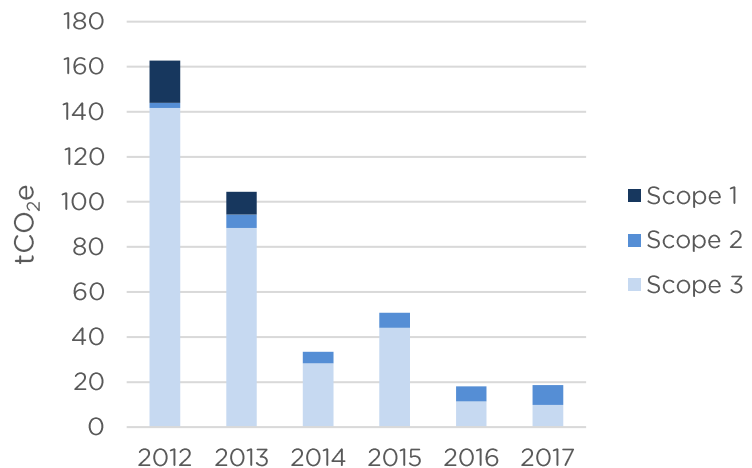


2017 Corporate Greenhouse Gas Inventory  
**NatureBank Asset Management Inc.**  
February 2018

# NatureBank's 2017 Greenhouse Gas Emissions: A Summary

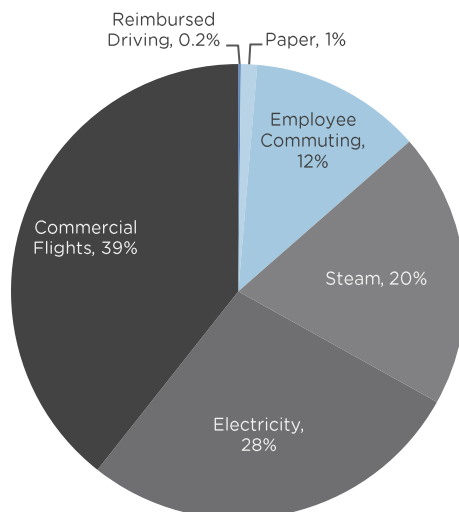
## Carbon Footprint Overview

NatureBank's total GHG emissions in 2017 were 18.6 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e). Compared to our base year of 2012, NatureBank's emissions have decreased significantly by 89%. The biggest reduction was achieved in air travel with a 94% reduction in emissions since our base year and 20% since last year.



## Organizational GHG Inventory

NatureBank's largest source of GHG emissions is air travel from commercial flights, accounting for 39% of total emissions. Electricity use is second, accounting for 27% of total emissions.



18.6 tCO<sub>2</sub>e is equivalent to the fuel emissions from 4 passenger vehicles in one calendar year<sup>1</sup>



Total 2017 GHG emissions are equivalent to the total emissions emitted by ~1 Canadian<sup>2</sup>

<sup>1</sup> <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

<sup>2</sup> <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/greenhouse-gas-emissions.html>





## Scope 1 Emissions Sources

Emissions activities categorized as Scope 1 emissions are from sources directly controlled by an organization and include mobile and stationary fuel combustion. As of 2014, NatureBank no longer reports Scope 1 emissions activities as the company sold its truck and moved offices to a location that uses steam heat instead of natural gas.



## Scope 2 Emissions Sources

### Overview:

Scope 2 emissions are indirect emissions generated from purchased services, including electricity and purchased heat. NatureBank has limited control over its electricity and heat because our energy use is a percentage of our entire building which has one meter.

### Electricity:

GHG emissions from electricity use accounted for 27% of total emissions in 2017. Actual data was unavailable and electricity consumption was assumed to be similar to the previous year, as tenancy in the building remained the same. Electricity consumption for 2017 was, therefore, assumed to be 241,277 kWh. Though electricity consumption remained similar to the previous year, associated emissions increased significantly due to an increased location-based emissions factor for British Columbia.

### Steam:

Emissions and usage for steam were also modelled using previously reported data in combination with average monthly temperature<sup>3</sup> changes in 2016. Based on changes in weather, modelled steam heating usage in 2017 increased compared to 2016. The emissions from steam consumption in 2017 totalled 3.6 tCO<sub>2</sub>e and accounted for 19% of NatureBank's total emissions.

**Location-based:** GHG emissions factors for energy production represents an overall regional grid average. The National Inventory Report for Canada includes a location-based emission factor for British Columbia. Based on this emission factor, NatureBank's location-based emissions in 2017 were 5.1 tCO<sub>2</sub>e.

**Market-based:** Companies with power purchase agreements should report their Scope 2 emissions using their energy provider's specific emission factor. BC Hydro is the sole energy provider for our operational region and based on their emission factor, NatureBank's market-based emissions in 2017 were 2.6 tCO<sub>2</sub>e<sup>4</sup>.

