

May 20, 2016

# Vancouver Landfill Gas Capture Optimization Project

Allocation of GHG Reduction Credits to Metro  
Vancouver and its Member Municipalities

**2015 Reporting Year**



This report was prepared by the staff of the Air Quality and Climate Change Division of Metro Vancouver.

Questions on the report should be directed to [AQInfo@metrovancover.org](mailto:AQInfo@metrovancover.org) or the Metro Vancouver Information Centre at 604-432-6200.

**Contact us:**

Metro Vancouver  
Air Quality and Climate Change Division  
4330 Kingsway, Burnaby, BC V5H 4G8  
604-432-6200  
[www.metrovancover.org](http://www.metrovancover.org)

## EXECUTIVE SUMMARY

This document provides an overview of the greenhouse gas (GHG) emission reductions and associated GHG reduction credits (or “carbon credits”) from the Vancouver Landfill Gas Capture Optimization Project.

**Project Overview:** The City of Vancouver voluntarily initiated the optimization of the landfill gas collection system at the Vancouver Landfill in Delta, BC, to increase the capture efficiency of landfill gas and reduce methane emissions. The “*Vancouver Landfill Gas Capture Optimization Project*” is considered an approved “Option 2 – Third Party Validated” project as per the Province’s *Becoming Carbon Neutral Guidebook*. The Project was implemented in advance of the Provincial Regulation that comes into effect in 2016, which sets a target capture efficiency of 75% for qualifying landfills. The Project will result in additional carbon reductions over the business as usual case, which are eligible for carbon credits. For the first three years of the project, the verified carbon credits were 55,799 tonnes CO<sub>2</sub>e (2012), 105,215 tonnes CO<sub>2</sub>e (2013), and 135,660 tonnes CO<sub>2</sub>e (2014). For 2015 (the present reporting year) the verified carbon credits are 134,056 tonnes CO<sub>2</sub>e.

**Metro Vancouver’s Role:** The final disposal of municipal solid waste from all municipalities in the region is managed at Metro Vancouver disposal facilities and the Vancouver Landfill located in Delta. In 2013, a Tripartite Agreement on Carbon Credit Allocation was reached between City of Vancouver, Metro Vancouver and Delta, under which the verified carbon credits for each year of the Project would be allocated in the proportions 57%, 33% and 10%, respectively. Therefore, Metro Vancouver’s portion of the verified carbon credits in 2015 is 44,238 tonnes CO<sub>2</sub>e.

**Allocation to Member Municipalities:** All local governments in the region have contributed to the GHG reduction project either through regional tipping fees and/or through a management role. In consultation between Metro Vancouver and all of its member municipalities, a method of allocating Metro Vancouver’s carbon credits has been developed. This report has been prepared on behalf of the region’s local governments to describe the allocation process, and to fulfill the reporting requirements associated with the Climate Action Charter and the Provincial Carbon Neutral Local Government Program.

**Allocation Methodology and Expected Impact:** The verified GHG reduction credits allocated to Metro Vancouver are further allocated to its member municipalities based on the following factors: the quantity of credits they receive from Municipal organics diversion programs (under the Provincial Carbon Neutral “Option 1” Profile), the proportional amount of municipally-collected solid waste that they contribute to the regional system, and their carbon footprint. All local governments in the region except for the City of Burnaby are signatories to the B.C. Climate Action Charter, and as such have made a voluntary commitment to make progress towards carbon neutrality. To balance their carbon inventories, they require GHG reduction credits each year from projects such as this one. The credits from this Project, in combination with the organics diversion carbon credits, are expected to balance more than 80% of each local government’s carbon footprint in 2015. This represents significant progress towards achieving carbon neutrality for the local governments in the region, however each municipality will need to pursue additional GHG reduction projects if they wish to fully balance their carbon footprints.

