
MicroHealth Greenhouse Gas Emissions Report

Calendar Year 2024

December 30, 2024

Version 1.0





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1.0 PURPOSE

The purpose of this report is to analyze MicroHealth's greenhouse gas (GHG) emissions in accordance with the requirements of the GHG Protocol: A corporate accounting and reporting standard.

2.0 SCOPE INFORMATION

2.1. Emissions Reporting Year

Calendar Year 2024

2.2. GHG Gases Reported

- CO2 only
- 7 GHGP GHGs (CO2, CH4, N2O, SF6, HFCs, PFCs, NF3)

2.3. Organization Description

MicroHealth LLC (MicroHealth) specializes in information technology. We offer program management, research, business intelligence, systems engineering, software development, human factors, enterprise architecture, mobile technology, and electronic health records.

2.4. Operational Boundaries

MicroHealth reports direct emissions (Scope 1) and energy indirect emissions (Scope 2) of carbon dioxide, (CO2), methane (CH4), and nitrous oxide (N2O) associated with its occupancy of leased office space in Vienna, Virginia.

2.5. Exclusions

MicroHealth does not report Scope 3 emissions as this is out of scope.

2.6. Emission Methodologies

MicroHealth reported our 2024 greenhouse gas (GHG) emissions in accordance with the requirements of the GHG Protocol: A corporate accounting and reporting standard, revised edition.

Emissions for 2024 were calculated based on activity data provided by building management for MicroHealth's leased office space. Total building consumption of natural gas and electricity were pro-rated in accordance with MicroHealth's proportionate share of total building office space. Fugitive emissions of the HFC refrigerant R134a from the building chiller were estimated and allocated proportionately to MicroHealth.

Emission factors (EFs) for the consumption of natural gas were obtained from in the 2023 GHG Emission Factors Hub, published by the US EPA. The EF for purchased electricity was sourced from the US EPA eGRID subregion SRVC (SERC Virginia/Carolina), which report emission rates. Global warming potentials were sourced from the Intergovernmental Panel on Climate Change Assessment. The annual rate for refrigerant fugitive emissions was sourced from data published by The Climate Registry.



3.0 REPORTING

Based off of previous GHG Inventory reports, the estimation of GHG emissions for 2024 was prepared on the basis of best available and historical data and is subject to quantification uncertainty.

3.1. Facilities and Associated Emissions

Source	Source Type	Emissions	Metered?
Office building heating	Boiler	Natural gas	Yes
Office building cooling	Chiller (Trane Series R)	R134a	No
Office building electricity	Dominion Energy	Electricity	Yes

Emissions for 2024 were calculated based on activity data provided by building management for the leased office space. Total building consumption of natural gas and electricity were pro-rated in accordance with MicroHealth’s proportionate share of total building office space. Fugitive emissions of the HFC refrigerant R134a from one building chiller were estimated and allocated proportionately to MicroHealth.

3.2. Inventory of Emissions

Emission Category	GHG	M Tons	tCO2-e	Notes
Direct stationary emissions	CO2	8.93701703	8.9370	From natural gas
Direct stationary emissions	CH4	0.00016843	0.0047	From natural gas
Direct stationary emissions	N2O	0.00001684	0.0046	From natural gas
Direct mobile emissions	CO2	0.00	0.00	
Direct mobile emissions	CH4	0.00	0.00	
Direct mobile emissions	N2O	0.00	0.00	
Direct fugitive emissions	HFC	0.02463048	7.3601	R134A
TOTAL DIRECT			16.3064	
Energy indirect emissions	CO2	44.0077203	44.0077203	Location-based
Energy indirect emissions	CH4	0.00357730	0.0998068	Location-based



Emission Category	GHG	M Tons	tCO2-e	Notes
Energy indirect emissions	N2O	0.00013759	0.0375617	Location-based
Energy indirect emissions	CO2	44.0077203	44.0077203	Market-based
Energy indirect emissions	CH4	0.00357730	0.0998068	Market-based
Energy indirect emissions	N2O	0.00013759	0.0375617	Market-based
TOTAL ENERGY INDIRECT			44.1450888	Market-based
Bioenergy combustion	CO2	N/A	N/A	Not Applicable
TOTAL BIOENERGY			N/A	

3.3. Summary of Emissions in Metric Tons per Greenhouse Gas

Greenhouse Gas	Emissions (Metric Tons)	Emissions (Metric Tons of CO2e)
Carbon dioxide (CO2)	52.94474	52.94474
Methane (CH4)	0.00375	0.10451
Nitrous oxide (N2O)	0.00015	0.04216
HFCs	0.02463	7.76668
PFCs	0.00	0.00
Sulfur hexafluoride (SF6)	0.00	0.00
Nitrogen trifluoride (NF3)	0.00	0.00
TOTAL		60.45151

4.0 SUMMARY

MicroHealth has demonstrated a strong commitment to environmental responsibility by implementing a comprehensive strategy to reduce its greenhouse gas emissions. MicroHealth's efforts have yielded impressive results, with emission numbers consistently remaining below industry averages. This achievement is the result of numerous initiatives designed to minimize the organization's carbon footprint.

