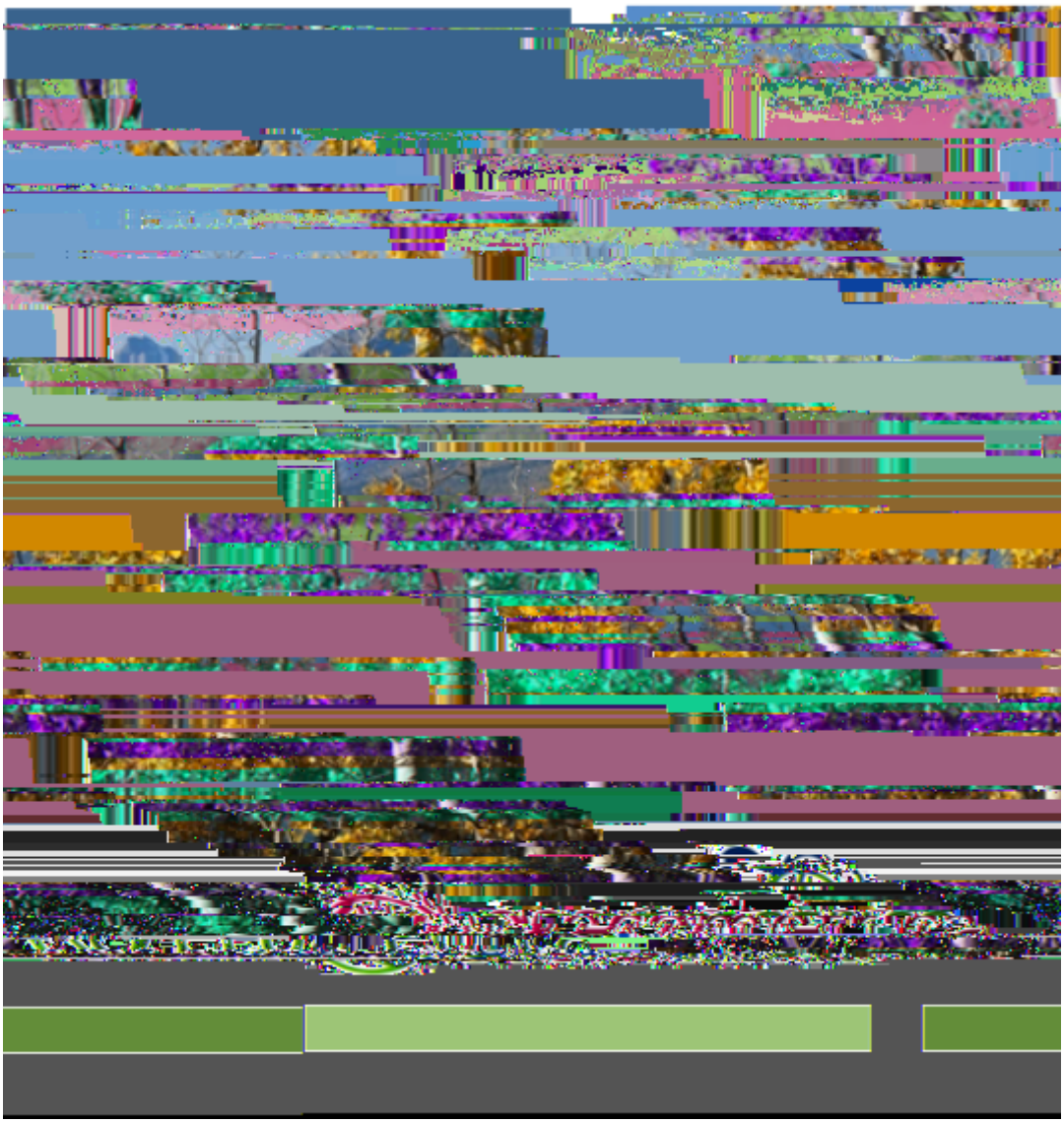

Greenhouse Gas Protocol (Dual Reporting) Report for Dawson College

Assessment Period: July 2010 - June 2011

Produced on Sept. 24, 2018 by *Our Impacts* on behalf of Ecometrica

Assessment Details

Consolidation Approach

Operational Control

Organisational Boundaries

Operations of Dawson College

Included

- Dawson College
- Dawson College

Operational Boundary

- Electricity
- Landfilled waste
- Natural gas
- Off-road vehicles and equipment
- Other fuel(s)
- Recycled waste

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Table of Contents

Introduction

A greenhouse gas (GHG) emissions assessment quantifies the total greenhouse gases produced directly and indirectly from a business or organisation's activities. Also known as a carbon footprint, it is an essential tool, providing your business with a basis for understanding and managing its climate change impacts.

A GHG assessment quantifies all seven Kyoto greenhouse gases where applicable and is measured in units of carbon dioxide equivalence, or CO_2e[1]. The seven Kyoto gases are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), nitrogen trifluoride (NF_3), sulphur hexafluoride (SF_6) and perfluorocarbons (PFCs). The global warming potential (GWP) of each gas is illustrated in the Table 1.