## TABLE OF CONTENTS

Executive Summary .....	3
Table of Contents .....	4
List of Tables.....	4
1.0 PROJECT OVERVIEW AND BACKGROUND .....	5
1.1 Vancouver Landfill Gas Capture Optimization Project.....	5
1.2 Tripartite Carbon Credits Allocation Agreement .....	5
1.3 Waste Contributions and Tipping Fees in the Solid Waste System .....	5
1.4 Local Government Carbon Footprints.....	6
1.5 Guiding Principles for Allocation of GHG Reduction Credits.....	6
2.0 METHOD FOR ALLOCATING GHG REDUCTION CREDITS .....	7
3.0 COMPLIANCE WITH GREEN COMMUNITIES CARBON NEUTRAL FRAMEWORK.....	8
3.1 Baseline Year and Project dates.....	8
3.2 Project Eligibility Statement.....	9
4.0 GHG ASSERTION AND OWNERSHIP OF CREDITS.....	9
4.1 GHG Assertion .....	9
4.2 Ownership of Credits.....	10
5.0 References and Supporting Documents .....	10
APPENDIX A: ALLOCATION OF VANCOUVER LANDFILL GHG REDUCTION CREDITS BY MUNICIPALITY (2015 REPORTING YEAR) .....	11
APPENDIX B: 2015 LETTER FROM CITY OF VANCOUVER TO METRO VANCOUVER RE: TRANSFER OF VERIFIED CARBON CREDITS .....	12
APPENDIX C: INDEPENDENT THIRD PARTY GHG PROJECT ASSESSMENT (2015 REPORTING YEAR) .....	13

## LIST OF TABLES

<b>Table 1</b> Total Project GHG reduction credits, and allocation to Metro Vancouver (and its member municipalities) according to the Tripartite Carbon Credit Allocation Agreement.....	5
<b>Table 2</b> Green Communities GHG Reduction Credits from the Vancouver Landfill Gas Optimization Project by Municipality, 2015.....	<b>Error! Bookmark not defined.</b>

## 1.0 PROJECT OVERVIEW AND BACKGROUND

### 1.1 Vancouver Landfill Gas Capture Optimization Project

The Vancouver Landfill Gas Capture Optimization project is intended to reduce GHG emissions by collecting methane. It is one of the largest greenhouse gas (GHG) reduction projects in the Metro Vancouver region. In 2011, as the managing entity for VLF, the City of Vancouver made the sole decision to implement this project ahead of the 2016 deadline set out in the Provincial Landfill Gas Management Regulation. The resulting additional reduction in landfill gas emissions (ahead of this deadline) has created carbon credits. The project was funded through the Vancouver Landfill Closure and Post-Closure Liability Fund (currently approximately \$20 million). The City of Vancouver retained consultants to prepare a GHG reduction plan, which was subsequently reviewed and validated by a third party. The “*Vancouver Landfill Gas Capture Optimization project*” is considered an approved “Option 2 – Third Party Validated” project as per the province’s Becoming Carbon Neutral Guidebook. The GHG reductions (and associated carbon credits) from this project in 2015 have been verified by a third party; this is the final year of this project and no additional carbon credits are expected.

### 1.2 Tripartite Carbon Credits Allocation Agreement

The City of Vancouver, Metro Vancouver and Delta (the three parties to the 1989 Tripartite Solid Waste Agreement for the Vancouver Landfill) signed a new agreement in 2013, under which each were allocated proportions of the carbon credits based on the historic waste-in-place in the landfill contributed by each party. The Tripartite Carbon Credits Allocation Agreement allocates 57% of any verified credits to City of Vancouver, 33% to Metro Vancouver, and 10% to Delta. Table 1 shows the total verified carbon credits from the Project to date, and Metro Vancouver’s allocation. This reports describes the allocation of the credits allocated to Metro Vancouver and available for use in 2015 (bold text in Table 1).

**Table 1** Total Project GHG reduction credits, and allocation to Metro Vancouver (and its member municipalities) according to the Tripartite Carbon Credit Allocation Agreement.

