



2014 Corporate Greenhouse Gas Inventory
Offsetters Climate Solutions



Executive Summary

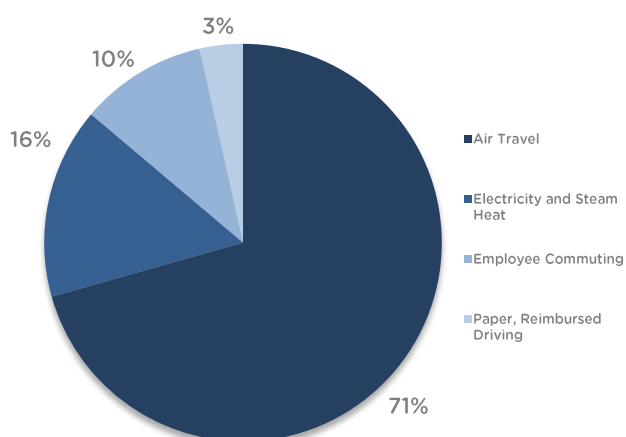
This report outlines the 2014 GHG footprint for Offsetters Climate Solutions (OCS). As of 2014, OCS no longer held a vested interest in the ERA DRC project, ERA's joint venture forestry project. This project accounted for a significant portion of the total footprint for the past two reporting periods. As a result OCS emitted only 34 tonnes of carbon dioxide equivalent (tCO₂e) in 2014, compared to the 2013 total of 252 tCO₂e (with the DRC Project emissions).

GHG sources under the operational control of OCS fall under the indirect categories of Scope 2 and 3 only. As of 2014, Offsetters no longer reports Scope 1 emissions, as OCS no longer has company owned motorized vehicles or equipment. Total Scope 2 emissions were 5.2 tCO₂e from electricity and steam heating, and 28.3 tCO₂e from air travel, employee commuting, office paper, outsourced paper, and reimbursed driving (Scope 3).

Major Emissions Sources

OCS' GHG emissions are highly dependent upon active company projects and number of staff. A detailed breakdown of GHG by source is illustrated in Figure E1.

Figure E1: 2014 Offsetters GHG Emissions by Activity



In 2014, OCS' largest GHG emissions source was air travel, accounting for more than 71% of the footprint. While air travel accounts for a small overall proportion in 2014 than in 2013 (78%) and 2012 (85%), emissions from air travel accounted for 23.7 tCO₂e, a decrease of 80% compared to 2013 emissions of 81.4 tCO₂e. Mobile fuel combustion from gasoline and diesel, previously the second highest emissions source, is no longer an emissions source for OCS, a 10 tCO₂e savings from 2013. In 2014, the second highest emission source was Scope 2, building electricity and steam heating, which when combined contributes 5.2 tCO₂e, or 16% of emissions. The remaining 14% of emissions are from employee commuting, office paper and reimbursed driving.

For additional information regarding Offsetters' GHG program, please contact Alexis Doyle, Project Manager, Advisory Services at alexis.doyle@offsetters.ca.

Table of Contents

Executive Summary	i
Table of Contents.....	ii
List of Figures	iii
List of Tables.....	iii
1 Introduction	1
2 Offsetters - 2014 Emissions.....	2
2.1 Scope One	2
2.2 Scope Two.....	2
2.2.1 Electricity.....	2
2.2.2 Steam	2
2.3 Scope Three.....	3
2.3.1 Reimbursed Driving.....	3
2.3.2 Employee Commuting	3
2.3.3 Business Air Travel	3
2.3.4 Office Paper Usage	3
2.3.5 Outsourced Paper.....	3
3 Emissions Overtime	5
4 Reductions Plan.....	6
5 Carbon Offsets.....	6
6 GHG Target Setting	7
6.1 Absolute Emissions.....	7
6.2 Emissions Intensity.....	7
7 Accounting and Reporting Procedures	8
7.1 Organizational Boundary	8
7.2 Operational Boundary	8
7.3 Inventory Exclusions	8
7.4 Base Year	8
7.5 Emissions Adjustments	9
7.6 Inventory Quality	9