Table 1. GWP of Kyoto Gases (IPCC 2013, without climate-carbon feedback)

Data Quality and Availability

In order to provide the most accurate estimate of an organisation's GHG emissions, primary (actual) data should be used where it is available, up to date and geographically relevant. Secondary data in the form of estimates, extrapolations and industry averages may be used when primary data is not available. Table 2 details the quality of data submitted for this assessment with the key assumptions used stated below.

Data Quality Overview

Location-based

Accuracy Overview	tCO_2e/year	%
Actual	541	68.5
Estimated	248	31.5
Total	789	100

Market-based

Accuracy Overview	tCO_2e/year	%
Actual	541	68.5
Estimated	248	31.5
Total	789	100

Table 2. Data Quality and Availability

Source of emissions	Data quality
Premises	
Composted waste	Unknown
Electricity	Actual
Landfilled waste	Estimated
Natural gas	Actual
Off-road vehicles and equipment	Estimated
Other fuel(s)	Estimated
Recycled waste	Actual
Refrigerant gas loss and other fugitive emissions	N/A

Assessment Summary for Dawson College

Gross Overall Emissions (location-based): 789 tCO_2e

Gross Overall Emissions (market-based): 789 tCO_2e

Key Performance Indicators

Absolute GHG emissions will vary over time and often correspond to the expansion or contraction of an organisation. It is useful therefore to use reporting metrics that take these effects into account and monitor relative GHG emissions intensity. A common emissions intensity metric is tonnes of CO_2e per full time equivalent. This has been calculated, along with other relevant metrics, in the table below:

Data	KPI
10,037 Number of students	0.0786 tCO_2e per student (Location-Based)
78,949 Floor area (square metres)	0.01 tCO_2e per square metre (Location-Based)
742 Full Time Equivalent Employees	1.06 tCO_2e per Full Time Equivalent Employee (Location-Based)
10,037 Number of students	0.0786 tCO_2e per student (Market-Based)
78,949 Floor area (square metres)	0.01 tCO_2e per square metre (Market-Based)
742 Full Time Equivalent Employees	1.06 tCO_2e per Full Time Equivalent Employee (Market-Based)

Summary by Activity (Location-Based, tCO_2e)

By Activity		tCO_2e/year	%
Premises		789	100
	Total	789	100

Summary by Activity (Market-Based, tCO_2e)

By Activity		tCO_2e/year	%
Premises		789	100
	Total	789	100

Summary by WBCSD/WRI Scope (Location-Based, tCO_2e)

Scope	tCO_2e/year	%
Scope 1	505	64
Scope 2	38.1	4.83
Scope 3	246	31.2
Total	789	100

Summary by WBCSD/WRI Scope (Market-Based, tCO_2e)

Scope	tCO_2e/year	%
Scope 1	505	64
Scope 2	38.1	4.83
Scope 3	246	31.2
Total	789	100

Summary by Greenhouse Gas

Greenhouse Gas	GWP	tGHG/year (Location-Based)	tCO_2e/year (Location-Based)	tGHG/year (Market-Based)	tCO_2e/year (Market-Based)
CO_2	1	540	540	540	540
CH_4	28	8.8	246	8.8	246
N_2O	265	0.0112	2.97	0.0112	2.97
CO_2e	1	0	0	0	0
		Total	789		789

Summary of Scope 2 Market-Based Method for Dawson College

Energy Consumed and Emissions By Factor Type In Scope 2 Market-Based Method

Scope 2 Market-Based Energy

Scope 2 Market-Based Emissions

Emission Factor Type	Energy		Market-Based Emissions	
	MWh	%	tCO_2e	%
Client-supplied market-based instrument	0	0	0	0
Residual mix factors	0	0	0	0
Default location-based factors	15,645	100	38.1	100
Total	15,645	100	38.1	100

Detailed Results

Detailed Summary by WBCSD/WRI Scope

Summary by Company Unit

Location-Based methodology

Assessment	July 2009 - June 2010		July 2010 - June 2011	
Company Unit	Total Emissions (tCO_2e)	Emissions per FTE (tCO_2e/FTE)	Total Emissions (tCO_2e)	Emissions per FTE (tCO_2e/FTE)
Dawson College	934	1.3	789	1.06
Dawson College	934	-	789	-

Market-Based methodology

Assessment	July 2009 - June 2010		July 2010 - June 2011	
Company Unit	Total Emissions (tCO_2e)	Emissions per FTE (tCO_2e/FTE)	Total Emissions (tCO_2e)	Emissions per FTE (tCO_2e/FTE)
Dawson College	934	1.3	789	1.06
Dawson College	934	-	789	-

Annual Activity Data

Source of Emissions	Value	Unit
Premises		
Electricity		
Electricity consumption	15,645,137	kWh
Landfilled waste		
Waste, landfilled, MSW	160	tonne
Natural gas		
Natural gas consumption (gross CV)	266,225	m3
Off-road vehicles and equipment		
Small utility mobile equipment and off-road vehicles, gasoline	80	l
Other fuel(s)		
Diesel	825	l
Recycled waste		
Waste, recycled	108	tonne

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