Year	Total project carbon credits (tonnes CO <sub>2</sub> e)	33% allocation to Metro Vancouver and municipalities (tonnes CO <sub>2</sub> e)
2012	55,799	18,413
2013	105,215	34,720
2014	135,660	44,767
<b>2015</b>	<b>134,056</b>	<b>44,238</b>
	<i>430,730</i>	<i>142,138</i>

### 1.3 Waste Contributions and Tipping Fees in the Solid Waste System

Solid waste is managed as a regional system by Metro Vancouver, once it has been delivered to a transfer station or a final disposal site. The tipping fee is the same for all users of the system in the region, whether municipal or private haulers, and includes a contribution to the Vancouver Landfill Closure and Post-Closure Liability Fund. Therefore, each municipality’s contribution to this Fund (and consequently the GHG reduction project) is proportional to the amount of waste they deliver to the system. All local governments in the region have contributed to the GHG reduction project either through regional tipping fees and/or

through a management role (i.e. municipalities manage municipally-collected waste and Metro Vancouver manages privately-hauled waste)

#### **1.4 Local Government Carbon Footprints**

All local governments in the region have a mandate to reduce both their corporate and community GHG emissions and have been taking actions to fulfill this mandate. Strategic cooperation among local governments in the region has enabled each to better achieve their individual mandates as well as make progress as a region. One of the key steps for local governments to measure progress on climate action is to estimate their carbon footprints for corporate operations and communities using accepted methods.

#### **1.5 Guiding Principles for Allocation of GHG Reduction Credits**

All local governments in the region have contributed to the GHG reduction project either through regional tipping fees and/or through a management role. In consultation between Metro Vancouver and all of its member municipalities, a method of allocating Metro Vancouver's carbon credits was developed. A critical element of this process was to identify the principles that should guide the allocation of carbon credits.

The following principles were used to guide the selection of an allocation method for the VLF Carbon Credits. There are two foundational principles:

1. Credits are initially allocated according to the Tripartite Carbon Credits Allocation Agreement, which was executed in 2013 between City of Vancouver, Metro Vancouver and the Corporation of Delta, and is based on historic waste in place at the landfill.
2. Metro Vancouver and its member municipalities are all entitled to a portion of the credits from the Vancouver Landfill, based on the fact that all regional and municipal governments in the region have contributed to the Vancouver Landfill gas reduction project, either financially (indirectly through tipping fees) and/or through a solid waste management role.

Building on these foundational principles, five additional principles were identified that guided the selection of the allocation method for Metro Vancouver's portions of the Carbon Credits:

3. Reduce Carbon Footprint: This is the overarching objective of local governments' climate action and/or carbon neutral programs, and any allocation method should encourage further carbon reductions in both their corporate and community carbon footprints.
4. Fairness and Transparency: The allocation method should be fair and not penalize local governments that are taking actions to reduce their GHG footprints, or that are undertaking other GHG reduction projects. The method should also be transparent, understandable, and reproducible.
5. No Geographic Advantage: Since solid waste in the region is managed as a system by Metro Vancouver, then the allocation method should be independent of any local government's proximity to the Vancouver Landfill (or other waste disposal sites).
6. Avoid Perverse Incentives: The allocation method should not compromise waste diversion and /or community or corporate greenhouse gas reduction goals, or have other unintended consequences.
7. Cost Efficient/Effective Allocation: The allocation method should not unduly increase the administrative burden of individual municipalities or Metro Vancouver.

## 2.0 METHOD FOR ALLOCATING GHG REDUCTION CREDITS

### Step 1: Calculate and Report the corporate carbon footprints

Each local government in the region calculates its corporate carbon footprint according to the Provincial Guidelines on Local Government Carbon Neutrality (or equivalent standard) and reports it to Metro Vancouver by a date specified by Metro Vancouver and agreed to by the member municipalities.

### Step 2: Calculate Organics Diversion Credits

Metro Vancouver has calculated the total local emission reductions from organic waste diversion undertaken by each local government in the region<sup>1</sup>, per an agreed upon regional calculation approach. The total emission reduction values will be used in step 4, below. However, it is at the discretion of each individual municipality to choose whether, and how, to use the calculated local emission reductions (and corresponding Green Communities Committee (GCC) “Option 1” carbon credits) according to their own policy and corporate direction.