List of Figures

Figure E1: 2014 Offsetters GHG Emissions by Activity i
Figure 1: 2012 and 2014 Emissions by Scope5
Figure 2: Offsetters Year-Over-Year Absolute GHG Emissions targets..... 6
Figure 3: Offsetters Year-over-year Intensity GHG Emissions targets 6

List of Tables

Table 1: Offsetters 2012, 2013 and 2014 Emissions (tCO₂e) by Scope.....2
Table 2: Emissions from Scope 2 Activities3
Table 3: Emissions from Scope 3 Activities4

1 Introduction

Offsetters Climate Solutions (OCS) provides high quality solutions for individuals and organizations seeking to reduce their climate impacts. Previously, OCS developed carbon forestry projects, in the Democratic Republic of Congo. As of the end of 2013, OCS sold their joint venture with Wildworks and therefore no longer reports emissions related to the DRC project. While OCS continues to develop forest carbon projects in British Columbia, OCS also sold all assets associated with their BC based projects and no longer reports diesel or gasoline emissions and activities. As a result, OCS' operational activity emissions have decreased significantly from one year to another.

In this report, prepared by OCS, the corporate inventory will be presented. The information has been collected from detailed accounting of OCS' GHG emissions for the 2014 calendar year. This is OCS' seventh year reporting on their organizational emissions.

The report is organized as follows:

- **Section 2** presents OCS' GHG emissions inventory for 2014;
- **Section 3** presents historical comparisons for Offsetters;
- **Section 4** summarizes GHG management actions for reducing emissions;
- **Section 5** discusses carbon neutrality;
- **Section 6** outlines targets for future emission reductions; and
- **Section 7** describes the accounting and reporting procedures used.

This GHG inventory report includes total emissions from Offsetters corporate activities, and will use 2012 as the updated base year. Since OCS divested the DRC project, all emissions from 2012 and 2013 will now exclude project related emissions. For more details, please refer to *Section 3 – Emissions Overview*. Total emissions from OCS in 2014 were 34 tCO₂e.

2 Offsetters - 2014 Emissions

OCS's total 2014 consolidated emissions were 33.5 tCO₂e. Each emission source is summarized in Table 1, below, and described in more detail in subsequent sections. Base year GHG emissions from 2012 are also reported for comparison. Both 2012 and 2013 emissions have been restated to exclude all fuel and air travel activities related to the DRC project as originally reported in OCS' 2012 and 2013 corporate GHG inventories. For more details regarding the DRC project emissions, please refer to previously reported annual emissions, available on our website (www.offsetters.ca).

Table 1: Offsetters 2012, 2013 and 2014 Emissions (tCO₂e) by Scope

Scope	Emissions Source	2012 (Base Year)	2013	2014
Scope 1 Emissions	Natural Gas	11.0	0.0	0.0
	Diesel	6.4	9.0	0.0
	Gasoline	1.4	0.9	0.0
	<i>Subtotal Scope 1:</i>	<i>18.8</i>	<i>10.0</i>	<i>0.0</i>
Scope 2 Emissions	Electricity	2.2	2.3	1.9
	Steam	0.0	3.7	3.3
	<i>Subtotal Scope 2:</i>	<i>2.2</i>	<i>6.0</i>	<i>5.2</i>
Scope 3 Emissions	Air Travel	130.2	81.4	23.7
	Employee Commuting	8.6	5.1	3.5
	Office Paper	1.2	1.2	0.5
	Outsourced Paper	0.3	0.0	0.0
	Reimbursed Driving	1.5	0.7	0.7
	<i>Subtotal Scope 3:</i>	<i>141.7</i>	<i>88.4</i>	<i>28.3</i>
Total Emissions (tCO₂e):		162.7	104.4	33.5

2.1 Scope One

As of 2014, OCS no longer reports Scope 1 emissions activities. Previously, OCS owned assets including fuel burned on project sites by company transportation vehicles and mechanical tools.

