

GHG Inventory Report: Scope 1 and Scope 2

October 2024

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Reducing Greenhouse Gas Emissions

At Cognosante, we're creating a safer, healthier, more equitable nation for all. The desire to improve people's lives drives everything we do, from our corporate culture to our program delivery. The sustainability of our physical environment promotes the safety, health, and well-being of our employees, our communities, and the people we serve.

We're committed to reducing our greenhouse gas emissions and promoting sustainable practices across our business.

Our targets are:

	Near-term Reduction	Long-term Reduction
Year	2033 (10 years from target set date)	2050 (27 years from target set date)
Type	Absolute reduction of 25% of baseline emissions	Absolute reduction 75% of baseline emissions
Covered	95% Scope 1 & 2 of baseline emissions	95% Scope 1 & 2 of baseline emissions

SBTi aligned*: No

Scope 1 & 2 Summary

Cognosante's Scope 1 & 2 emissions from April 1, 2023, to March 31, 2024, are calculated to be 175.6 mtCO₂e per the methodology described below. Scope 1 emissions are calculated to be 5.0 mtCO₂e, and Scope 2 emissions are calculated to be 170.1 mtCO₂e.

This document outlines the methodology and assumptions used in preparation for the greenhouse gas (GHG) emissions report. These are consistent with the reporting requirements of the GHG Protocol Corporate

Accounting and Reporting Standard, Revised Edition (2004). The Federal Greenhouse Gas Accounting and Reporting Guide (2016) and the EPA Simplified GHG Emissions Calculator (SGEC) were also used as references..

Scope 1	CO ₂ e	CO ₂	CH ₄	N ₂ O	HFC	PFC	NF ₃	SF ₆
Stationary Emissions	5.0	5.0	0.0	0.0	-	-	-	-
Mobile Emissions	-	-	-	-	-	-	-	-
Fugitive Emissions	-	-	-	-	-	-	-	-
Scope 1 Total	5.0	5.0	0.0	0.0	-	-	-	-

Scope 1	CO ₂ e	CO ₂	CH ₄	N ₂ O	HFC	PFC	NF ₃	SF ₆
Electricity, Location-Based	170.1	169.2	0.3	0.5	-	-	-	-
Heating, Location-Based	-	-	-	-	-	-	-	-
Scope 2 Total	170.1	169.2	0.3	0.5	-	-	-	-

Scopes 1 & 2 Total	175.1	174.2	0.3	0.5	-	-	-	-
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Baseline Comparison

This GHG Emissions Report shows a significant reduction nearing 68.5% in our company's greenhouse gas emissions compared to our baseline inventory. This reduction is largely attributed to our strategic shift towards remote-based operations and closure of office space, therefore cutting down on emissions associated with electricity and heating those offices.

Inventory Scope and Organizational Boundary

Reporting period	April 1, 2023 – March 31, 2024
Consolidation Approach	Operational control
Description of the Cognosante	Cognosante is a US-based organization with over 1,800 employees providing health IT consulting, technology solutions, and business process outsourcing services.
Organizational boundary	<p>All offices occupied during the reporting period are considered part of the organizational boundary and their corresponding Scope 1 and 2 emissions are included in this report.</p> <p>No offices were excluded from this report based on size.</p> <p>Cognosante leased 5 locations during the reporting period, with 2 locations subleased to another occupant, and 2 locations exited during the year.</p>
Base Year	April 1, 2021 – March 31, 2022

Recalculation policy	<p>Cognosante is reporting its GHG emissions for the third consecutive year. The starting and ending days and months coincide with those of the baseline reporting period.</p> <p>The majority of Cognosante office-based employees have been working remotely since 2020 that may lead to changes in the real estate portfolio size in future years.</p> <p>Cognosante intends to calculate its GHG emissions annually following the guidance of the GHG Protocol Corporate Standard if there are meaningful changes to the base year inventory or material changes to the organizational boundary.</p>
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Operational Boundaries

Emission Source	Status	Commentary on data availability and exclusions
Scope 1: Direct emissions from owned/controlled operations	Calculated	Cognosante’s Scope 1 emissions include stationary emissions from diesel generators. There are no mobile emissions to account for since Cognosante does not own any vehicles. Fugitive emissions were excluded following an initial screening.
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling	Calculated	Cognosante’s Scope 2 emissions include emissions from electricity consumption. Scope 2 emissions are based on electricity purchases. Regional estimates for office space were utilized for locations that do not have utility bills or submeter data available.

General Methodology

General Formula Used to Calculate Cognosante’s Emissions
Cognosante’s GHG calculations follow the general formula below:

$$\left\{ \text{Activity} \times \text{Emission Factor} \times \text{Global Warming Potential} = \text{CO2 Equivalent Emissions} \right\}$$

Where:

- Activity is a quantitative measure of a level of activity (e.g. kWh purchased, vehicle-miles traveled, etc.) that results in GHG emissions.
- Emission factor converts the activity into GHG emissions (e.g. kg CO₂ emitted per kWh of electricity purchased, kg CH₄ emitted per mile traveled by transport mode, etc.).
- CO₂ equivalent (CO₂e) obtained by multiplying the emissions of a given GHG by its GWP.