### Step 3: Calculate Proportion of Waste Delivered to the System by Each Municipality

Using solid waste data for the years 2009, 2010, and 2011 (i.e. the three years prior to the start of the Project), Metro Vancouver has calculated the average amounts of municipally-collected waste (MCW) including directly contracted collection. The balance of waste contributed to the system is privately-delivered waste (PDW). The ratio  $MCW_i/TRW$  (where TRW is the total regional waste delivered to the system based on the same three year average), will be used to determine the proportional share of carbon credits allocated to each municipality (municipality “i”). This ensures that all of the VLF carbon credits associated with the municipally-collected waste are allocated to the individual municipalities based on the proportion of their solid waste contributions to Metro Vancouver’s Solid Waste System. Should any municipality balance their entire corporate carbon footprint through this initial allocation, they can choose to carry forward any surplus of their own credits to subsequent reporting years at their discretion (in which case that surplus would have to be applied against its footprint before the allocation steps described in this report). The remaining carbon credits based on the proportion PDW/TRW will be available to distribute to those local governments (described in step 5, below) that do not achieve carbon neutrality through this initial allocation step.

### Step 4: Calculate the Carbon Balance (CB) for Each Local Government’s Carbon Footprint

Using the inputs from Steps 1-3, Metro Vancouver will calculate each local government’s remaining carbon balance according to the following formula, where  $CF_i$  is the carbon footprint of local government  $i$ ,  $OC_i$  is the amount of organics credits (as allowed under GCC Option 1 should they be applied by the local government),  $TC$  is the total VLF credits allocated to Metro Vancouver under the Tripartite Carbon Credits Allocation Agreement,  $MCW$  is local government municipally-collected waste, and  $TRW$  is total regional waste:

---

<sup>1</sup> Municipalities in the region are implementing programs to divert food scraps and other organic waste to composting. Under the Provincial Guidelines on Local Government Carbon Neutrality (GCC Option 1), municipalities are able to receive carbon credits for these activities. Details are provided in the report: *Metro Vancouver, 2016. “Municipal Organic Waste Diversion and Composting in Metro Vancouver: Greenhouse Gas Emission Reductions and Green Community Carbon Credits for Carbon Neutral Reporting (2015 reporting year).”*

$$\text{Municipality } i: \text{CB}_i = \text{CF}_i - [\text{OC}_i + (\text{TC} * (\text{MCW}_i / \text{TRW}))]$$

The carbon balance for Metro Vancouver ( $\text{CB}_{\text{Metro}}$ ) is simply its carbon footprint, because Metro Vancouver does not divert organics or collect municipal waste:

$$\text{Metro Vancouver: } \text{CB}_{\text{Metro}} = \text{CF}_{\text{Metro}}$$

#### Step 5: Distribute the Remaining VLF Carbon Credits

Any remaining VLF Carbon Credits not allocated using municipal solid waste allocation in step 4 will be distributed among those local governments that have not yet reached carbon neutrality following Step 4 above. Each local government will receive additional credits in proportion to their remaining carbon footprint according to the following formula, where  $\text{CB}_i$  is the carbon balance of an individual local government,  $\text{RC}_{\text{Total}}$  is the total remaining VLF credits, and  $\text{CB}_{\text{Total}}$  is the total remaining corporate carbon balance for all local governments (including Metro Vancouver). A local government will not be allowed to receive more credits than needed to reach carbon neutrality.

$$\text{Remaining credits distributed to local government } i: \text{RC}_i = \text{CB}_i * (\text{RC}_{\text{Total}} / \text{CB}_{\text{Total}})$$

#### **Total Credits distributed to a local government:**

The total amount of VLF Carbon Credits for an individual local government will be calculated using the following formula:

$$\text{Amount distributed to local government } i: [(\text{TC} * (\text{MCW}_i / \text{TRW})) + \text{RC}_i]$$

#### Step 6: Carry Forward any Remaining Credits

If there are any remaining carbon credits after the above allocation process (i.e., if every municipality in the region has reached carbon neutrality), Metro Vancouver will carry those credits forward to be used in future years by adding to the pool of credits available and using the same allocation method described above.

## **3.0 COMPLIANCE WITH GREEN COMMUNITIES CARBON NEUTRAL FRAMEWORK**

### **3.1 Baseline Year and Project dates**

The baseline period for this Project is 2010-2011, i.e. the two years prior to the year that the Project commenced. The baseline amount of methane captured and destroyed is based on the average amount captured in those two years. However, the amount of methane that would have been destroyed during the Project years (2012-2015) in the absence of the project is not fixed, and is calculated according to the validated Project Plan for the project. Further details can be found in the validated Vancouver Landfill Gas Optimization Project Plan (2013).



