ChurnZero
2022 Greenhouse Gas Summary Report

September 18, 2023

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Introduction

Thank you for partnering with GreenPlaces to assess your company's carbon footprint. Learning your emission sources is a critical step in your sustainability journey. We’ve prepared this document to help you understand your footprint and the methodologies we use to measure your emissions. Please feel free to reach out to our team with any questions or clarifications.
Assessment Summary

Based on the information provided and the analysis conducted, subject to the attached Statement of Limiting Conditions, we have concluded that as of the assessment date, ChurnZero (also referred to as the client or reporting company) emissions from the examined categories is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Location-Based Emissions (mT CO₂e)</th>
<th>Market-Based Emissions (mT CO₂e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>6.6467</td>
<td>6.6467</td>
</tr>
<tr>
<td>Scope 2</td>
<td>20.2876</td>
<td>19.6835</td>
</tr>
<tr>
<td>Scope 3</td>
<td>579.2553</td>
<td>579.2553</td>
</tr>
<tr>
<td>Totals</td>
<td>606.1895</td>
<td>605.5855</td>
</tr>
</tbody>
</table>

Company Overview

ChurnZero is a recognized leader in Customer Success and a champion of CSMs everywhere. It is through Customer Success teams that businesses thrive. The ChurnZero platform and ongoing partnerships ensure Customer Success teams can enhance onboarding, spot potential churn risks early, identify renewal and expansion opportunities, and increase adoption. Best-in-class automation and in-app communication make it easy to engage with customers and lead them to value.
Geographic Boundary

This report includes two ChurnZero locations listed below.

1. 1100 15th St NW, Floor 4, Washington, DC 20005
2. Netherlands (Remote)

Base Year and Reporting Period

2021 serves as the reporting company’s base year footprint as it is the earliest point in time at which reliable, historical data was used to calculate emissions. This report reflects emissions from the following inventory year, 2022. GreenPlaces uses a “fixed base year” approach that allows emissions to be tracked over time on a like-with-like basis. However, it should be noted that this GHG inventory includes one category that was not previously examined in the 2021 GHG reporting period: emissions from teleworking (reported under employee commute). Additionally, more categories were examined under scope 3 category 1 (purchased goods and services) during this reporting period. As a result of these additions, total absolute emissions from the two reporting periods should be compared cautiously. This greenhouse gas inventory report focuses on the reporting company’s emissions for the 2022 calendar year (January 1st, 2022 – December 31, 2022).
<table>
<thead>
<tr>
<th>Scope 1</th>
<th>mT CO₂e</th>
<th>Specific exclusions and reason for exclusion</th>
<th>Estimated Activity</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fugitive Emissions</td>
<td>0</td>
<td>ChurnZero did not report any sources of fugitive emissions, because all office spaces are leased and refrigerators are not under ChurnZero's operational control.</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Stationary Combustion</td>
<td>6.6467</td>
<td>No exclusions made.</td>
<td>Natural gas consumption was estimated using the U.S. Energy Information Administration (EIA) Commercial Building Energy Consumption Survey (CBECS).</td>
<td>(EPA, 2023) (EIA, CBECS)</td>
</tr>
<tr>
<td>Mobile Combustion</td>
<td>0</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Process Emissions</td>
<td>0</td>
<td>To GreenPlace's knowledge, ChurnZero does not produce any process emissions.</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Total Scope 1 Emissions</td>
<td>6.6467 mT CO₂e</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scope 2</th>
<th>mT CO₂e</th>
<th>Specific exclusions and reason for exclusion</th>
<th>Estimated Activity</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased Electricity - Location Based eGRID Emission Factor Source</td>
<td>20.2876</td>
<td>No exclusions made.</td>
<td>Electricity consumption was estimated using the U.S. Energy Information Administration (EIA) Commercial Building Energy Consumption Survey (CBECS).</td>
<td>(EPA, 2023) (EIA, CBECS)</td>
</tr>
</tbody>
</table>
### Purchased Electricity - Market Based Green-e® Emission Factor Source

