



2020 DETAILED ENVIRONMENTAL DATA

ENVIRONMENTAL BOUNDARY & PORTFOLIO CHARACTERISTICS

GRI: 103-1

Ventas defines its environmental control boundary for greenhouse gas emissions (“emissions”), energy, water, and waste reporting in alignment with the Greenhouse Gas Protocol’s Operational Control approach. Under this approach, we generally include assets where we pay (directly or indirectly) the utility bills. This includes our owned Office (MOB and Life Science, Research & Innovation (“R&I”)) and Senior Housing Operating Portfolio (“SHOP”) assets. Excluded from our control boundary are owned single-tenant, triple-net leased assets and other Office and SHOP assets where we do not pay the utility bills. We do, however, work to collect the utility data for these assets to understand our full environmental impact, and this data is included in our reporting to external frameworks, where required, such as GRESB and the S&P Global Corporate Sustainability Assessment. The emissions from these owned assets outside of our control boundary are included in Scope 3 (downstream leased assets). In 2020, we owned 1,195 properties, 656 of which are in our environmental operational control boundary (“within boundary”).

Developments and major redevelopment projects are excluded from our control boundary until they are operational. However, we are working to track and evaluate the carbon emissions related to the construction of new developments and redevelopments (“embodied carbon”). As of December 31, 2020, we had 33 properties under development.

We do not track or report on emissions related to our loan portfolio and unconsolidated assets and JV assets where Ventas ownership is less than 25%, [which together represent less than 5% of our annualized adjusted NOI].

Please see our quarterly supplemental on our investor relations website for more details on our portfolio. Where data is not available, estimates were made using methodologies explained in the subsequent sections. Due to rounding, numbers presented in the tables throughout this section may not sum to the totals.

WITHIN OPERATIONAL CONTROL

BUILDING TYPE	# PROPERTIES	SQUARE FEET (SF)	% OF TOTAL SF
Senior Housing	431	43,827,017	45%
MOB	206	13,359,699	14%
Life Science, R&I	19	4,243,340	4%
SUBTOTAL	656	61,430,056	63%

OUTSIDE OPERATIONAL CONTROL

BUILDING TYPE	# PROPERTIES	SQUARE FEET	% OF TOTAL SF
Senior Housing	320	20,019,771	20%
Healthcare*	65	7,643,972	8%
MOB	140	6,761,399	7%
Life Science, R&I	14	2,108,933	2%
SUBTOTAL	539	36,534,075	37%
TOTAL	1,195	97,964,131	100%

* Includes all non-senior housing triple net assets (IRFs & LTACs, Health Systems, Skilled Nursing, International Hospitals)

As of 12/31/2020

EMISSIONS

GRI: 305-1, 305-2, 305-3, 305-5



EMISSIONS BY PROPERTY TYPE (SCOPE 1 & 2 MTCO ₂ e)	2020 SAME STORE				
	DIRECT (SCOPE 1)	INDIRECT (SCOPE 2, LOCATION-BASED)	TOTAL	INTENSITY (MTCO ₂ E/1,000 SF)	2019-20 Intensity Δ
MOB	16,998	102,240	119,238	9.0	-4.8%
Senior Housing	55,255	114,707	169,962	5.4	-7.1%
Research & Innovation	11,458	34,357	45,815	13.5	-2.2%
TOTAL	83,711	251,305	335,016	7.0	-5.6%

EMISSIONS BY PROPERTY TYPE (SCOPE 1 & 2 MTCO ₂ e)	2019 SAME STORE				
	DIRECT (SCOPE 1)	INDIRECT (SCOPE 2, LOCATION-BASED)	TOTAL	INTENSITY (MTCO ₂ E/1,000 SF)	Intensity Δ
MOB	17,995	107,244	125,239	13,210,421	9.5
Senior Housing	58,590	124,310	182,900	31,257,769	5.9
Research & Innovation	11,502	35,364	46,866	3,381,448	13.9
TOTAL	88,087	266,919	355,005	47,849,638	7.4

EMISSIONS BY PROPERTY TYPE (SCOPE 1 & 2 MTCO ₂ e)	2020*				
	DIRECT (SCOPE 1)	INDIRECT (SCOPE 2, LOCATION-BASED)	TOTAL	INTENSITY (MTCO ₂ E/1,000 SF)	
MOB	19,831	102,785	122,616	9.2	
Senior Housing	74,484	116,163	190,647	4.4	
Research & Innovation	12,376	35,385	47,760	13.2	
TOTAL	106,691	254,333	361,023	6.0	

* Reflects total emissions with acquisitions and dispositions time-weighted for our ownership period.

