – are emissions by generation facilities from electricity purchased by the business; and
- Scope 3 emissions – are emissions created to make products consumed by businesses (e.g. office supplies) and emissions created while doing business but not owned by the business (e.g. employee commuting in non-company vehicles and natural gas heaters not owned by the company)

¹ GGTRA legislates B.C.'s aggressive reduction targets for greenhouse gas emissions, and the government's commitment to a carbon-neutral public sector by 2010. The act puts into law British Columbia's target of reducing greenhouse gas emissions (GHGs) by at least 33 per cent below 2007 levels by 2020. It also includes the long-term target of an 80 per cent reduction below 2007 levels by 2050. B.C. also accepted the recommendations of the Climate Action Team for interim GHG targets of six per cent below 2007 levels by 2012 and 18 per cent by 2016.

For the purpose of this GHG footprint analysis, the Union operations were divided into two locations:

- COPE378 Administration Office – 2nd Floor 4595 Canada Way, Burnaby, BC. The office is leased through Touchstone Property Management, and in general is responsible for emissions of the Scope 2 and 3 variety; and
- Office Employees Building Ltd – This building is owned by COPE378 which is leased out and is generally responsible for Scope 2 emissions.

For the purpose of this GHG footprint analysis, the Union operations were divided into two categories:

- Service – The day to day operations of the Union required to serve the membership and collective agreements and the annual Job Steward Seminar.
- Governance – Because the Union is a democratic organization there are is a requirement for several meetings including Executive Board, Executive Council and Convention.

This GHG audit was conducted in the month of October 2010 by COPE378 staff and by Tim Weigelt on behalf of the Environment Committee.

- Travel by Executive Councillors and Executive Board members was calculated from surveys and travel records. Averages and estimates were then extrapolated from those surveys and records. Board and Council attendance was tracked from meeting minutes. This approach likely gives a more realistic total estimate than previously used methods however it underestimates out-of-town road travel as some distances aren't reported.
- Staff commuting was calculated from information provided however staff travel by car for work was estimated.

- Previously BC Ferries travel was assumed to have the same impact per person–km as an airplane. For 2010 a separate formula was used to assess ferry travel.
- Air travel was tracked and a separate formula was used to calculate its impact.
- Paper consumption was based on information provided.
- Waste was not included in this audit because there is currently no method in place for the tracking of waste or recycling.
- Courier and post office usage was tracked but not included in this audit as there currently is no formula to assess its impact and it was deemed inconsequential.
- Office Employees Building Ltd was assessed only for the portion of the build which COPE378 occupied. This is a departure from previous audits.

5.0 Validation

Training in preparation for this audit as well as validation of methodology used to compile it and the verification of the results provided by Climate Smart™, more information about Climate Smart™ can be found on their website www.climatesmartbusiness.ca.

6.0 COPE378's 2009 GHG Footprint

The total GHG footprint for COPE378's 2009 operations is estimated at 359.4 tonnes CO₂. For context, the average U.S. household with four people emits about 100 tonnes CO₂ per year.

The following graphs summarize the results of the 2009 audit based on records retrieved from COPE378 files.