<table>
<thead>
<tr>
<th>Description</th>
<th>mT CO₂e</th>
<th>Specific exclusions, % this represents for relevant scope</th>
<th>Estimated Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>No exclusions made.</td>
<td>19.6835</td>
<td>Calculations made here are the same as those used for location-based purchased electricity.</td>
<td>(Green-e®, 2022) (EIA, CBECs)</td>
</tr>
</tbody>
</table>

| Total Scope 2 Emissions (Location-Based) | 20.2876 mT CO₂e |
| Total Scope 2 Emissions (Market-Based) | 19.6835 mT CO₂e |

### Scope 3

<table>
<thead>
<tr>
<th>Category</th>
<th>mT CO₂e</th>
<th>Specific exclusions, % this represents for relevant scope</th>
<th>Estimated Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1: Purchased Goods and Services</td>
<td>307.6050</td>
<td>Exclusions were made to this section of the report if a purchased item did not have a description.</td>
<td>Through the use of the Comprehensive Environmental Data Archive (CEDA) 2023 database (provided by VitalMetrics), GreenPlaces calculated cradle-to-gate emissions from ChurnZero’s purchased goods. It should be noted that cradle-to-gate emissions exclude upstream transportation emissions released during shipment of the product to the reporting company’s facilities. Direct spending for various accounting categories was provided by the client; however, occasionally, educated assumptions were made as to what product was purchased in said category.</td>
</tr>
<tr>
<td>Category 2: Capital Goods</td>
<td>0</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 3: Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2</td>
<td>1.0752</td>
<td>The same exclusions made to the electricity portion of this report were made here as well. Additionally, this category only examines</td>
<td>The average gross grid loss rate of 5.3% was applied to all US locations.</td>
</tr>
</tbody>
</table>
emissions from transmission and distribution losses. Due to a lack of US well-to-tank emission factors, emissions from upstream purchased electricity are excluded from the calculation.

<table>
<thead>
<tr>
<th>Category 4: Upstream Transportation and Distribution</th>
<th><strong>Not reported on</strong></th>
<th>Not included due to a lack of primary data on weight, mileage, and method of transportation used to ship products purchased by the reporting company to their facility.</th>
<th>Not applicable</th>
<th>Not applicable</th>
</tr>
</thead>
</table>

Waste was not include due to a lack of primary data on waste generated in operations and lack of reliable assumption sources for waste.

| Category 5: Waste Generated in Operations | 0 | Not applicable | Not applicable |

No known exclusions were made to this section of the report.

| Category 6: Business Travel | 85.8189 | Emissions data related to flights, accommodations, and trains was provided directly by TripActions. GreenPlaces used spend data provided by the client where distance-based or hotel-stay calculations did not apply. | (VitalMetrics, 2022) | (EPA, 2023) | (DEFRA, 2023) |

No exclusions made.

<p>| Category 7: Employee Commuting | 12.2491 | US Census data for average commute methods in the District of Columbia. Therefore, there is a fair to large amount of | (EPA, 2023) | (US Census Data, 2021) |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Category Description</th>
<th>Emissions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 7: Employee Telecommuting</td>
<td>172.5071</td>
<td>No exclusions made.</td>
<td>Estimations were made for the number of working days per year and the incremental increase in baseline residential energy consumption.</td>
</tr>
<tr>
<td>Category 8: Upstream Leased Assets</td>
<td>0</td>
<td>Emissions from ChurnZero’s leased assets are reported in scope 1 and 2 as the reporting company has operational control over its assets.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 9: Downstream Transportation and Distribution</td>
<td>0</td>
<td>ChurnZero reported zero sources of downstream transportation.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 10: Processing of Sold Products</td>
<td>0</td>
<td>No tangible sold products.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 11: Use of Sold Products</td>
<td>Not reported</td>
<td>Not examined as obtaining such data was not feasible.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 12: End-of-Life Treatment of Sold Products</td>
<td>0</td>
<td>No tangible sold products.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 13: Downstream Leased Assets</td>
<td>0</td>
<td>No downstream leased assets.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 14: Franchises</td>
<td>0</td>
<td>No franchises.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Category 15: Investments</td>
<td>0</td>
<td>Emissions from investments most commonly apply to financial institutions and</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
 Targets

After the conclusion of this assessment report, GreenPlaces will strategize emissions reduction targets with ChurnZero.