2.2 Scope Two

Scope 2 emissions are comprised of indirect emissions from electricity and steam for building heating.

2.2.1 Electricity

In 2014, indirect GHG emissions from electricity generated 1.9 tCO₂e, representing 5.8% of the total carbon footprint. While emissions for electricity are down 14% since 2014, actual usage compared to 2014 is up 13%. Increased usage is primarily due to increased tenancy within Offsetters' office building for which the meter is shared. OCS reported lowered emissions due to updated, lower emissions factors.

2.2.2 Steam

OCS' indirect GHG emissions from steam building heating generated 3.3 tCO₂e, representing 9.8% of the total carbon footprint. Compared to last year, these emissions

and usage are down 13%. Vancouver had a more mild winter season in 2014 resulting in less steam heat usage overall.

Table 2: Emissions from Scope 2 Activities

Emission Source	Activity Data	Emission Factor (g CO ₂ e/kWh)	2014 Emissions (tCO ₂ e)
Electricity Office Building: 675 W. Hastings	213,347 kWh	9.1 gCO ₂ e/kWh	1.9
Steam Office Building: 675 W. Hastings	56.1 klbs	58.3 kg CO ₂ e/ 100 lbs	3.3
Total Emissions (tCO₂e):			5.2

Emissions Factor Source: Environment Canada, 1990-2012 National Inventory Report (May 2013), Greenhouse Gases and Sinks in Canada, Part 2, Annex 8 (Table A13-11), Central Heat Distribution Ltd., Gerry Mitton, Controller, Personal Communication, June 14, 2012.

2.3 Scope Three

Other indirect emissions in 2014 accounted for 28.3 tCO₂e or 84% of the total carbon footprint.

2.3.1 Reimbursed Driving

Reimbursed driving accounts for GHG emissions related to rental car and personal vehicle use for work purposes. In 2014, OCS reimbursed employees for 2633 km, a 16% decrease in activity year-over-year and a 6% decrease in emissions due to emission factor updates. Total emissions amounted to 0.7 tCO₂e, representing 2.1% of the total carbon footprint.

2.3.2 Employee Commuting

Data on commuting modes and distances travelled were gathered from an online staff survey conducted in 2015 for the 2014 staff commuting activity. Response rate was 84%. Total emissions from employee commuting amounted to 3.5 tCO₂e, or 10.3% of emissions. Emissions per employee commute were 0.182 tCO₂e. Public transit was the most commonly used mode of transport (78%), followed by walking and cycling (16%). Employee commuting emissions were reported to be lower in 2014 as OCS total employees have decreased.

2.3.3 Business Air Travel

Total emissions for all commercial flights flown were 23.7 tCO₂e and total km flown amounted to 121,499 km. Air travel continues to be the largest emissions source, accounting for 71% of the 2014 carbon footprint. Emissions compared to 2013 are down 80%. The divestment of the ERA DRC Project contributed significantly to the lower air travel emissions, in addition to lower, general corporate air travel activities.

2.3.4 Office Paper Usage

OCS printed a total of 42,556 sheets of paper in 2014. Associated emissions were reported to be 0.5 tCO₂e, or 1.4% of total emissions.

2.3.5 Outsourced Paper

OCS reports no GHG emissions from outsourced printed paper. Outsourced printing for OCS' marketing materials continues to be completed with Hemlock Printers' Zero program – their carbon neutral printing program. In 2014, OCS printed a limited amount of outsourced printing – all of which was carbon neutral.