EMISSIONS BY PROPERTY TYPE (SCOPE 1 & 2 MTCO ₂ e)	2019*			
	DIRECT (SCOPE 1)	INDIRECT (SCOPE 2, LOCATION-BASED)	TOTAL	INTENSITY (MTCO ₂ E/1,000 SF)
MOB	23,074	119,139	142,213	9.6
Senior Housing	70,528	115,026	185,554	5.7
Research & Innovation	13,173	38,857	52,031	14.1
TOTAL	106,776	273,022	379,798	7.4
Office			214,118	

EMISSIONS BY PROPERTY TYPE (SCOPE 1 & 2 MTCO ₂ e)	2018			
	DIRECT (SCOPE 1)	INDIRECT (SCOPE 2, LOCATION-BASED)	TOTAL	INTENSITY (MTCO ₂ E/1,000 SF)
MOB	31,776	135,371	157,148	11.4
Senior Housing	58,710	136,451	195,162	6.7
Research & Innovation	12,198	42,654	54,851	13.5
TOTAL	102,684	314,476	417,161	8.7
Office			221,999	

EMISSIONS

Gases included in the calculation; whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃ or all:

Emissions from CO₂, CH₄, N₂O, and HFCs are included herein (HFCs are estimated based on industry intensity data for 2018-19). Emissions from PFCs, SF₆ and NF₃ primarily result from manufacturing and other activities that do not occur in the Ventas portfolio and are therefore not included.

Source of the emission factors and the global warming potential (GWP) rates used or a reference to the GWP source:

- Electricity (US) - EPA eGRID 2016 (2018), EPA eGRID 2018 (2020), EPA eGRID 2019 (2021)
- Electricity (Canada) - IEA 2016 (2018), IEA 2017 (2019)
- Natural Gas/District Steam - EPA Emission Factors for Greenhouse Gas Inventories (2018)
- Global Warming Potential - IPCC Fifth Assessment Report, 2014 (AR5)

* Reflects total emissions with acquisitions and dispositions time-weighted for our ownership period.

EMISSIONS

Standards, methodologies, assumptions and/or calculation tools used:

Scope 1 Emissions

Methodology aligns with the “The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)”; Using actual and estimated data, a total emission impact is calculated using EPA Emission Factors for Greenhouse Gas Inventories (2018). Ventas’s third-party consultant uses a calculation tool in their cloud-based platform to convert the energy usage to a Scope 1 greenhouse gas impact. Note: refrigerant data was based on industry data from approximately 100 properties where the intensity (MTCO₂e/sqft) was used to extrapolate to the Ventas properties. The GHG Protocol Refrigerant Emission tool was used to calculate the emissions for the ~100 properties, with the GWPs based on the IPCC 2nd Assessment.

Scope 2 Emissions

Methodology aligns with the “The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)”; Using actual and estimated data, a total emission impact is calculated using EPA eGRID 2016, 2018, and 2019 factors for 2018-2020 data, respectively (United States) and IEA 2016 and 2017 (International) emission factors to result in a total MTCO₂e for Scope 2 Emissions from electricity. Ventas’s third-party consultant uses a calculation tool in their cloud-based platform to convert the energy usage to a location-based greenhouse gas impact.

<i>SCOPE 3 MTCO₂E</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2019-20 Δ</i>
Downstream Leased Assets	383,111	364,884	345,795	-5.2%
Waste	44,390	39,055	35,721	-8.5%
Business Travel	730	862	154	-82.2%
Employee Commuting³	392	1,012	552	-45.5%
Upstream Leased Assets	946	860	593	-31.0%
Other: SHOP Vehicle Emissions⁴	4,185	3,919	1,732	-55.8%
Other: Refrigerants	16,510	14,929	14,485	-3.0%
New Development and Redevelopment Emissions (Embodied Carbon)	not assessed	12,634	11,751	-7.0%
Fuel and Energy Related Activities (Transmission Losses)	not assessed	28,399	21,273	-25.1%
TOTAL	450,263	466,553	432,055	-7.4%



EMISSIONS

Gases included in the calculation; whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃ or all:

Emissions from CO₂, CH₄, N₂O, and HFCs are included herein (HFCs are estimated based on industry intensity data for 2018-19). Emissions from PFCs, SF₆ and NF₃ primarily result from manufacturing and other activities that do not occur in the Ventas portfolio and are therefore not included.

Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source:

- Electricity - EPA eGRID 2016, 2018, 2019; IEA 2016, 2017; Business travel/Employee Commuting - EPA Emission Factors for Greenhouse Gas Inventories (2018); Global Warming Potential - IPCC Fifth Assessment Report, 2014 (AR5)

Standards, methodologies, assumptions and/or calculation tools used:

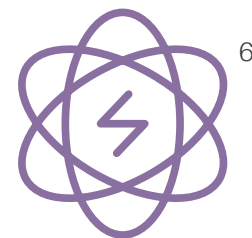
- Corporate Value Chain (Scope 3) Standard | (Supplement to the GHG Protocol Corporate Accounting and Reporting Standard)
- Upstream/Downstream Leased Assets: Chicago and Louisville Corporate offices (Upstream) and owned assets outside of our environmental boundary (Downstream) are using the same calculation methodology as Scope 1 and 2 emission calculations.
- Waste data represents the disposal of actual and estimated waste within the environmental boundary using the Waste Reduction Model (WARM), New Model Version 15 (<http://epa.gov/epawaste/conserve/tools/warm>).
- Business Travel - GHG Protocol Calculation Methodology. Based on Ventas business flight data provided by travel agency through which all flights are booked.
- Employee Commuting - 2018-20 data was calculated based on a survey of employee commuting patterns and the GHG Protocol Mobile Combustion tool.
- Other: SHOP Vehicle Emissions – Estimated leased vehicle emissions from transport fuel from SHOP assets. 2018-20 emissions are calculated using the GHG Protocol Mobile Combustion tool.
- Other: Refrigerants: Refrigerant data was based on industry data from approximately 100 properties where the intensity (MTCO₂e/sqft) was used to extrapolate to the Ventas properties. The GHG Protocol Refrigerant Emission tool was used to calculate the emissions for the ~100 properties, with the GWPs based on the IPCC 2nd Assessment.
- Purchased Goods and Services (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 customizing public templates in the EC3 tool to replicate a sample of our development projects.
- 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 to determine total losses.
- Estimates: For properties lacking complete natural gas usage data for the reporting period, estimations were made based on the size of the property and property type. Approximately 1.8% of the Scope 1 emissions for 2020 were estimated based on energy use intensities based on the property type; less than 1% of the Scope 2 emissions for 2020 were estimated based on energy use intensities based on the property type.

³ Includes emissions from vehicles operated in our senior housing operating portfolio (SHOP) to transport residents to local activities (note: this was previously categorized under Downstream Transportation and Distribution in our CDP response). We categorize this as scope 3 (versus scope 1) because the operation of the vehicles is performed by independent, third party senior housing management companies; Ventas does not directly operate senior housing communities. We include the real estate emissions from these properties (from the building's use of natural gas, electricity and refrigerants) in scope 1 and scope 2 for our in-boundary senior housing communities (SHOP portfolio) because real estate ownership and management is Ventas's primary business. Ventas does not include vehicle emissions from our NNN-leased senior housing communities as these are outside of our operational control boundary. The emissions are based on fuel purchase records (cost only) accounting for 79% of vehicle emissions. Estimations for missing data were calculated based on emissions intensity and extrapolated by senior housing units. The cost is converted to gallons of fuel purchased based on the average annual fuel price, nationally, in the U.S. and Canada. The emissions are calculated based on the vehicle type, using the GHG Protocol Stationary Emissions Calculator. Calculations are in accordance with the methodology of GHG Protocol's Technical Guidance on calculation Scope 3 emissions.

⁴ Emissions from employee commuting methodology changed in 2019 to include estimated data where vehicle/transit data was not available.

ENERGY (within boundary)

302-1, 302-3, 302-4, 302-5



6

TOTAL FUEL CONSUMPTION (MWh/GJ) ⁵	2018	2019	2020
Natural Gas (MWh)	453,008	440,792	455,061
Natural Gas (GJ)	1,630,829	1,586,851	1,638,219
TOTAL FUEL CONSUMPTION (MWh)	2018	2019	2020
Electricity	763,793	779,453	796,140
Heating	453,008	440,792	455,061
Cooling	N/A	N/A	N/A
Steam	N/A	N/A	N/A
Renewables ⁶	324	337	2,637
TOTAL	1,217,125	1,220,581	1,253,838