Carbon Offsets and Renewable Energy Credits

GreenPlaces has not purchased carbon offsets or renewable energy credits on behalf of ChurnZero’s 2022 footprint at the time of this report.

Discussion of Methodology

1.0 Objective

GreenPlaces strives to provide clients with a comprehensive, accurate representation of their current carbon footprint, adhering to the GHG Protocol accounting and reporting principles: relevance, completeness, consistency, transparency, and accuracy.
2.0 Scope 1 Emissions

Stationary Combustion: ChurnZero

Natural Gas:

The client was not able to provide any primary data on natural gas; therefore, GreenPlaces used tables C30 and C31 from the Commercial Building Energy Consumption Survey (CBECS) provided by the US Energy Information Administration (EIA) to calculate the average natural gas energy intensity per square foot of each office location. The average natural gas energy intensity calculated was then multiplied by the specific square footage of each office location to get the total annual consumption of natural gas (125.1384 mmBtu). GreenPlaces applied the natural gas emission factor (EPA, 2023) to the mmBtu of natural gas consumed per location to calculate emissions from natural gas.

Total emissions from stationary combustion for ChurnZero came to 6.6467 mT CO2e. As this data is all secondary, there is likely a fair to large amount of uncertainty associated with the calculation.

3.0 Scope 2 Emissions

Purchased Electricity: ChurnZero

The client was not able to provide any primary data on electricity consumption, therefore, GreenPlaces used tables C20 and C21 from the Commercial Building Energy Consumption Survey (CBECS) provided by the US Energy Information Administration (EIA) to calculate the average kWh energy intensity per square foot of ChurnZero's office location. The average kWh energy intensity calculated was then multiplied by the square footage of the office to get the total annual consumption of electricity (66,152.5 kWh). GreenPlaces applied the electricity emission factor corresponding to the eGRID RFCE (2021 data) to the kWh of electricity consumed per location to calculate emissions from electricity consumption (EPA, 2023). The Green-e® 2022 (2020 data) residual mix emission factor was used to calculate market-based emissions (Green-e, 2022).
Total location-based electricity emissions were calculated at **20.2876 mT CO₂e**, and total market-based electricity emissions were calculated at **19.6835 mT CO₂e**. It should be noted that there is a high amount of uncertainty associated with the market-based calculations due to the emission factors used. Market-based emission factors were sourced from Green-e® residual mix data tables. The most recent emission factors released by Green-e® correspond to a 2020 eGRID. Location-based emission factors used correspond to a 2021 eGRID. As a result of inconsistent years, market-based emissions appear lower than expected, and location-based should only be used for absolute emissions reporting. Table 2.0 below displays kWh and market-based and location-based emission factors.
Table 2.0 Location-based & Market-based Electricity Emissions: ChurnZero US locations

<table>
<thead>
<tr>
<th>Location</th>
<th>kWh/ year</th>
<th>Total Market-based emissions (mT CO2e)</th>
<th>Total Location-based emissions (mT CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1100 15th St NW, Floor 4 Washington, DC 20005</td>
<td>66152.50</td>
<td>0.2975</td>
<td>0.3067</td>
</tr>
<tr>
<td>Totals</td>
<td>66152.50</td>
<td>0.2975</td>
<td>0.3067</td>
</tr>
</tbody>
</table>

4.0 Scope 3 Emissions

4.1 Category 1: Purchased Goods & Services

Purchased Goods and Services: ChurnZero

The client was able to provide data on purchased goods and services for ChurnZero’s office location. All purchases were categorized into an appropriate CEDA category and the spend-based method was then used to calculate emissions (VitalMetrics, 2023). Of the categories reported by ChurnZero, GreenPlaces made assumptions about the physical items purchased in each category when specific details were not provided. A total of $940.29 was recorded for unknown purchases which GreenPlaces could not assume a category; these items were labeled as gift cards or miscellaneous purchases.

Total emissions from purchased goods for all categories came to **307.5050 mT CO2e**. As the spend-based method was applied, there is a fair to large amount of uncertainty associated with these calculations.
4.2 Category 2: Capital Goods

Capital Goods: ChurnZero

There were no capital goods purchased in the reporting year.