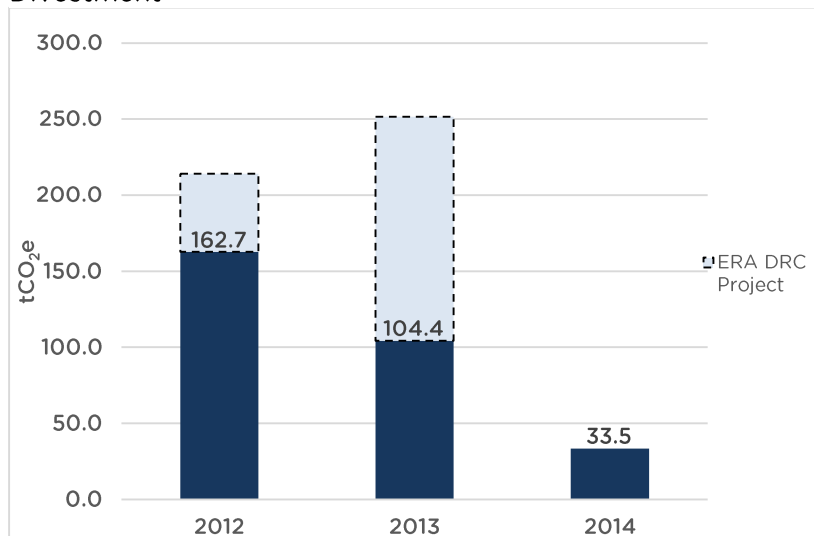
Table 3: Emissions from Scope 3 Activities

Emissions Source	Activity Data	Emission Factor	2014 Emissions (tCO ₂ e)
Air Travel	121,499 km	0.151-0.602 kgCO ₂ e/km	23.7
Employee Commuting	58,918 km	0.0-0.29 kgCO ₂ e/km or passenger km	3.4
Office Paper	42,574 sheets	0.012 kgCO ₂ e/sheet	0.5
Outsourced Paper	N/A	N/A	0.0
Total Emissions (tCO₂e):			28.3

Emissions Factor Sources: UK Government GHG Conversion Factors for Company Reporting – Business Travel Air Tab, version 1.0, year 2013, 2013 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions – Table 11, UK Government GHG Conversion Factors for Company Reporting – Passenger Vehicles Tab, version 1.0, year 2013, Environmental Defence Fund's Paper Calculator (EDF Paper Calculator), version 3.2.

3 Emissions Overtime

Figure 1: 2012, 2013 & 2014 Emissions with DRC Project Divestment

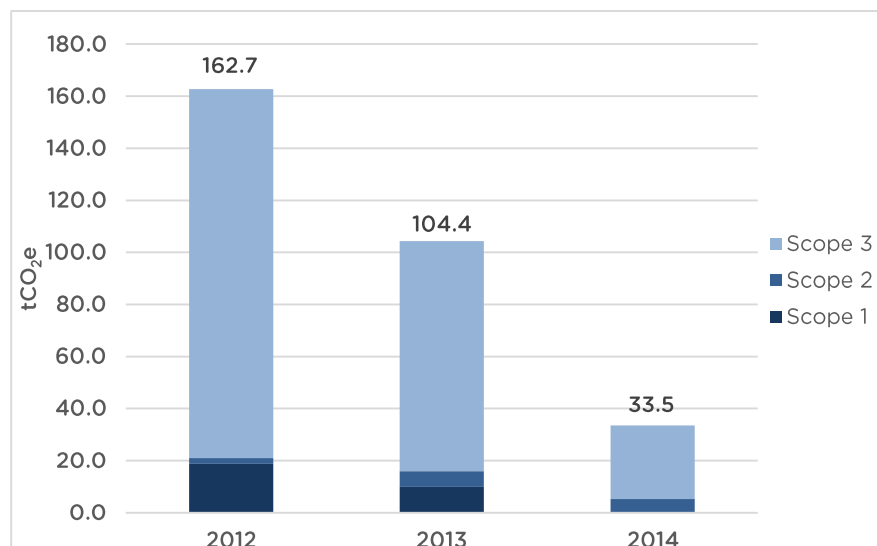


OCS has seen a 64% decrease compared to the 2013 adjusted total emissions and a 48% decrease in emissions compared to 2012, OCS' base year. This change in emissions is due to decreased corporate air travel in 2014. In 2013, OCS' corporate operations in the United States resulted in a number of additional flights that have since decreased in number in 2014.