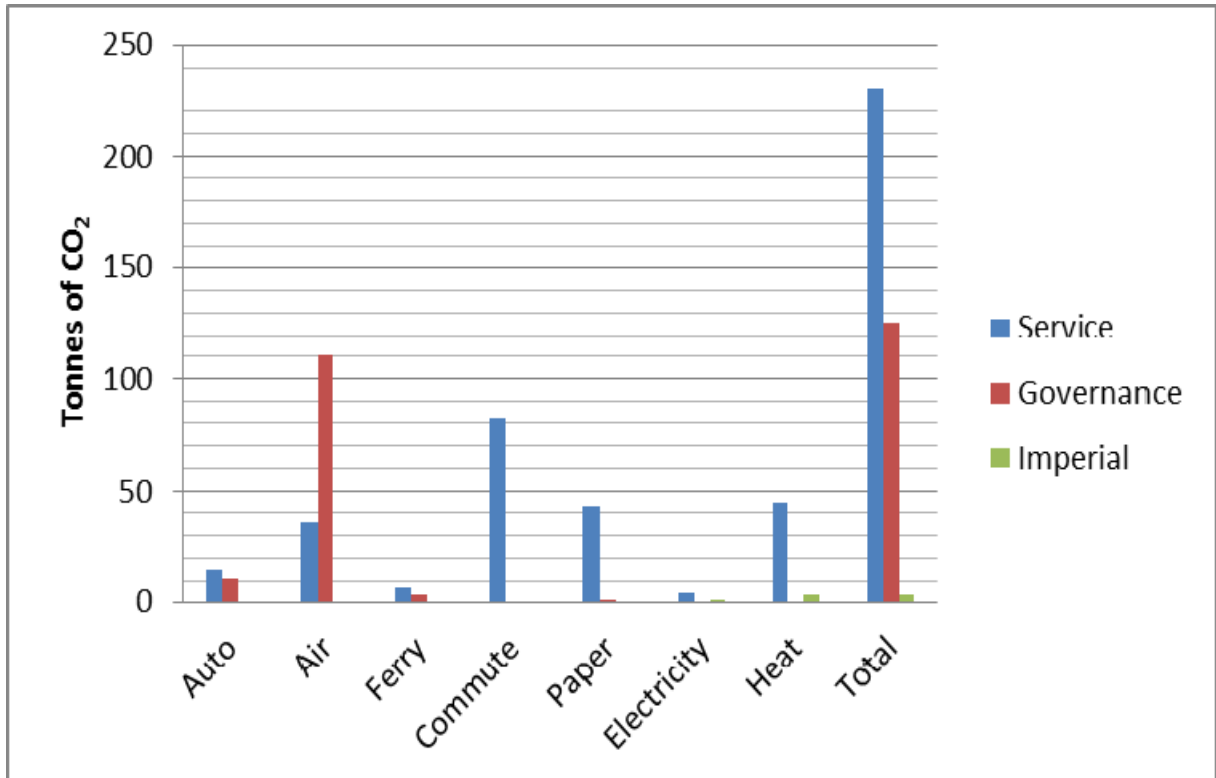


Figure 1: Summary of COPE Local 378 operations GHG Footprint

As demonstrated in the Figures 1 and 2, Union travel has the largest footprint, followed by commuting then heating and cooling emissions and then paper consumption.

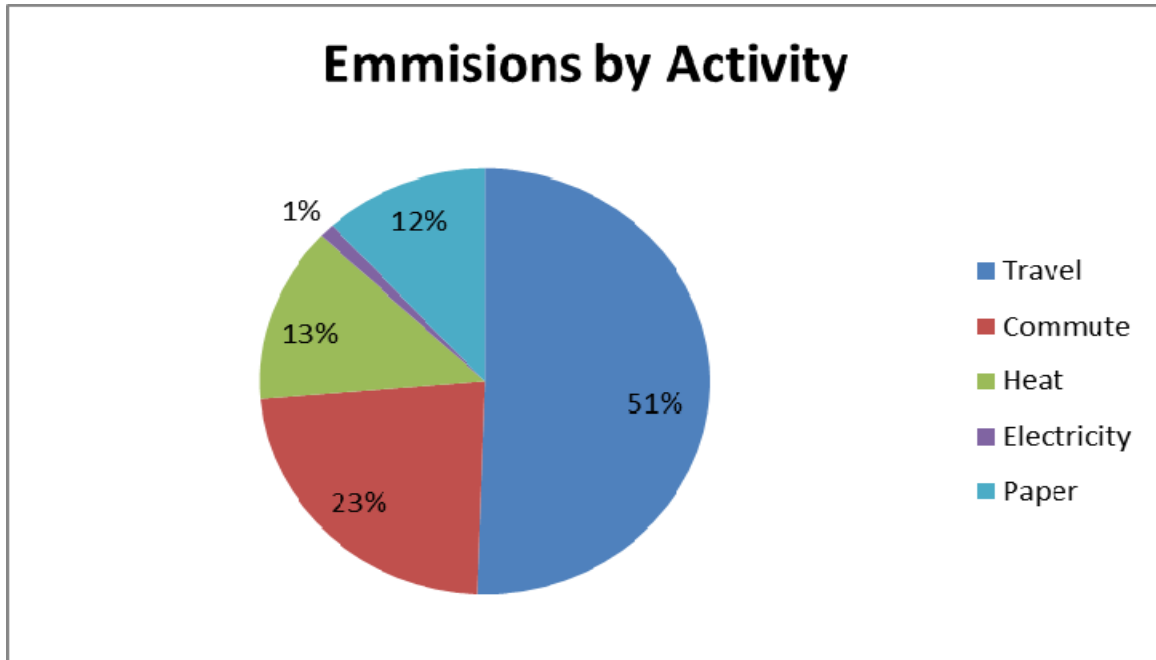


Figure 2: GHG emissions by activity for 2009 COPE378 Office Operations and Office Employee Building Ltd. emissions.