4.3 Category 3: Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2

Transmission and Distribution Losses (T & D Losses): ChurnZero

Electricity usage for ChurnZero was provided directly by the reporting company. For transmission and distribution losses, GreenPlaces applied the US average gross grid loss rate of 5.3%.

Total T & D losses for ChurnZero were approximately **1.0752 mT CO₂e**.

4.4 Category 4: Upstream Transportation and Distribution

Upstream Transportation and Distribution: ChurnZero

There weren’t any Upstream Transportation and Distribution activities reported in the reporting year.
4.5 Category 5: Waste Generated in Operations

Waste Generated in Operations: ChurnZero

There was no waste reported in the reporting year.

4.6 Category 6: Business Travel

Business Travel: ChurnZero

All business travel emissions were pulled from ChurnZero's business travel records in Q1, purchased goods and services data and TripActions’ travel report. Business travel expenses after Q1 related to accommodations, air transportation, and rail travel were reported independently through TripActions. Passenger ground transportation (rideshare) is not reported in TripActions.

Where ChurnZero provided trip itineraries in Q1, mileage was calculated using airport codes, and emissions were calculated using the distance-based methodology. A radiative forcing factor of 2.7 was applied to these distance calculations to account for uncertainty associated with emission variability at high altitudes. Where ChurnZero provided the number of hotel nights, the appropriate emission factor from the UK DEFRA's conversion factor dataset (2022) was applied.

For purchased goods and services, all travel related expenses were categorized into an appropriate CEDA category (CEDA, 2023). The spend-based method was only applied to emissions from transit and ground passenger transportation and reported here.

Total business travel emissions came to $85,818.9\text{ mT CO}_2\text{e}$. As the spend-based method was partially applied, there is a fair to large amount of uncertainty associated with these calculations. Additionally, there is uncertainty as to whether TripActions’ air travel emission calculations include radiative forcing or not. This methodology knowledge gap contributes to the overall uncertainty associated with the calculation.
4.7 Category 7: Employee Commute

Employee Commute: ChurnZero

The client was able to provide each employee’s address and the average number of employees commuting each day.

GreenPlaces used US Census data for average commute mode breakdown in the District of Columbia as no specific data was provided by the client (United States Census Bureau, 2021).

GreenPlaces then applied the appropriate emission factors to miles traveled per commute mode per location from the EPA emission factor hub (2023). For public transportation commuting, GreenPlaces assumed 50% of the commuting distance was traveled by transit rail and the other 50% by bus.

All sources used by GreenPlaces to determine the average commute mode are listed in the works cited section of this report.

Because GreenPlaces assumes the commute mode and commute distance traveled based on addresses provided, there is a fair to large amount of uncertainty associated with these calculations. Total emissions from employee commuting came to 12,249.1 mT CO₂e.

Telecommuting: ChurnZero

ChurnZero provided a list of all employees and the average number of employees commuting each day, which GreenPlaces used to assume the number of days worked remotely using average working days per year. The following methods were applied to calculate remote work emissions:

**Remote Emissions From Stationary Combustion:**
GreenPlaces obtained the average natural gas intensity per remote employee (Anthesis, 2021) and multiplied this intensity by the number of employees and by the number of days worked remotely per year. GreenPlaces completed these calculations to get the total annual natural gas consumption which was then multiplied by the natural gas emission factor to get a total of 41,285.6 mT CO₂e for all employees working remotely. For US remote employees, emission factors were sourced from the EPA 2023 GHG emission factor hub. For remote employees in the Netherlands, a country-specific emission factor was sourced from the International Energy Agency (IEA).

**Remote Emissions From Purchased Electricity:**
GreenPlaces obtained the average electricity intensity per remote employee (Anthesis, 2021) and multiplied this intensity by the number of employees and by the number of
days worked remotely per year. Total kWh was then multiplied by the US average eGRID emission factor or the Netherlands IEA emission factor to calculate location-based electricity emissions. Using these calculation methods, total location-based emissions for all employees came to \(124.6304 \text{ mT CO}_2\text{e}\).

