VENTAS®

2023
Environmental Data Tables

Environmental Data Boundary

Ventas calculates its environmental performance data using the operational control approach per the Greenhouse Gas Protocol (GHG Protocol). (GHG Protocol, 2015, Chapter 3, p. 20). Under this approach, we define operational control to include assets where Ventas (or entities it owns or manages): a) funds capital expenditures (capex) and b) pays (directly or indirectly) the utility bills. This includes our owned Outpatient Medical Buildings, Research Centers and Senior Housing Operating Portfolio (SHOP) assets, and unconsolidated assets under our Ventas Investment Management platform. Excluded from our control boundary are owned single-tenant, triple-net leased (NNN) assets and other Office and SHOP assets where we do not pay the utility bills or fund capex. We strive to collect the utility data for these assets to understand our full environmental impact. The emissions from these owned assets outside of our operational control are included in Scope 3 emissions from downstream leased assets.

In 2023, Ventas moved its data to a new Environmental Management System (EMS), which improved the accuracy and reliability of our environmental data. As a result, our 2022 data is restated here to provide a more accurate comparison with 2023 and future years.

Where we were unable to obtain actual environmental data (e.g., energy water, waste consumption), estimates were made using methodologies explained in the Notes and Methodology section. Due to rounding, numbers presented in the tables throughout this document may not sum to the totals.

Portfolio Characteristics

In 2023 we owned 1,414 properties, 902 of which are within our environmental operational control boundary. These property counts include assets that were acquired and disposed in 2023. Data presented herein based on these property counts are denoted as 'Not Recalculated.' Our 2023 emissions inventory includes 1,385 properties, 892 of which are within our environmental operational control boundary and comprise our scopes 1+2 emissions. The remaining 493 assets are NNN-leased assets that are outside of our environmental operational control boundary and comprise our scope 3 emissions from downstream leased assets. These property counts represent our recalculated base year using the fixed base year approach per the GHG Protocol. Our base year is 2022 and all assets acquired in 2023 are grossed up to full year ownership (in 2022 and 2023) and all dispositions prior to January 1, 2024 are excluded from both years. Data presented herein based on these property counts are denoted as 'Recalculated.'

Developments and major redevelopments are excluded from our control boundary until they are operational, but we include the embodied carbon from these projects in our scope 3 emissions. As of December 31, 2023, we had 14 properties under development or major redevelopment (including 2 completed in 2023). We do not track or report on emissions related to our loan portfolio or assets where we only provide 3rd party property management services, which combined represented less than 2% of our company Net Operating Income in 2023.

2022 and 2023 Portfolio and Operational Control Boundary (Not Recalculated)

	Building Type	2022 # Properties	Ownership Time-Weighted Square Feet (SF)[1]	% Total (SF)	2023 # Properties	Ownership Time-Weighted Square Feet (SF)[1]	% Total (SF)	SF Delta %
		2022			**2023**			**2022-2023**
Within Operational Control	Senior Housing	567	58,687,998	54%	603	61,949,692	54%	6%
	Outpatient Medical	182	11,609,867	11%	265	13,507,977	12%	16%
	Research	34	7,180,115	7%	34	7,167,229	6%	0%
	Subtotal	**783**	**77,477,980**	**72%**	**902**	**82,624,898**	**73%**	**7%**
Outside Operational Control	Senior Housing	250	14,575,558	13%	234	12,978,517	11%	-11%
	Outpatient Medical	150	6,968,284	6%	154	7,217,683	6%	4%
	Healthcare[2]	64	7,547,136	7%	107	8,922,223	8%	18%
	Research	15	1,605,009	1%	17	2,026,616	2%	26%
	Subtotal	**479**	**30,695,988**	**28%**	**512**	**31,145,038**	**27%**	**1%**
	Total	**1,262**	**108,173,968**	**100%**	**1,414**	**113,769,937**	**100%**	**5%**

[1] Time-weighted square footage accounts for the number of months Ventas owned an asset within a given year. For example, if a 100,000 SF property was acquired in June 2023, the time-weighted square footage would be 50,000 SF in 2023, reflecting ownership for 6 out of 12 months, and 0 SF in 2022 since the asset was not owned during that year.

[2] Includes inpatient rehabilitation facilities (IRFs) and long-term acute care hospitals (LTACs), health systems, skilled nursing, international hospitals.