Figure 1 shows the emissions difference since 2012 with the removal of the ERA DRC Project to show a more accurate comparison of year-over-year emissions. The ERA DRC project was a major contributor of Scope 1 mobile fuel emissions and Scope 3 air travel emissions.

Scope 3 emissions continue to be the most significant portion of OCS' annual emissions as air travel continues to be the greatest emissions source. With the divestment of the DRC project, Scope 1 emissions are no longer as significant to annual emissions and as of 2014, are no longer a part of OCS' footprint.

Figure 2: 2012, 2013 & 2014 Emissions by Scope



4 Reductions Plan

OCS is focused on continuing to reduce our emissions where possible every year. Over the years, we have moved into new offices, with lower electricity and heating emissions from our previous locations, we use public transportation to meet up with our clients around the lower mainland and we have worked to decrease the unnecessary corporate air travel flights. We will continue to monitor and lessen our environmental impacts as it is at the core of our business.

5 Carbon Offsets

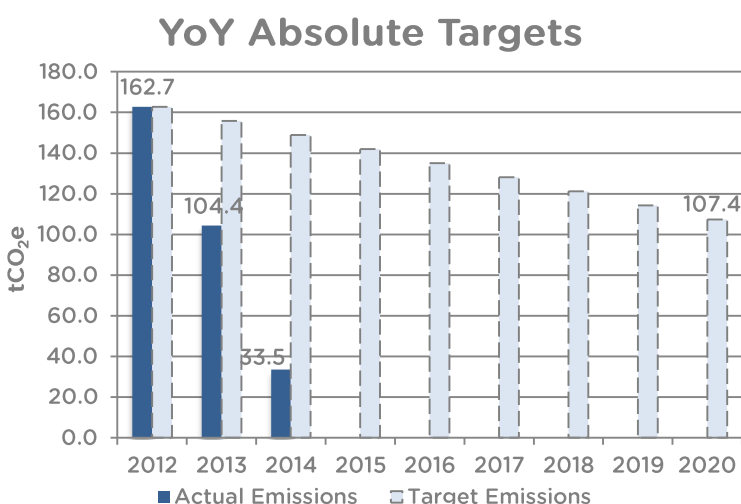
OCS is a carbon neutral business. We have purchased 34 tonnes of high quality, verified carbon credits to offset GHG emissions generated in 2014. The carbon credits were used to fund renewable energy and energy efficiency projects that reduce GHG emissions, which would not take place without OCS' involvement.

6 GHG Target Setting

Offsetters originally set absolute and intensity targets based on the 2008 GHG Inventory to match the BC Provincial Government's target of a 33% reduction in GHG emissions across the BC economy by 2020. With the divestment of the DRC project, OCS has restated both absolute and intensity targets using the adjusted emissions from 2012 on. This approach allows OCS to maintain the same base year, comparing year-over-year emissions

6.1 Absolute Emissions

Figure 3: Offsetters Year-Over-Year Absolute GHG Emissions targets



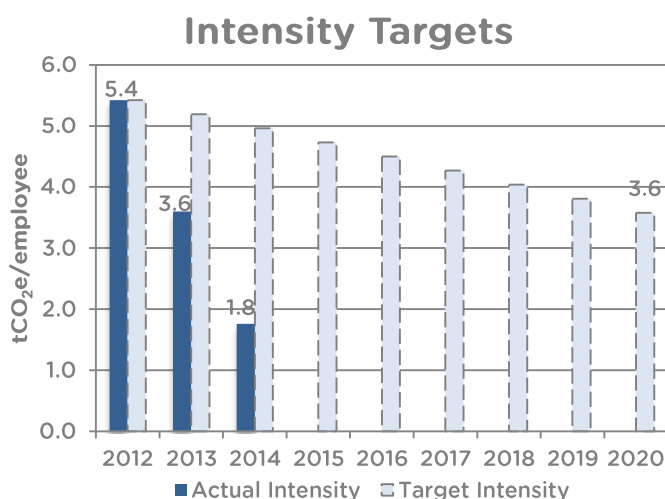
With the adjustment to the historical emissions since 2012, OCS' absolute emissions are well below our 2020 goal of 107 tCO₂e. This is the third adjustment since 2012. Over the next 6 reporting years, OCS hopes to maintain current annual emissions. Should additional project investments or company mergers take place, OCS will work to remain below the annual emissions targets year-over-year with the end goal to be below the 107 tCO₂e in 2020.