T & D losses were also included in remote work electricity emissions and came to a total of \(6.5910 \text{ mT CO}_2\text{e}\). For US T & D loss calculations, a 5.3% gross grid loss rate was assumed. For the Netherlands remote employees, a T & D loss rate was obtained from the IEA.

Total emissions from employees working remotely for ChurnZero came to \(172.5071 \text{ mT CO}_2\text{e}\). As average increases in baseline energy consumption were applied; there is a fair amount of uncertainty associated with these calculations.

4.8 Category 8: Upstream Leased Assets

Upstream Leased Assets: ChurnZero

There were no upstream leased assets reported in the reporting period.

4.9 Category 9: Downstream Transportation and Distribution

Downstream Transportation and Distribution: ChurnZero

There was no downstream transportation and distribution reported in the reporting period.

4.10 Category 10: Processing of Sold Products

Processing of Sold Products: ChurnZero

This category was not included in this assessment.
4.11 Category 11: Use of Sold Products

Use of Sold Products: ChurnZero

This category was not included in this assessment.

4.12 Category 12: End of Life Treatment of Sold Products

Processing of End of Life Treatment of Sold Products: ChurnZero

This category was not included in this assessment.

4.13 Category 13: Downstream Leased Assets

Downstream Leased Assets: ChurnZero

There were no downstream leased assets so this category was not included in this assessment.

4.14 Category 14: Franchises

Franchises: ChurnZero

There were no franchises reported so this category was not included in this assessment.
4.15 Category 15: Investments

Investments: ChurnZero

There were no investments reported so this category was not included in this assessment.

Assessment Results

Based on the information provided and the analysis conducted, and subject to the attached Statement of Limiting Conditions, we have concluded that ChurnZero's scope 1 and 2 emissions, with local-based method purchased electricity, as of the assessment date are: 26.9343 mT of CO₂e. Scope 3 emissions as of this assessment date are approximately 579.2553 mT CO₂e. It should be noted that this is likely a conservative number as not all emission scopes were accounted for.

Total emissions are:

606.1895 mT of CO₂e

[Visual breakdown by category, next pg.]
Total emissions are:

606.1895 mT of CO₂e

- **Purchased Goods & Services 50.74%**
  These are the scope 3 emissions that come from the things your business purchases to operate. ~307.6050 mT CO₂e

- **Employee Commute 11.97%**
  We consider local transit patterns and emissions from teleworking in these scope 3 calculations. ~184.7562 mT CO₂e

- **Business Travel 14.16%**
  These scope 3 emissions include flights, hotels, ground transit, and trains. ~85.8189 mT CO₂e
Electricity 3.35%
These are the scope 2 emissions that come from the electricity your business purchases. ~20.2876 mT CO₂e

Natural Gas 1.10%
These are scope 1 emissions from the combustion of natural gas related to your operations. ~6.6467 mT CO₂e

Fuel and Energy Related Activities 0.18%
These are scope 3 emissions from electricity lost along the utility chain process. ~1.0752 mT CO₂e
Documentation

When conducting carbon assessments, GreenPlaces recommends that client's include any verifying documentation of carbon emissions, REC and carbon credit purchases as applicable.

Statement of Limiting Conditions

1. This Carbon Assessment is valid only for the stated purpose and as of the date of its completion.
2. Information provided by the client or its representatives has been accepted by GreenPlaces without verification and is not audited, reviewed, or otherwise validated. The carbon footprint arrived at herein is based on such information.
3. GreenPlaces has obtained certain information regarding GHG from public sources that it believes to be reliable. However, GreenPlaces makes no representation regarding the accuracy or completeness of such information and has not taken action to corroborate such information.
4. This Carbon Assessment does not constitute an environmental site assessment, and GreenPlaces takes no responsibility for identifying any actual or potential environmental liabilities or contamination on or associated with the Client's property.
5. The prior written consent of GreenPlaces is required before all or any part of the contents of this Carbon Assessment may be disseminated to the public or reproduced or distributed to any third parties. Any modification of this Carbon Assessment requires the prior written consent of GreenPlaces. This Carbon Assessment is copyright © 2022, GreenPlaces. All rights are reserved.
Works Cited


The travel survey for Northern Ireland in-depth report 2020 has been published today. Department for Infrastructure.


[End of Report]