2023 Portfolio and Operational Control Boundary (Recalculated)

	Building Type	2023 Year-End		
		2023 # Properties	2023 Square Footage of Data Coverage	% Total (SF)
Within Operational Control	**Senior Housing**	596	62,626,115	54%
	Outpatient Medical	263	14,514,016	13%
	Research	33	6,693,785	6%
	Subtotal	**892**	**83,833,916**	**73%**
Outside Operational Control	**Senior Housing**	231	13,015,312	11%
	Outpatient Medical	148	7,310,846	6%
	Healthcare[2]	100	9,368,595	8%
	Research	14	1,818,380	2%
	Subtotal	**493**	**31,513,133**	**27%**
	Total	**1,385**	**115,347,049**	**100%**

Emissions

In metric tons of carbon dioxide equivalent (MTCO2e), Intensity is per 1,000 square feet (SF)

Goal: GHG Emissions (market-based):

- Reduce scopes 1+2 emissions (MTCO2e) 42% by 2030 from a 2022 base year (1.5°C-aligned and validated by the Science Based Targets initiative (SBTi)), and achieve net zero emissions by 2040

- Reduce scope 3 emissions (MTCO2e) 20% by 2030 from a 2022 base year

2023 Emissions and Intensity by Property Type (Recalculated)

Property Type	Scope 1				Market-based			Location-based		
	Refrigerants	Backup Generators (diesel)	Gas and Other Fuels	Total	Scope 2 (Indirect)	Total (Scopes 1+2)	Intensity	Scope 2 (Indirect)	Total	Intensity
Senior Housing	12,085	2,347	76,235	90,667	138,196	228,862	3.7	166,597	257,264	4.1
Outpatient Medical	3,974	718	13,688	18,380	79,859	98,239	6.8	96,360	114,741	7.9
Research	2,100	102	20,906	23,108	44,592	67,699	10.1	53,730	76,838	11.5
Total	**18,159**	**3,167**	**110,829**	**132,155**	**262,646**	**394,801**	**4.7**	**316,687**	**448,842**	**5.4**
Data Coverage	100%	100%	100%	100%	100%	100%		100%	100%	
Estimated Data	58.6%	83.1%	7.48%	16.31%	6.87%	10.03%		6.87%	9.65%	

2023 Zero-Carbon Electricity and Scope 2 Emissions Details (Not Recalculated)

Goal: Achieve 60% zero-carbon electricity by 2030 and 100% by 2035

				Market-based		Location-Based	
	Electricity (MWh)	Electricity	Total Energy	Emissions Factor	Emissions	Emissions Factor	Emissions
On-Site Renewable Electricity Generation	264	0.0%	0.0%	0	0	0	0
Off-Site Renewable Electricity Procured[1]	8,611	0.8%	0.5%	0	0	Standard Grid	4,044
Grid Electricity Offset by RECs[2]	65,000	6.3%	3.9%	0	0	Standard Grid	36,572
Other Zero-Carbon Electricity[3]	43,077	4.2%	2.6%	0	0	Standard Grid	17,177
Zero-Carbon Subtotal	116,951	**11.3%**	7.1%	0	0	0	57,793
Low Carbon Electricity	15,779	1.5%	1.0%	6	43	Standard Grid	3,574
All Other Grid Electricity Consumption	900,093	87.1%	54.3%	Residual Mix	262,603	Standard Grid	244,751
Total	**1,032,823**	**100.0%**	**62.3%**		**262,646**		**306,118**

[1] Includes renewable power purchase agreements (PPAs) or other utility green power products that explicitly include renewable energy certificates (RECs), e.g., 'bundled' RECs.
[2] Represents unbundled North American REC purchases where RECs have been retired by Ventas and applied to North American grid energy consumption.
[3] Includes zero-carbon electricity sources, such as nuclear, that are procured through utility programs.

Base Year and Subsequent Years Emissions and Intensity (Recalculated)

	2022	2023	2022-23 Delta
Scope 1	151,722	132,155	-12.9%
Scope 2 (Market-based)	287,438	262,646	-8.6%
Total	**439,160**	**394,801**	**-10.1%**
Intensity	5.2	4.7	-10.1%

Historical Emissions and Intensity (Not Recalculated)

	2022	2023	2022-23 Delta
Scope 1	140,496	130,785	-6.9%
Scope 2 (Market-based)	268,655	260,384	-3.1%
Total	**409,151**	**391,168**	**-4.4%**
Intensity	5.3	4.7	-10.4%

Scope 3 Base Year and Subsequent Years Emissions (Recalculated)

Scope 3 categories that were recalculated based on the adjusted asset pool include Downstream Leased Assets, Waste, Transmission Losses, and Refrigerants. The activities in all other Scope 3 categories are independent of our portfolio changes except for SHOP Vehicle Emissions which we excluded due to its immaterial impact to total scope 3 emissions and the complexity of recalculating.