NON-RENEWABLE ENERGY CONSUMPTION AND INTENSITY BY PROPERTY TYPE*	2018		2019 ⁷		2020	
	MWh	INTENSITY (MWH/1,000 SF)	MWh	INTENSITY (MWH/1,000 SF)	MWh	INTENSITY (MWH/1,000 SF)
MOB	421,974	29.0	377,940	25.4	316,520	23.7
Senior Housing	620,366	21.4	658,578	20.2	765,488	17.6
Research & Innovation	174,461	43.0	183,726	49.9	169,192	46.7
TOTAL	1,216,801	25.5	1,220,244	23.9	1,251,201	20.7

NON-RENEWABLE ENERGY CONSUMPTION AND INTENSITY BY PROPERTY TYPE	SAME STORE							
	2018 - 2019				2019 - 2020			
	2020 MWh	2018 INTENSITY	2019 MWh	2019 INTENSITY	2019 MWh	2019 INTENSITY	2020 MWh	2020 INTENSITY
MOB	393,134	29.4	348,901	26.1	331,738	25.1	314,620	23.8
Senior Housing	608,141	21.7	584,812	20.9	629,154	20.1	584,504	18.7
Research & Innovation	174,461	42.3	177,313	42.9	163,104	48.2	161,132	47.7
TOTAL	1,175,736	25.8	1,111,026	24.4	1,123,996	23.5	1,060,256	22.2

* Reflects total consumption within our operational control, with acquisitions and dispositions time-weighted for our ownership period.



ENERGY

Standards, methodologies, assumptions and/or calculation tools used:

Energy data is aggregated primarily from utility bills. Ventas engages a third-party consultant with expertise in utility data aggregation and environmental impact analysis; the process is aligned with ISO 14001.

For properties where partial or no utility data can be obtained, estimates are made as follows:

- A) Estimates using real data: For properties with one or more months of missing data, data from the corresponding month from the prior year (or in the case of 2018-2019 data, the following year) for that property is used as an estimate for the missing month; where data from the corresponding month of the prior or following year for that property is not available, data is estimated based on data from an adjacent month.
- B) Intensity Estimates: For properties with one or more months of missing data where prior or following year data is not available, the energy intensity per square foot for the property type in the respective calendar year (within the Ventas portfolio) is used to estimate the usage. Energy intensity is calculated by summing the total average monthly energy consumption for the property type in the calendar year and dividing by the total square feet for the property type, excluding outliers.

In 2019 and 2020, 3.6% and 1.3% of energy data was estimated, respectively (based on number of months estimated).

Source of the conversion factors used:

EPA Thermal Conversions: <https://portfoliomanager.energystar.gov/pdf/reference/Thermal%20Conversions.pdf>

⁵ Natural Gas was the only source of fuel used in the 2017-2020 period.

⁶ None of the energy generated was sold.

⁷ 2019 Seniors Housing intensities decreased due to the acquisition of the Le Groupe Maurice (LGM) portfolio (~12M SF) in September of 2019; because Ventas does not report data for months where properties were not owned, and energy intensity is derived by dividing the total use by the total SF of buildings within our operational control boundary, the partial-year data for LGM has skewed the intensity.

WATER (within boundary)

GRI: 303-1



WATER CONSUMPTION & INTENSITY (CUBIC METERS) ⁸	2018		2019		2020	
	CUBIC METERS	INTENSITY	CUBIC METERS	INTENSITY	CUBIC METERS	INTENSITY
MOB	1,475,338	101.3	1,328,704	89.4	1,150,982	86.2
Senior Housing	5,347,236	184.3	5,849,355	179.8	7,546,258	173.8
Research & Innovation	390,256	96.3	391,583	106.3	335,027	92.4
TOTAL	7,212,830	151.4	7,569,642	148.2	9,032,267	149.5

WATER CONSUMPTION & INTENSITY (CUBIC METERS) ^{8*}	SAME STORE							
	2018 - 2019				2019 - 2020			
	2018 CUBIC METERS	2018 INTENSITY	2019 CUBIC METERS	2019 INTENSITY	2019 CUBIC METERS	2019 INTENSITY	2020 CUBIC METERS	2020 INTENSITY
MOB	1,393,930	104.4	1,275,369	95.5	1,220,590	92.4	1,146,129	86.8
Senior Housing	5,248,338	187.2	5,066,154	180.7	5,496,731	175.9	5,438,112	174.0
Research & Innovation	390,256	94.5	391,971	94.9	369,306	109.2	317,916	94.0
TOTAL	7,032,524	154.5	6,733,494	147.9	7,086,627	148.1	6,902,157	144.2

⁸ 100% of the water withdrawn by Ventas comes from Municipal sources. We did not source water from surface water, ground water, rainwater or waste water.

* Reflects total consumption within our operational control, with acquisitions and dispositions time-weighted for our ownership period.