<sup>3</sup> Historical temperatures for Vancouver were retrieved from <http://climate.weather.gc.ca>

<sup>4</sup> 2016/17 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions, Table 3.

## Scope 3 Emissions Sources

### Overview:

Scope 3 emissions are all other indirect emissions that are relevant and significant, and are a result of a company's operations. NatureBank reported four sources of Scope 3

emissions: commercial air travel, paper use, reimbursed driving and employee commuting. Emissions from these sources total 9.9 tCO<sub>2</sub>e, or 53% of total emissions.



### Air Travel

7.3 tCO<sub>2</sub>e

NatureBank's staff flew on 15 one-way commercial flights, with 44% of emissions from air travel coming from only one flight – a round-trip to Frankfurt. In total, flights accounted for 39% of NatureBank's total emissions, making this the largest source for the company at 7.3 tCO<sub>2</sub>e.



### Office Paper

0.2 tCO<sub>2</sub>e

Naturebank reported using a total of 26,591 sheets, amounting to a total of 0.2 tCO<sub>2</sub>e, or 1% of total emissions. This is a 20% reduction in paper use per employee compared to the previous year.



### Reimbursed Driving

0.03 tCO<sub>2</sub>e

219 kilometres were driven for company purposes in 2017, resulting in emissions of 0.03 tCO<sub>2</sub>e, or 0.2% of the company's total emissions.

### Emissions from air travel over the years:



## Employee Commuting

### Overview:

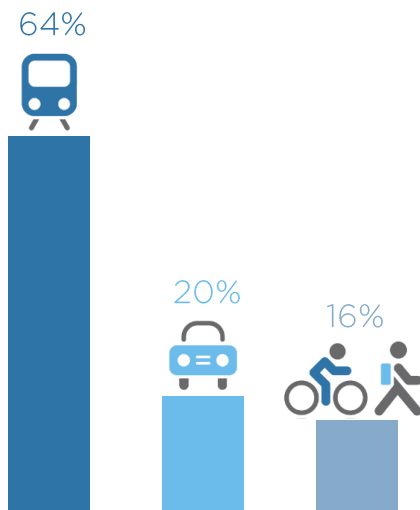
A total of 2.3 tCO<sub>2</sub>e were emitted from employee commuting, or 12% of NatureBank's total emissions making it the fourth largest emissions source. Emissions from commuting increased by 35% on average per employee compared to the previous year.

Daily employee commuting habits were collected using an online survey. A total of 10

employees responded to the survey, a response rate of 91% and a resulting emissions per employee of 0.2 tCO<sub>2</sub>e. The emissions related to the one remaining employee were modelled using the emissions intensity per employee.

NatureBank's employees commute on average 13 kilometres daily.

### % of total commuting kilometres:



### Transit:

64% of commuting kilometres are done using transit (city bus, SkyTrain, etc.). Emissions from transit amount to 1.1 tCO<sub>2</sub>e, or 51% of emissions from commuting.

### Driving:

Two staff members reported driving to and from work on a regular basis with a small car that runs on gasoline. This accounts for 20% of commuting kilometres and 1.0 tCO<sub>2</sub>e, or 49% of employee commuting emissions.

### Walk/Bike:

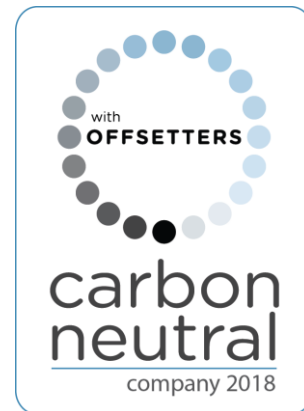
16% of total commuting kilometres are spent walking or biking to and from work and 64% of employees report walking or biking at least once a week to the office.

## Carbon Neutrality

To maintain our carbon neutral status, NatureBank has retired 19 tonnes of high-quality, ICROA (International Carbon Reduction and Offset Alliance) compliant, carbon offsets. This means that the carbon offsets are third-party validated and verified to best-in-class standards to ensure that they are real, additional and permanent.

For more information, please see:

<https://www.offsetters.ca/education/carbon-offsets/>



Since 2012, NatureBank has retired 588 tonnes. This is the equivalent of removing 126 cars<sup>5</sup> from the road for a year.

## Accounting and Reporting Procedures

NatureBank's corporate GHG inventory report is structured to follow the accounting and reporting guidelines of The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (the Protocol), published by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

NatureBank has applied an operational control boundary approach which requires reporting all business activities over which the companies exercise operational control. In 2015, NatureBank acquired ForestFinest Consulting, which has been excluded from this inventory because this operation falls outside of NatureBank's operational control. Office waste has also been excluded from this inventory, however, NatureBank utilizes office waste composting and recycling services to limit impacts related to waste generation.

<sup>5</sup> <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>



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