	2022	2023	2023 Estimated Data	2022-23 Delta
Downstream Leased Assets[1]	343,901	323,858	28.8%	-5.8%
Waste	65,657	60,454	17.2%	-7.9%
Development and Redevelopment Embodied Carbon (Capital Goods)	23,636	22,845	100.0%	-3.3%
Fuel and Energy Related Activities (Transmission Losses)	25,131	26,846	16.6%	6.8%
Other: SHOP Vehicle Emissions	3,437	4,020	30.9%	16.9%
Business Travel	959	952	0.0%	-0.8%
Employee Commuting	665	675	0.0%	1.5%
Upstream Leased Assets	384	371	31.0%	-3.4%
Total	**463,770**	**440,019**	**32.1%**	**-5.1%**
Data Coverage	100%	100%		

[1] Refrigerants are categorized under Downstream Leased Assets. Refrigerant emissions (recalculated) totaled 10,394 and 9,063 in 2022 and 2023, respectively.

Scope 3 Historical Emissions (Not Recalculated)

	2022	2023	2022-23 Delta
Downstream Leased Assets[2]	339,957	322,280	-5.2%
Waste	59,615	60,708	1.8%
Development and Redevelopment Embodied Carbon (Capital Goods)	23,636	22,845	-3.3%
Fuel and Energy Related Activities (Transmission Losses)	23,499	26,522	12.9%
Other: SHOP Vehicle Emissions	3,437	4,020	17.0%
Business Travel	959	952	-0.7%
Employee Commuting	665	675	1.5%
Upstream Leased Assets	384	371	-3.5%
Total	**452,152**	**438,373**	**-3.0%**
Data Coverage	100%	100%	

[2] Refrigerants are categorized under Downstream Leased Assets. Refrigerant emissions (not recalculated) totaled 10,361 and 9,063 in 2022 and 2023, respectively.

Energy (Not Recalculated)

In megawatt hours (MWh), Intensity is per 1,000 square feet (SF)

Goal: Reduce energy use intensity (MWh/1,000 SF) 25% from 2022 to 2030

Property Type	2022		2023		2022-23 Delta
	MWh	Intensity	MWh	Intensity	
Senior Housing	995,111	17.0	1,014,702	16.4	-3.4%
Outpatient Medical	289,286	24.9	319,816	23.7	-5.0%
Research	317,805	44.3	322,148	44.9	1.5%
Total	**1,602,202**	**20.7**	**1,656,666**	**20.1**	**-3.0%**
Data Coverage	100%		100%		
Estimated Data	2.8%		1.8%		

Energy Consumption by Type (Not Recalculated)

➡️ Goal: Electrification: Achieve 80% of energy consumption from electricity by 2030

	2022		2023		
	Consumption	% of Total Energy	Consumption	% of Total Energy	% Total Energy Delta
Electricity	990,820	61.8%	1,032,823	**62.3%**	0.5%
Gas and Other Fuels[1]	599,495	37%	613,963	37%	-0.4%
Steam	11,886	1%	9,880	1%	-0.1%
Total	**1,602,202**	**100%**	**1,656,666**	**100%**	**0.0%**

Base Year and Subsequent Years Energy Consumption (Recalculated)

	2022	2023
Electricity	1,062,723	1,035,606
Gas and Other Fuels	641,614	623,190
Steam	11,886	9,880
Total	**1,716,224**	**1,668,676**

[1] Other fuels includes propane, No. 2 Fuel Oil, and diesel.

Water (Not Recalculated)

In cubic meters (m3), Intensity is per 1,000 square feet (SF)

⮕ Goal: Reduce intensity (m^3/1,000 SF) for SHOP properties in environmental control boundary by 20% by 2030 from 2022

⮕ Goal: OM&R: Maintain water use intensity at 105 m^3/1,000 SF

Property Type	2022			2023			2022-23 Delta
	m3	SFT	Intensity	m3	SFT	Intensity	
Senior Housing	9,530,141	58,687,998	162.4	9,845,051	61,949,692	158.9	-2.1%
Outpatient Medical	1,157,349	11,609,867	99.7	1,359,459	13,507,977	100.6	1.0%
Research	658,320	7,180,115	91.7	707,090	7,167,229	98.7	7.6%
Total	11,345,810	77,477,980	146.4	11,911,600	82,624,898	144.2	-1.6%
Subtotal of Outpatient Medical and Research	1,815,669	18,789,982	96.6	2,066,549	20,675,206	100.0	3.4%
Data Coverage	100%			100%			
Estimated Data	18.6%			19.6%			

Waste

In metric tons (MT), Intensity is per 1,000 square feet (SF)

Goal: Achieve the following diversion rates by property type by 2030:
- SHOP: 30%
- OM: 15%
- Research: 35%

Waste Diversion (Not Recalculated)

This table presents actual waste data exclusively, with no estimates factored into the calculations.