### **3.2 Project Eligibility Statement**

Metro Vancouver believes that this Project meets all eligibility requirements of the BC Green Communities Committee's (GCC) "Becoming Carbon Neutral Guidebook".

#### *Project Eligibility Requirements:*

1. Emission reductions are outside the local government corporate emissions boundary, as defined in the Carbon Neutral Workbook:
  - Emissions associated with solid waste disposal sites (including landfills and composting facilities) are outside the corporate boundary, according to the Workbook.
2. Emission reductions have occurred before they are counted:
  - The emission reductions being claimed for 2015 are associated with Project activities in 2015 (that have occurred by the end of that year).
3. Emission reductions are credibly measured:
  - Emissions reductions are calculated by City of Vancouver staff according to the validated Project Plan. The City of Vancouver have retained third party experts to verify the GHG reductions associated with the Project each year, and have communicated the results of that verification process to Metro Vancouver.
4. Emission reductions projects are beyond business as usual (BAU): projects must have started after September 26, 2007; must not be required to fulfill a federal or provincial government's legislated or regulatory requirement; and meet one of three tests (financial, other barriers or common practice):
  - The Project started after 2007, and was conducted voluntarily by the City of Vancouver ahead of any legislated requirement to take action. Third Party experts were retained by the City of Vancouver to validate the Project Plan and confirm that it meets the tests for eligibility.
5. Accounting of emission reductions is transparent:
  - The City of Vancouver's public reporting of the Project Plan and its verification process provides details of the emission reduction accounting. In addition, this public report outlines the allocation process.
6. Emission reductions are counted only once:
  - The emission reductions allocated in this report have not been previously committed or retired as emission reductions.
7. Project proponents have clear ownership of all emission reductions:
  - The City of Vancouver has transferred legal ownership of Vancouver Landfill credits to Metro Vancouver (see Appendix B). In turn, Metro Vancouver is allocating those credits according to an agreed methodology, as described herein. The local governments claiming the emission reductions allocated in this report assert that they have exclusive rights to the legal and commercial benefits of reductions associated with municipal solid waste management.

## **4.0 GHG ASSERTION AND OWNERSHIP OF CREDITS**

### **4.1 GHG Assertion**

Project activity in 2015 resulted in a verified GHG emissions reduction from the Vancouver Landfill Gas

Optimization Project of 134,056 tonnes CO<sub>2</sub>e, of which 33% (44,238 tonnes) was transferred to Metro Vancouver. This Report summarizes the allocation of Metro Vancouver's portion of the verified carbon credits from the 2015 Project year to the local governments in the region, for use in the 2015 reporting year.

#### **4.2 Ownership of Credits**

Upon completion of the allocation of the 2015 carbon credits from the Vancouver Landfill Gas Optimization Project, Metro Vancouver and its member municipalities are hence identified as the owners of those carbon credits. Individual local governments will choose whether to include these green community credits in their final Carbon Neutral Reports as part of the Climate Action Revenue Incentive Program.

## **5.0 REFERENCES AND SUPPORTING DOCUMENTS**

B.C. Climate Action Toolkit. "Carbon Neutral Local Government". Available at:

<http://www.toolkit.bc.ca/resource/becoming-carbon-neutral-workbook-and-guidebook>

B.C. Ministry of Environment, 2014. "2014 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions". Available at:

[http://www2.gov.bc.ca/gov/DownloadAsset?assetId=6DF9D0E1E46D4DC28F96E190AF4D7783&filename=2014\\_bc\\_best\\_practices\\_methodology\\_for\\_quantifying\\_greenhouse\\_gas\\_emissions.pdf](http://www2.gov.bc.ca/gov/DownloadAsset?assetId=6DF9D0E1E46D4DC28F96E190AF4D7783&filename=2014_bc_best_practices_methodology_for_quantifying_greenhouse_gas_emissions.pdf)

City of Vancouver Climate Leadership (web resources). Available at: <http://vancouver.ca/green-vancouver/climate-leadership.aspx>