The general formula above is adjusted according to the type of activity and the most recent emission factors are used. The emission factors used for each category and emission source are listed below.

Global Warming Potentials Used to Calculate Cognosante’s Emissions

Global Warming Potentials Used in This Inventory

Greenhouse Gas	GWP (100-years)	Source
CO ₂	1 CO ₂ e	Intergovernmental Panel on Climate Change, Sixth Assessment Report (2020)
CH ₄	25 CO ₂ e	
N ₂ O	298 CO ₂ e	
HFC-134a	1300 CO ₂ e	

Calculation Updates

This report includes information on energy consumption and emissions factors used to calculate emissions associated with each category. To ensure accuracy and consistency, we have reviewed the values used for previous reporting periods and identified which ones we have updated since then. All changes are listed below:

Updated for the 2022–2023 GHG Inventory Report

- *Average Natural Gas Use intensity for Commercial Buildings across US Regions*
- *Average Fuel Oil Consumption for Commercial Buildings across US Regions*
- *Average Electricity Intensity for Commercial Buildings across US Regions*
- *Average Steam Intensity for Commercial Buildings across US Regions*
- *Average Electricity Intensity for Residential Buildings US Regions*
- *Emission Factors for District Heat (Steam)*

Updated for the 2023–2024 GHG Inventory Report

- *GHG Global Warming Potentials*
- *Electricity Emission Factors for Location-based Method*
- *Emission Factors for Transport Modes (vehicle-mile)*
- *Emission Factors for various Transport Modes (passenger-mile)*

Scope 1 Methodology

Scope 1 includes direct GHG emissions from office operations leased by Cognosante. Only stationary emissions from space heating and cooling are considered. There are no mobile emissions as Cognosante does not own a vehicle fleet. Fugitive emissions would have made up less than 1% of scope 1 & 2 combined and were therefore ruled out of this report in accordance with the GHG Protocol screening method and its definitions of materiality and significance.

Approach For Stationary Emissions From Diesel Generators

Methodology	Description
Activity data	<p>Activity data consists of gallons of diesel fuel combusted. Cognosante utilizes four generators used during electricity outages. Two generators are owned by Cognosante. Records of fuel purchases are used to estimate fuel consumed. In cases for which no records exist and/or building managers have not provided activity data, estimates were based on the U.S. Energy Information Administration’s (EIA) 2018 Commercial Buildings Energy Consumption Survey (CBECS).</p>
Methodology	<p>Calculated emissions from fuel combusted by diesel generators follow the general formula. Activity data is multiplied by an emission factor and GHG GWP.</p> <p>Estimations Where actual data is not available, annual fuel consumption was estimated by multiplying the fuel expenditure intensity benchmark for office buildings found by Cognosante’s square-footage occupancy across its office portfolio.</p>
Limitations	<p>The CBECS is conducted periodically by the EIA. The most recent consumption and expenditure data available is from their 2018 CBECS.</p> <p>Estimations are not as accurate as submetering Cognosante’s operations would be. However, submetering would not account for common space energy use in commercial buildings with multiple tenants. Scope 1 calculations include Cognosante’s common areas share based on a pro-rata basis. These should not be accounted for in Scope 3, category 8 on upstream leased assets to avoid double counting.</p> <p>Actual fuel purchases were used to compare against benchmark calculations and found to be close to the information made available by the EIA.</p>

Emission Factors For Diesel Generators

Greenhouse Gas	Emission Factor	Units	Source
CO ₂	10.21000	kg CO ₂ /gal	EPA Greenhouse Gas Inventory Guidance: Direct Emissions from Stationary Combustion Sources (2024)
CH ₄	0.41000	g CH ₄ /gal	
N ₂ O	0.08000	g N ₂ O/gal	

Average Fuel Oil Consumption for US Regions

Location	Building Type	Expenditure intensity (gal / sf)	Source
United States	Office	0.02	CBECs (2018) Table C34. Fuel oil consumption and expenditure intensities, 2018

Fugitive emissions would have made up less than 1% of scope 1 & 2 combined and were therefore excluded in accordance to the GHG Protocol screening method and its definitions of materiality and significance. The table below shows the approach used to screen the fugitive emissions from Cognosante’s cooling units.