	2022						2023					
	Recycling	**Compost**	**Landfill**	**Total**	**Intensity[1]**	**Diversion Rate**	**Recycling**	**Compost**	**Landfill**	**Total**	**Intensity[1]**	**Diversion Rate**
Senior Housing	7,597	1,186	42,895	51,678	1.35	17%	15,158	1,682	59,710	76,550	1.33	22%
Outpatient Medical	924	7	11,352	12,283	1.43	8%	1,444	33	13,882	15,359	1.62	10%
Research	485	34	2,021	2,540	0.46	20%	632	21	1,792	2,445	0.42	27%
Total Non-Estimated Waste	**9,005**	**1,227**	**56,268**	**66,501**	**1.27**	**15%**	**17,234**	**1,736**	**75,385**	**94,355**	**1.29**	**20%**

[1] Denominator square feet are time-weighted for asset ownership periods and only includes square footage for which waste data was available.

Total Landfill Waste with Estimates (Not Recalculated)

	2022					2023				
	Estimated Landfill	Total Non-Hazardous Waste[1]	Total Non-Hazardous Intensity	Data Coverage	Estimated Data	Estimated Landfill	Total Non-Hazardous Waste[1]	Total Non-Hazardous Intensity	Data Coverage	Estimated Data
enior Housing	27,852	79,530	1.36	100%	35%	7,017	83,567	1.35	100%	8%
patient Medical	4,737	17,020	1.47	100%	28%	6,567	21,927	1.62	100%	30%
Research	964	3,504	0.49	100%	28%	730	3,175	0.44	100%	23%
Non-Hazardous	**33,553**	**100,054**	**1.29**	**100%**	**34%**	**14,314**	**108,668**	**1.32**	**100%**	**13%**

[1] Total non-hazardous waste is calculated by summing both the actual and estimated waste, measured in metric tons. Ventas does not provide services related to hazardous waste. Such services, if required by our tenants or operators, are procured directly by our tenants and operators and are outside the scope of our waste purview and reporting.

Notes and Methodology

Estimation Methodology:

For properties where we were unable to obtain natural gas, electricity or water usage data for the reporting period, estimations were made as follows: where available, data gaps were filled in with prior years' data. Where prior or subsequent year data was not available, if the asset had over 50% data coverage, then an average of the other usage months was utilized to fill in the gaps; if the asset had less than 50% data coverage, then estimates were derived based on the location of the property, size of the property, and property type.

Scope 1 & 2 Emissions:

Emissions from CO_2, CH_4, N_2O, and HFCs are included. Emissions from PFCs, SF_6 and NF_3 primarily result from manufacturing and other activities that do not occur in the Ventas portfolio and are therefore not included.

Emissions factors and the global warming potential (GWP) rates used:
- Electricity (US): EPA eGRID 2021 (2022), EPA eGRID 2022 (2023)
- Electricity (Canada): Canada National Inventory Report (2022 & 2023)
- Electricity (United Kingdom): 2023 UK Government Conversion Factors for GHG Reporting (2022 & 2023)
- Natural Gas/Diesel/Propane/District Steam: EPA Emission Factors for Greenhouse Gas Inventories (2024)
- Business Travel/Employee Commuting: EPA Emission Factors for Greenhouse Gas Inventories (2024)
- Global Warming Potential for fugitive refrigerant emissions: IPCC Sixth Assessment Report, 2021 (AR6)

Scope 1 Emissions: Methodology aligns with "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)." Using actual and estimated data, a total emissions impact was calculated using EPA Emission Factors for Greenhouse Gas Inventories (June 2024). Refrigerant (fugitive) emissions for in boundary properties are included in Scope 1; out of boundary property refrigerants are included in Scope 3. Fugitive refrigerant emissions are based on actual recharge of refrigerants in the reporting year from approximately 350 properties. The intensity (MT CO2-e/sq ft) from this sample was used to extrapolate to our remaining properties by property type.