Vancouver Landfill Gas Optimization Project Plan, City of Vancouver – Delta. 2013. Available at:

<http://vancouver.ca/files/cov/Vancouver-Landfill-Gas-Capture-Optimization-Project-Plan.pdf>

Green Communities Committee. 2012. "Becoming Carbon Neutral: A Guidebook for Local Governments in British Columbia". Version 2, July 2011. Available at:

[http://www.toolkit.bc.ca/sites/default/files/CNLG%20Final%20July%202011\\_0.pdf](http://www.toolkit.bc.ca/sites/default/files/CNLG%20Final%20July%202011_0.pdf)

Green Communities Committee. 2012. "The Workbook. Helping Local Governments Understand How to be Carbon Neutral in their Corporate Operations ". Available at:

[http://www.toolkit.bc.ca/sites/default/files/CarbonNeutralWorkbook.V2\\_noapdcs\\_03.12\\_0.pdf](http://www.toolkit.bc.ca/sites/default/files/CarbonNeutralWorkbook.V2_noapdcs_03.12_0.pdf)

Green Communities Committee. 2012. "Green Communities Carbon Neutral Framework Option 1 Profile: Household Organics Waste Composting". Available at: <http://www.toolkit.bc.ca/carbon-neutral-government>

Municipal Organic Waste Diversion and Composting in Metro Vancouver: Greenhouse Gas Emission Reductions and Green Community Carbon Credits for Carbon Neutral Reporting (2015 reporting year). May 2016. (Report prepared by Metro Vancouver).

Province of British Columbia. 2007. "Climate Action Charter". Available at:

<http://www.livesmartbc.ca/community/charter.html>

## APPENDIX A: ALLOCATION OF VANCOUVER LANDFILL GHG REDUCTION CREDITS BY MUNICIPALITY (2014 AND 2015 REPORTING YEAR)

**Table 2** Green Communities GHG Reduction Credits from the Vancouver Landfill Gas Optimization Project by Municipality, **2015**

<b>Municipality</b>	<b>Reported 2015 Carbon Footprint<sup>1</sup></b> (tonnes CO <sub>2</sub> e)	<b>2015 Allocation of Vancouver Landfill Gas Optimization Credits</b> (tonnes CO <sub>2</sub> e)	<b>Notes on 2015 carbon footprints</b>
Anmore	37	12	Not reported: using estimate from 2010 CARIP rebate
Belcarra	21	21	Not reported: using 2012 Carbon Footprint
Bowen Island	82	83	Not reported: using estimate from 2010 CARIP rebate
Burnaby	5,897	3,990	Not reported; using 2014 Carbon Footprint (which does not include fleet, minor equipment or contracted emissions).
Coquitlam	4,668	1,853	2015 data complete
Langley City	708	353	2015 data complete
Langley Township	5,580	4,207	2015 data complete
Lions Bay	49	11	Not reported: using estimate from 2010 CARIP rebate
Maple Ridge	2,227	2,293	2015 data complete
New Westminster	3,406	2,264	2015 corporate emissions complete; contracted emissions estimated based on 2014 data
North Vancouver City	2,469	2,102	2015 data complete
North Vancouver District	4,673	4,004	2015 corporate emissions complete; contracted emissions estimated based on 2014 data
Pitt Meadows	1,169	606	2015 data complete
Port Coquitlam	2,351	1,634	2015 corporate emissions complete; contracted emissions estimated based on 2014 data
Port Moody	1,680	1,096	2015 data complete
Richmond	8,372	4,032	2015 data complete
Surrey	16,400	6,514	2015 data complete
West Vancouver	2,983	2,590	2015 data complete
White Rock	774	367	2015 data complete
Metro Vancouver	6,018	6,197	2015 data complete
<b>Total:</b>	<b>69,564</b>	<b>44,238</b>	Note: Credits may not sum to total due to rounding

<sup>1</sup> The municipal carbon footprints in this column represent the best available information available to Metro Vancouver at time of publication of this report, and may be subsequently amended by the reporting municipality. In cases where carbon footprints were not reported directly to Metro Vancouver by the member municipalities, prior year data were used as per the agreed allocation approach.