One of the primary focuses has been on improving energy efficiency within MicroHealth's facilities. MicroHealth has replaced traditional halogen lighting with more energy-efficient LED alternatives, significantly reducing electricity consumption. Additionally, the installation of automatic motion detection lighting systems ensures that lights are only active when needed, further conserving energy. The Office Management Team has also implemented new procedures and checklists to monitor conference rooms and common areas, ensuring that monitors and other hardware are powered down when not in use.

MicroHealth has extended its environmental efforts beyond just lighting and equipment management. MicroHealth has invested in newer, more eco-friendly appliances that consume less power and operate more efficiently. To reduce emissions associated with commuting,



MicroHealth has embraced remote work opportunities and telework options for its employees. The Human Resources department has gone a step further by offering incentives through benefits packages for employees who choose to use public or shared transportation.

In line with its commitment to responsible resource management, MicroHealth has partnered with an eco-friendly external provider to collect and recycle obsolete hardware, ensuring that electronic waste is properly handled. MicroHealth has also undertaken a comprehensive overhaul of its heating and cooling systems, including duct work and equipment upgrades, to improve overall energy efficiency.

Collaboration with building management (Link Parks) has further enhanced MicroHealth's environmental initiatives. The logistics company overseeing the building has worked closely with tenants, including MicroHealth, to implement additional measures for reducing emissions and overall carbon footprint. These efforts include re-sealing the building's exterior to prevent air leakage and updating and maintaining building equipment to ensure optimal efficiency.

Through these concerted efforts, MicroHealth has positioned itself as a leader in corporate environmental responsibility, demonstrating that business success and ecological stewardship can go hand in hand. MicroHealth's ongoing commitment to reducing greenhouse gas emissions not only benefits the environment but also sets a positive example for other organizations in the industry.

5.0 GREENHOUSE GAS REDUCTION EFFORTS

5.1. Greenhouse Gas Reduction Goals Approach

In efforts to continue to lower our emissions output, MicroHealth has set additional goals to meet within the next few years. Our main initiative will be downsizing MicroHealth's facility by eliminating the 7th floor offices once our lease expires, which is a significant opportunity to reduce energy costs and minimize MicroHealth's carbon footprint. This decision aligns well with our current hybrid work environment, where many employees split their time between remote and office location. By consolidating operations onto fewer floors and workspaces, MicroHealth can substantially decrease its overall energy consumption. The immediate impact would be seen in reduced heating, cooling, and lighting costs for the vacated space. This change would lower electricity usage for lighting, computer equipment, and other office machines, as well as decrease the demand on HVAC systems. Additionally, elevators would have reduced usage, further contributing to energy savings.

The decision to downsize by removing an entire floor from our footprint also opens up possibilities for more efficient space utilization in the remaining areas. MicroHealth could optimize its office layout to ensure its energy efficiency, potentially incorporating more open-plan spaces that are easier to heat and cool. This consolidation could also provide an opportunity to upgrade to more energy-efficient lighting and equipment in the consolidated space. Furthermore, the reduction in overall square footage would likely result in lower maintenance costs and potentially reduced rent or lease expenses. This strategic downsizing not only contributes to MicroHealth's sustainability goals but also aligns with modern workplace trends that favor more compact, efficient, and collaborative office environments.



5.2. Greenhouse Gas Reduction Goals

To achieve a quantitative measurable approach to reduce greenhouse gases, we are aiming to decrease our total office space by 40.24% through the elimination of the 7th floor once the lease has expired, which translates to approximately 11,167 square feet of reduced occupancy. This reduction in space could lead to a targeted 40.24% decrease in overall energy consumption, equivalent to saving roughly 60,000 kWh of electricity annually. This could in turn reduce our carbon emissions by 23 metric tons per year as a result of this downsizing.

Below are the listed goals and measures for when the 7th floor is no longer utilized to reduce emissions and carbon footprint which is set to be achieved by end of Quarter 1, 2026:

Goal	Description	Quantitative Measure	Date to Achieve
Decrease Energy Consumption	Decreasing overall energy consumption	Reduce overall consumption by 40.24% total	April 2026
Reduce Square Foot Occupancy	Decreasing overall space will reduce the utilizes and energy consumption	Reduce by 11,167 Square Feet Total	April 2026
Reduce Annual Average Kilowatt Consumption	Decrease annual electricity usage by saving overall space	Reduce by 60,000 kWh annually	April 2026
Reduce Annual Average Carbon Emissions	Decrease annual carbon emissions by saving overall space	Reduce by 23 Metric Tons annually	April 2026

Additionally, MicroHealth could also lower its utility costs by 40.24%, annually. By setting these quantifiable objectives, MicroHealth can more effectively measure the impact of its downsizing efforts and adjust strategies as needed to maximize energy and cost savings. To track progress, we will establish a baseline of current energy usage and costs, then monitor these metrics after the downsizing to ensure they're meeting or exceeding the set targets.



6.0 DECLARATION APPROVALS

By signing below, the parties attest that the information provided in this document is true, accurate, and complete to the best of their knowledge.

Kyle Shifflett

Kyle Shifflett – Quality Manager

Page W. McNall

Page McNall – Sr. Director of Organizational Performance