In 2007, COPE378 was estimated to have been responsible for the released of 247 tonnes of CO₂. In 2008 it was estimated at 247 tonnes of CO₂. For the year, 2009 it is estimated at 359 tonnes of CO₂.

The significant increase between 2008 and 2009 can be attributed to several causes, not least of which would be differences in the methodology used to compile the audit from year to year. The amount of data available has increased and record keeping continues to improve. As this happens the accuracy of the audit improves and is less dependent on estimates. Previous audits have been, by their own admission, underestimated particularly in the travel category. Also it should be noted that 2009 was a particularly heavy travel year with lots of meetings leading up to ICBC bargaining and a triennial convention was held in 2009.

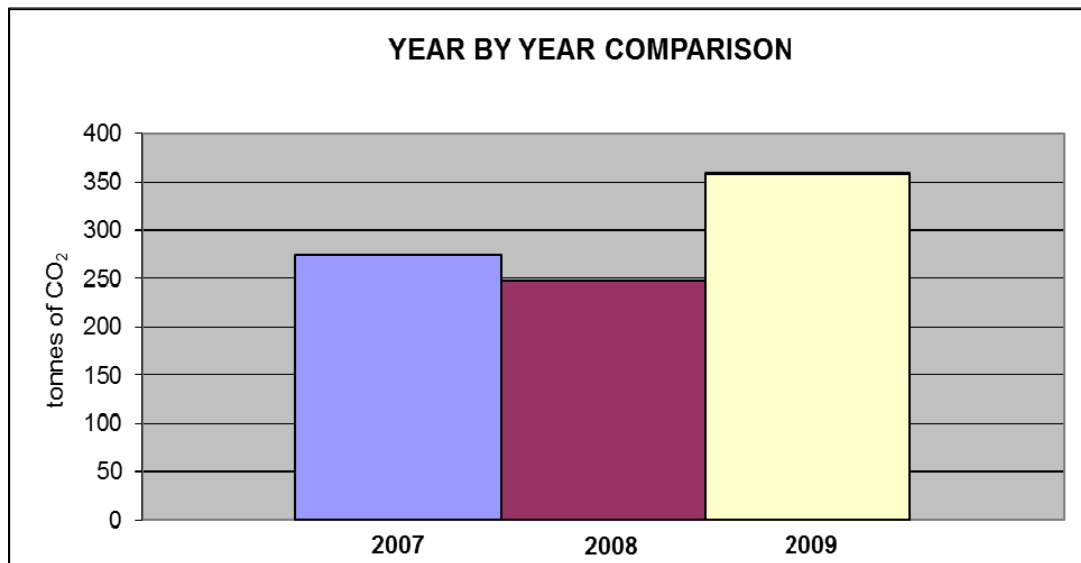


Figure 3: Year to year comparison of total CO₂ output in tonnes.

7.0 Progress made

Between the first audit in 2007 and the latest in 2009 several improvements have been made including:

- Improvement in tracking of air travel.
- During November 2009 COPE378 Convention voted to eliminate the triennial “policy convention” leaving only one triennial convention.
- Paper usage continues to decrease as the move to electronic documentation improves;
- *The Local Voice* is now published on 30% post-consumer paper.
- Not including *The Local Voice*, 23 percent of paper purchased was 30% post-consumer content.
- The 2010 budget, approved by Council, included extra funds for the purpose of offsetting the additional costs associated with the migration to recycled paper usage.

- On May 31, 2010 Council voted in favour of an initiative that could greatly reduce the amount of paper consumed at council meetings.
- COPE378 has purchased high quality “carbon offsets” from Cool Works™. More information about Cool Works™ can be found on their website www.cool-works.ca.

8.0 Recommendations for further work

Between the 2007 and 2009 audit steps were undertaken to improve the reliability of the data used, but likely underestimated those aspects where expense reporting was optional¹:

- Separately define expense types in each account that are GHG emitting activities: mileage and gas, paper, airplane and ferry travel, courier, heating/cooling, electricity and waste should be flagged as GHG activities to ease auditing processes in the future.
- Travel information provided by Executive Councillors during meeting sign-in should be considered by the Union.
- Institute a better method of tracking Business Representative’s automobile usage.
- Develop a method of tracking waste and recycling.
- Include this review in resourcing annual office planning. March 31st is a logical end date for annual reporting to coincide with financial requirements that have similar data needs.
- Promote accomplishment made!
- Provide a link to this report on the external COPE378 website.

¹ Members are not supposed to submit a travel expense claim unless union business travel is greater than their normal trip to work, which would have happened anyway.