Scope 2 Emissions: Methodology aligns with "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)." Using actual and estimated data, a total emissions impact was calculated using EPA eGRID 2021 and 2022 factors for 2022 and 2023 data, respectively (United States), Canada's Official Greenhouse Gas Inventory (2023) for 2022 and 2023 data (Canada), and the UK Government Conversion factors (2023) for 2022 and 2023 data (United Kingdom) to result in a total MT CO2-e for Scope 2 emissions from electricity. Market-based emissions were calculated utilizing the California Energy Commission's Annual Power Content Labels (2022 & 2021), the Edison Electric Institute's (EEI) utility specific emission factors (2022 & 2023), and Green-e Residual Mix Emission Rates (2022 & 2023). Location-based emissions factors were used for Canadian properties where there was no source for residual mix emissions factors.

All estimations are based on percentage of emissions for that category that was estimated.

Scope 3 Emissions:

Methodology aligns with the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (supplement to the GHG Protocol Corporate Accounting and Reporting Standard)

- Downstream/Upstream Leased Assets: Chicago, Louisville, and NYC Corporate offices (Upstream) and owned assets outside of our environmental boundary (Downstream, both recalculated and not recalculated) using the methodology explained in the estimates section. No natural gas consumption data was available for the Upstream Assets; therefore, consumption was estimated using the EIA Commercial Buildings Energy Consumption Survey (CBECS) for administrative and professional offices and the square footage of each asset.

- Waste: This data represents the disposal of actual and estimated waste generated by properties within our operational control (approximately 13% of the landfill data was estimated). Emissions are calculated using the Waste Reduction Model (WARM), Model Version 16, December 2023.

- Development and Redevelopment Embodied Carbon: Ventas estimates the embodied carbon from our development projects by using an estimated carbon intensity per square foot of development and applying this intensity to the total square feet of development completed during the reporting year, multiplied by the percent of spend of total project cost (percent spend is used as a proxy for the percent of the project complete during the year). The embodied carbon intensity was calculated by using actual embodied carbon calculations from current 2023 developments and other references including the report "Comparative LCAs of Conventional and Mass Timber Buildings in Regions with Potential for Mass Timber Penetration"

- Fuel and Energy Related Activities (Transmission Losses): Ventas estimates transmission losses by applying the percent of electricity loss by state (per the EIA Transmission & Distribution Losses by State database) to the total annual emissions from electricity usage for our properties (both in and outside of our environmental boundary) to determine total losses.

- Other: Refrigerants: This includes emissions from refrigerants not included in our scope 1 emissions. (Refrigerant emissions from our NNN assets).

- Other: SHOP Vehicle Emissions Estimated leased vehicle emissions from transport fuel from SHOP assets. Our 3rd-party senior housing operators use these vehicles to transport the elderly residents of our assets to various activities. Fuel use is estimated using a combination of actual and estimated data from our operators. Actual data includes fuel consumed by vehicle or miles traveled per vehicle. Where actual data could not be obtained, fuel use was estimated by vehicle and fuel costs (4.9% estimated). Emissions were calculated based on this data using the EPA Emission Factors for Greenhouse Gas Inventories (June 2024).

- Business Travel: Based on Ventas business flight, private jet, and rental car data provided by travel agency and using EPA Emission Factors for Greenhouse Gas Inventories (June 2024). Additionally, costs for Ubers, Lyfts, and other taxis were used in conjunction with the EPA's Supply Chain GHG Emission Factors for Industries and Commodities v1.2 (April 2023).

- Employee Commuting: 2023 data was based on employee home-to-office distances. Hybrid employees were assumed to commute 3 days a week (129 days/year) and field employees, 233 days/year. Remote employees' home office energy use was estimated using EIA data (75 sq. ft. per office). EPA's 2024 emission factors were used to convert energy and miles into emissions.

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Energy and Water:

Energy and water data is aggregated from utility bills and data feeds from 3rd party bill pay providers. For properties where partial or no utility data can be obtained, estimates are made using the methodology explained in the estimates section.

Waste:

Waste data is aggregated primarily from waste hauler reports and invoices. Actual waste tonnage or volume is used from the waste hauler reports or invoices, where available. When reports or invoices do not provide the tonnage, calculations are made using the number of bins, their size in cubic yards (or a unit that can be directly converted to cubic yards like gallons or liters), and pickup frequency. Containers are assumed to be full and a material-specific conversion factor is used to determine the average weight per cubic yard. If the material type is not specified, assumptions are made and documented with the EPA conversion factors to volume weight. This is a standard approach for estimating waste from commercial real estate properties.

For properties with missing waste data, landfill estimates are made by using last year's data for the property, or if unavailable, applying the average intensity for similar property types, multiplied by the property's square footage.