WATER

Standards, methodologies, assumptions and/or calculation tools used:

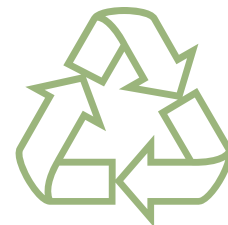
Water data is aggregated primarily from utility bills. Ventas engages a third-party consultant with expertise in utility data aggregation and environmental impact analysis; the process is aligned with ISO 14001.

- A) Estimates using real data: For properties with one or more months of missing data, data from the corresponding month from the prior year (or in the case of 2018-2019 data, the following year) for that property is used as an estimate for the missing month; where data from the corresponding month of the prior or following year for that property is not available, data is estimated based on data from an adjacent month.
- B) Intensity Estimates: For properties with one or more years of missing data where prior or following year data is not available, the water intensity per square foot for the property type in the respective calendar year (within the Ventas portfolio) is used to estimate the usage. Water intensity is calculated by summing the total average monthly water consumption for the property type in the calendar year and dividing by the total square feet for the property type, excluding outliers.

In 2019 and 2020, 8% and 10% of the water data was estimated, respectively (based on number of months estimated).

WASTE (within boundary)

GRI: 306-2



TOTAL WEIGHT OF WASTE (MT)	2018*	2019	2020**	2019 Same Store	2020 Same Store
Recycling	24,205	8,271	7,257	7,325	6,489
Compost	82	299	282	284	268
Landfill	110,808	67,035	71,924	35,276	40,152
Other	0	0	0	0	0
Total Non-Hazardous	135,094	75,605	79,463	42,885	46,909
Hazardous waste	0	0	0	0	0
TOTAL	135,094	75,605	79,463	42,885	46,909
DIVERSION RATE	18%	11%	9%	18%	14%

RECYCLING SERVICES ⁹	2018	2019	2020**
# Assets with Recycling Services in Place	250	286	311
# Assets within Recycling Control Boundary	626	644	642
% Portfolio with Recycling Services in Place	40%	44%	48%

2020 OFFICE	# with recycling	Total properties	% with recycling
MOB	116	192	60%
Life Science	9	19	47%
Office	125	211	59%



WASTE

Standards, methodologies, assumptions and/or calculation tools used:

Note: Our waste operational control boundary differs slightly from our energy and water control boundary; the data here reflects where we believe to have control over landfill and recycling services, which differs slightly from where we have control over energy and water utilities.

Waste data is aggregated primarily from waste hauler invoices. Ventas engages a third-party consultant with expertise in utility data aggregation and environmental impact analysis; the process is aligned with ISO 14001. In cases where volumetric data was provided instead of weight data, the following volume-weight conversion factors were used: EPA Standard volume-to-weight conversion factors.¹⁰

If actual waste tonnage or volume is available from the waste hauler invoice or other reliable source, that is reflected in our waste data. For most properties, waste amounts are estimated based on the number and size of waste containers that are picked up by the waste hauler (based on the hauler invoice). For data collection and reporting purposes, it is assumed that containers are full and contain an average weight per cubic yard. This is a standard practice for estimating waste from commercial real estate properties. For properties where partial or no utility data can be obtained, estimates are made as follows (note: estimates are made only for landfill waste, as all properties are assumed to have landfill services, but not all are assumed to have recycling and compost):

- A)** Estimates using real data: For properties with one or more months of missing data, data from the corresponding month from the prior year (or in the case of 2018-2019 data, the following year) for that property is used as an estimate for the missing month; where data from the corresponding month of the prior or following year for that property is not available, data is estimated by taking the average of adjacent months or the equivalent of a previous or following month.

In 2019 and 2020, 51% and 46% of the waste data was estimated, respectively (based on number of months estimated).

¹⁰ Source: https://www.epa.gov/sites/production/files/2016-04/documents/volume_to_weight_conversion_factors_memoandum_04192016_508fnl.pdf

* Note: The reduction in emissions from Waste between 2018-2019 is a result of improved methodology in data reporting, including additional data QA and assurance which led to the discovery of over reporting prior year values.

** Note: given that most data is estimated based on container size and pickup frequency (as noted above), 2020 waste tonnage may not accurately reflect increases due to Covid as a result of increased disposable cleaning supplies, plates and cutlery, and other temporary operational changes;



CORPORATE OFFICES

353 North Clark Street
Suite 3300
Chicago, IL 60654
+1 312 660 3800

500 North Hurstbourne Parkway
Suite 200
Louisville, KY 40222
+1 502 357 9000