Approach for Office Refrigerators

Methodology	Description
Activity data	Fugitive emissions from Cognosante’s refrigerators.
Method	<p>Annual emissions from refrigerants don’t follow the general formula outlined at the beginning of this report but ARE Instead calculated using the formula from the Climate Registry’s General Reporting Protocol (GRP) v 1.1 (2008) below:</p> $\text{Total Annual Emissions (mt)} = \frac{(C_N \times k) + (C \times w \times T) + [C_D \times y \times (1 - z)] \text{ (kg)}}{1,000 \text{ (kg mt)}}$ <p> C_N = Quantity of refrigerant charged into the new equipment* C = Total full charge (capacity) of the equipment T = Time in years equipment was in use (e.g., 0.5 if used only during half the year and then disposed of) C_D = Total full charge (capacity) of equipment being disposed of k = Installation emission factor w = Operating emission factor y = Refrigerant remaining at the disposal z = Recovery efficiency </p>

Limitations	<p>Our calculations assume an average lifetime of 12 years for every refrigerator, as suggested by the U.S. Department of Energy. The emission factors for office refrigerators are found in the table below. Installation and disposal emissions are distributed across this 12 years of operations.</p> <p>Fugitive emissions from fridges are apportioned based on the percentage of time leases were active during the reporting period</p> <p>Specific refrigeration data is unavailable for offices. Our screening method assumes a model similar to GE® ENERGY STAR® 27.0 Cu. Ft. Refrigerator (Models GNE27JYMFS) for each of Cognosante’s offices. This model has a 4.48 oz. capacity charge of its HFC-134a refrigerant.</p>
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Emission Source	Emission Factor (% of Capacity/Year)	Source
Operating emission factor	0.5	<u>The Climate Registry (2016)</u>
Installation Emission Factor	1	
Disposal Emission Factor	0.8	
Recovery Efficiency	0.7	

Source: [The Climate Registry \(2016\)](#)

Scope 2 Methodology

Scope 2 includes indirect GHG emissions from the generation of acquired and consumed electricity, steam, heat, or cooling within the organizational boundaries established for this report. Cognosante’s Scope 2 emissions include electricity purchases and steam purchases. Scope 2 guidance requires dual reporting, following emission factor hierarchies.

Location-based Method

The location-based method calculates emissions based on electricity consumption at the location where the energy is used, taking into account the fuel mix used to generate electricity within the locations and periods in which Cognosante operates. Cognosante uses local grid average emission factors to report location-based emissions for all offices included in the inventory scope.

Approach for Electricity Purchased

Methodology	Description
Activity data	<p>Activity data consists of electricity consumption in megawatt hours (MWh).</p> <p>Cognosante maintains records of electricity bills for its leased and sub-leased offices. In cases for which no records exist and/or building managers have not provided activity data, estimates were based on the U.S. Energy Information Administration's (EIA) 2018 Commercial Buildings Energy Consumption Survey (CBECS).</p>
Method	<p>Calculated emissions from electricity consumption use follow the general formula. Activity data is multiplied by an emission factor and GHG GWP. The location-based emissions factors particular to electricity usage based on each office's corresponding regional grid are included in the table below.</p> <p><u>Estimations</u></p> <p>Where actual data is not available, annual electricity expenditure was estimated by multiplying a regional electricity consumption intensity benchmark factor by Cognosante's square-footage occupancy across its office portfolio.</p>
Limitations	<p>The CBECS is conducted periodically by the EIA. The most recent consumption and expenditure data available is from their 2018 CBECS.</p> <p>Estimations are not as accurate as submetering Cognosante's own operations would be. However, submetering would not account for common space energy use in commercial buildings with multiple tenants. Our Scope 1 calculations include Cognosante's common areas share based on a pro-rata basis. These should not be accounted for in Scope 3, category 8 on upstream leased assets to avoid double counting.</p> <p>A comparison of Cognosante's actual electricity purchases to EIA's consumption intensity factors further confirmed our estimation method.</p>

Electricity Emission Factors for Location-based Method

eGrid Region	Emission Factor				
	CO ₂ (lb/MWh)	CH ₄ (lb/MWh)	N ₂ O (lb/MWh)	Grid Gross Loss	Source
ERCT (ERCOT All)	771.100	0.049	0.007	5.10%	EPA Greenhouse
RFCE (RFC East)	657.400	0.045	0.006	5.10%	Gas Inventory
RFCW (RFC West)	1,000.100	0.087	0.012	5.10%	Guidance: Direct
SRVC (SERC Virginia/Carolina)	623.000	0.047	0.007	5.10%	Emissions from Electricity (2024)

Average Energy Intensity for US Regions

Location	Building Type	Expenditure intensity kWh / sf)	Source
United States	Office	13.60	CBECs (2018) Table C14. Electricity consumption and expenditure intensities, 2018
Mid-Atlantic	Office	14.10	CBECs (2018) Table C17-C19. Electricity consumption and conditional energy intensity by Census division, 2018
West South Central	Office	13.70	

Market-based Method

Our methodology does not include a market-based method based on contractual emissions and defaults to the location-based method as Cognosante does not have direct agreements with its energy suppliers.