## APPENDIX B: 2014 AND 2015 LETTERS FROM CITY OF VANCOUVER TO METRO VANCOUVER RE: TRANSFER OF VERIFIED CARBON CREDITS



SUSTAINABILITY GROUP

---

May 4, 2016

Metro Vancouver  
4330 Kingsway, Burnaby  
BC V5H 4G8

and

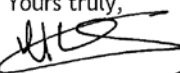
Corporation of Delta  
4500 Clarence Taylor Crescent, Delta  
CB V4K 3E2

To Whom It May Concern:

**RE: Sharing of Vancouver Landfill Emissions Credits**

City of Vancouver has received an Assessment Report, dated May 2<sup>th</sup>, 2015, stating that the City of Vancouver achieved GHG emission reductions in 2015 from its Landfill Gas Capture Optimization Project. The Assessment Report is attached, along with the Assessment Template to be provided to the Province. As per the Vancouver Landfill Carbon Offset Allocation Agreement, the City will share 33% of Assessed credits with Metro Vancouver and 10% with the Corporation of Delta. Each entity is free to use the credits per the above stated agreement and the GCC Carbon Neutral Framework.

Yours truly,

  
P.P. *Doug Smith, Climate Policy Manager.*

Doug Smith, P.Eng.  
Acting Director, Sustainability Group

453 W12th Ave, Vancouver, BC V5Y 1V4  
tel: 604.871.6619  
fax: 604.673.8689  
[Amanda.pitre-hayes@vancouver.ca](mailto:Amanda.pitre-hayes@vancouver.ca)

Enclosures: Assessment Report, Third Party Verification Template


---

City of Vancouver, Office of the City Manager  
Deputy City Manager, Sustainability Group  
453 West 12th Avenue  
Vancouver, British Columbia V5Y 1V4 Canada  
tel: 604.873.7748 fax: 604.673.8169  
website: [vancouver.ca](http://vancouver.ca)



## APPENDIX C: INDEPENDENT THIRD PARTY GHG PROJECT ASSESSMENT (2014 AND 2015 REPORTING YEARS)

### Independent Third Party GHG Assessment Template

Project Proponent Information	
Name of Local Government Project Proponent(s)	Provide the name of the local government(s) involved in the proposed project and claiming GHG reductions from the project. <b>The City of Vancouver</b>
Name of Third Party Assessment Organization	Provide the name of the third party assessment organization that has entered into a contractual arrangement with the Project Proponent and is duly authorized through this contractual arrangement to conduct the assessment. <b>Offsetters Clean Technology Inc.</b>
Project Proponent Contact	Provide a Project Proponent contact name and contact information: Name <b>Ian Neville</b> Title: <b>Climate Policy Analyst</b> Phone: <b>604 673 8246</b> Email: <b>Ian.Neville@vancouver.ca</b>
Project Information	
Project title	Provide project title and attach a copy of the original Project Plan previously made public. Copy of Project Plan attached. <input checked="" type="checkbox"/>
Timing and Amount of reductions being claimed	Please indicate the amount of GHG reductions, expressed in tonnes, being claimed from the project and the timeframe during which the emission reductions being claimed occurred.  Number of tonnes <b>134,056 tCO<sub>2</sub>e carbon dioxide equivalent</b>  Timeframe from <b>January 1<sup>st</sup>, 2015 - December 31<sup>st</sup> 2015 inclusive</b>
Certification that the required work occurred	<input checked="" type="checkbox"/> To the best of my knowledge, I declare that the project activity required to achieve the GHG reductions from this project, using the formulas/methodologies described in the referenced Project Plan, actually occurred during the year for which the emission reductions are being claimed, as per the <i>Becoming Carbon Neutral</i> guidebook.
Authorization and Sign off	
<p><u>GHG Assessment Third Party</u></p> <p><i>The information provided in this Project Report Template is to the best of my knowledge correct and complete.</i></p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  <p><b>Signature</b> Simon Phillips Title: Project Manager P.Eng.</p> </div> <div style="text-align: right;"> <p><b>May 2<sup>nd</sup>, 2016</b></p> </div> </div>	