6.2 Emissions Intensity

Similar to the absolute targets, the intensity target was adjusted to align with loss of the ERA DRC joint venture emissions for 2012 onward. Consequently, this will be the third year that these intensity targets have been adjusted due to major changes in the corporate emissions accounting.

In 2014, emissions per employee were 1.8 tCO₂e, a significant reduction since 2013 and lower than OCS' projected target of 3.6 tCO₂e in 2020. OCS will work toward maintaining this met target, as the company grows.

Figure 4: Offsetters Year-over-year Intensity GHG Emissions



7 Accounting and Reporting Procedures

OCS' 2014 GHG corporate inventory report is structured to follow the accounting and reporting guidelines of *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard¹, Revised Edition* (the Protocol), published by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The Protocol is the international accounting tool most widely used by government and business leaders to understand, quantify and manage GHG emissions

7.1 Organizational Boundary

The Greenhouse Gas Protocol requires that an organizational boundary be defined in order to complete a GHG inventory. There are several different approaches that can be used when choosing an organizational boundary, and Offsetters have applied the operational control approach. The operational control approach means reporting on all business activities over which the companies exercise operational control, previous footprints have been restated based on operational control boundaries.

7.2 Operational Boundary

The following direct (Scope 1) and indirect emissions (Scope 2 & 3) have been identified and categorized for Offsetters' inventories based on operational boundaries:

- **Scope 1:** No scope one emissions sources.
- **Scope 2:** OCS' indirect emissions are from purchased electricity and steam for office heating.
- **Scope 3:** OCS quantifies outsourced activity emissions from: employees commuting to work; reimbursed driving; business air travel, and office paper and outsourced paper.

7.3 Inventory Exclusions

The following emissions sources are not currently included in the inventory:

- **Waste:** OCS does not currently have access to reliable data about the weight or volume of solid waste being picked up from the offices, the types of vehicles used, or the routes that the vehicles take to the incinerator or landfill. OCS utilizes office waste composting to limit impacts related to waste generation. OCS utilizes recycling services and both companies estimate that emissions from waste disposal are minimal.

7.4 Base Year

Offsetters has been calculating and reporting their emissions since 2008. After the merger in 2014, OCS' updated base year was 2012 and combined Offsetters' and ERA's 2012 company emissions, as this was the first year that ERA could report complete emissions data for all operationally controlled activities.

¹ A copy of the Protocol can be downloaded from the WRI website, www.ghgprotocol.org.

7.5 Emissions Adjustments

As OCS' knowledge and experience with inventory calculation grows, they may develop improved methodologies and tools. When this happens, previous years' reported emissions will be adjusted accordingly. Adjustments will also be made when new emission factors are published that more closely reflect actual emissions than those available at the time of the original calculations, allowing for consistent, accurate accounting from year to year. However, in the case where adjustments are relatively insignificant (less than 5%) or do not reflect a change in calculation methodology, recalculations may not be performed for previous years' emissions.

7.6 Inventory Quality

To ensure inventory quality, an OCS staff person external to the Project Team has performed quality assurance procedures to the excel model. This GHG inventory report has not been subjected to an assessment by a qualified third-party.



604.646.0400

info@offsetters.ca

www.offsetters.ca