9.0 GHG Reduction Recommendations

As this audit has shown, there are three activities that are significantly contributing to COPE378's carbon footprint: Union travel, heating and cooling, and paper use. Heating and cooling emissions reductions are at present mostly out of the union's control. Union travel and paper use provide the best immediate opportunities to reduce GHG emissions for this organization.

- Heating and Electricity Use: If the union wishes to take control of these emissions the following recommendation would fulfill that goal:
 - Relocate operations to a LEED¹ certified building.
- Paper Use: The COPE378 Administration staff has continued working towards an electronic filing system, archiving existing files to the electronic system throughout 2009. These efforts will continue to drive down paper use. In addition to this initiative, the following options are recommended to reduce the need for paper to meet our requirements:
 - Expand the use of the internet and email communications specifically among members to support Union initiatives. Continue the improvements made to the COPE378.ca website. Expand the use of the website to register and assist in tracking travel to events.
 - Continue to work with office vendors to supply "post-consumer content" paper and office supplies.
 - Allocate funds to facilitate the printing of *The Local Voice* on a higher recycled content paper than 30% content currently being used.
 - Continue to explore options to greatly reduce or eliminate paper distribution at board and council meeting.

¹ The Leadership in Energy and Environmental Design (LEED) <http://www.cagbc.org/leed/what/index.php>

- Union Travel: It is understood that travel is integral to union operations and governance. However there are opportunities to try different alternatives to smaller face to face meetings, particularly outside the Lower Mainland, including:
 - Organizing several meetings at one location (e.g. BC Hydro meetings in one day/ICBC the next).
 - Review the need to meet – discuss alternatives or relay information over the internet using net-meeting or video conferences.¹
 - Look at incentives to encourage staff to use more efficient vehicles.
 - Locate operations in close proximity to a rapid transit hub.
 - Encourage carpooling to meeting and events.
- Policy changes: in 2009 the Environment Committee successfully implemented policy changes to the way low-impact travel options are reimbursed, allowing compensation for those who choose to ride their bike or walk to Union activities. This policy proved to be unworkable and subsequently rescinded, however the idea has merit and should be revisited.
- Promote Employee Conservation: the Environment Committee has recommended that a COPE378 office staff group be created, but to date the group has been inactive. This group can be effective not only in promoting office GHG reductions, but in influencing employees to adopt a climate-friendly lifestyle.
- COPE378 Carbon Trust: a separate account was created in 2009 to receive funding for carbon offsets.
 - Continue to fund the Carbon Trust.
 - Continue to purchase high quality carbon offsets.

¹ Examples are; Microsoft LiveMeeting™ or GoToMeeting™ or Skype™.

10.0 Next Steps

The Environment Committee proposes that this document be accepted and its recommendations be integrated into the 2010/2011 Waste and Energy Management Program. The Environment Committee will present the report and recommendations to the Executive Board for approval on November 25, 2010 and Executive Council approval on December 6, 2010.





Timothy Weigelt
COPE 378
2nd Floor, 4595 Canada Way
Burnaby, BC V5G 1J9
Canada

Tuesday, 23 November 2010

Dear Timothy,

I am delighted to confirm COPE 378's participation in and completion of the Climate Smart program.

In order to successfully complete the Climate Smart program, participating businesses and organizations must: 1) complete a greenhouse gas emissions inventory according to the best practice taught in the Climate Smart workshops and work with the Climate Smart team during the inventory review process until the inventory is finalized, and 2) submit a list of reductions strategies they intend to pursue over the coming year.

Climate Smart reviews our participants' inventories for adherence to the standards of the GHG Protocol Corporate Accounting and Reporting Standard and its principles of transparency, relevance, accuracy, consistency and completeness. We have found COPE 378's inventory of 359.4 tonnes CO₂ equivalent emitted in 2009, to comply with the Standard.

The list of the reduction strategies COPE 378 has committed to pursue includes the following:

- Implementing an electric filing system
- Expanding the use of email for communications
- Purchasing higher recycled content paper
- Organizing several meetings at one location and time to reduce travel
- Encouraging carpooling
- Reviewing the need to meet in person

Thank you again for participating in Climate Smart and for your leadership in taking action to reduce COPE 378's greenhouse gas emissions! We look forward to hearing about your progress in the coming months, and hope to continue to work with you on subsequent inventories!

1380-163 West Hillside St, Vancouver, BC V6H 1T5





If you have any questions about the certificate of participation, please don't hesitate to contact me at michelle@climatesmartbusiness.com or 604-254-6283 ext. 234.

Sincerely,

A handwritten signature in black ink that reads "MBonner".

Michelle Bonner
Director of Training

1380-163 West Hastings St, Vancouver, BC V6B 1T5

