

2024 Greenhouse Gas Emissions Inventory

Unitil's 2024 greenhouse gas emissions inventory compares results with the 2023, 2022, 2021, 2020, and 2019 baseline inventory to show year-to-year changes across scopes and measure progress against the company's 2030 emissions target (50% reduction of Scope 1 emissions by 2030). All emissions figures are in metric tons of carbon dioxide equivalent (MTCO₂e).

2019-2024 Emissions Summary Table

Table 1: Total annual emissions (MTCO₂e) from 2019 to 2024 by source. Percent change 2024 emissions compared to 2019 baseline year included.

<i>Emissions Source</i>	<i>Scope</i>	<i>2019 Baseline</i>	<i>2020 Emissions</i>	<i>2021 Emissions</i>	<i>2022 Emissions</i>	<i>2023 Emissions</i>	<i>2024 Emissions</i>	<i>% Change from 2019 to 2023</i>
<i>Fuel Facilities</i>	1	599	622	431	447	361	372	-38%
<i>Fugitives</i>	1	21,636	21,066	19,321	18,197	17,350	15,166	-30%
<i>Fleet</i>	1	2,750	2,759	2,767	2,746	2,714	2,802	2%
<i>Consumed Electricity</i>	2	789	808	737	743	762	842	7%
<i>T&D Losses</i>	2	20,486	17,586	18,616	19,248	15,165	20,609	1%
<i>Delivered Gas</i>	3	1,237,987	1,130,604	1,181,178	1,193,901	1,169,624	1,174,047	-5%
<i>Delivered Electricity</i>	3	384,311	384,347	367,788	393,043	385,899	404,842	5%
<i>Waste</i>	3	124	111	116	110	123	123	-1%
<i>Water</i>	3	3.1	2.1	0.8	0.7	0.2	0.6	-81%
<i>Commuting</i>	3	1,683	691	761	1,007	988	1,031	-39%
<i>Total Scope 1</i>	1	24,984	24,447	22,520	21,390	20,424	18,340	-27%
<i>Total Scope 2</i>	2	21,275	18,394	19,353	19,991	15,926	21,451	1%
<i>Total Scope 3</i>	3	1,624,108	1,515,756	1,549,844	1,588,062	1,556,634	1,580,044	-3%
All Scopes		1,670,367	1,558,597	1,591,717	1,629,443	1,592,984	1,619,835	-3%

Scope 1 Emissions

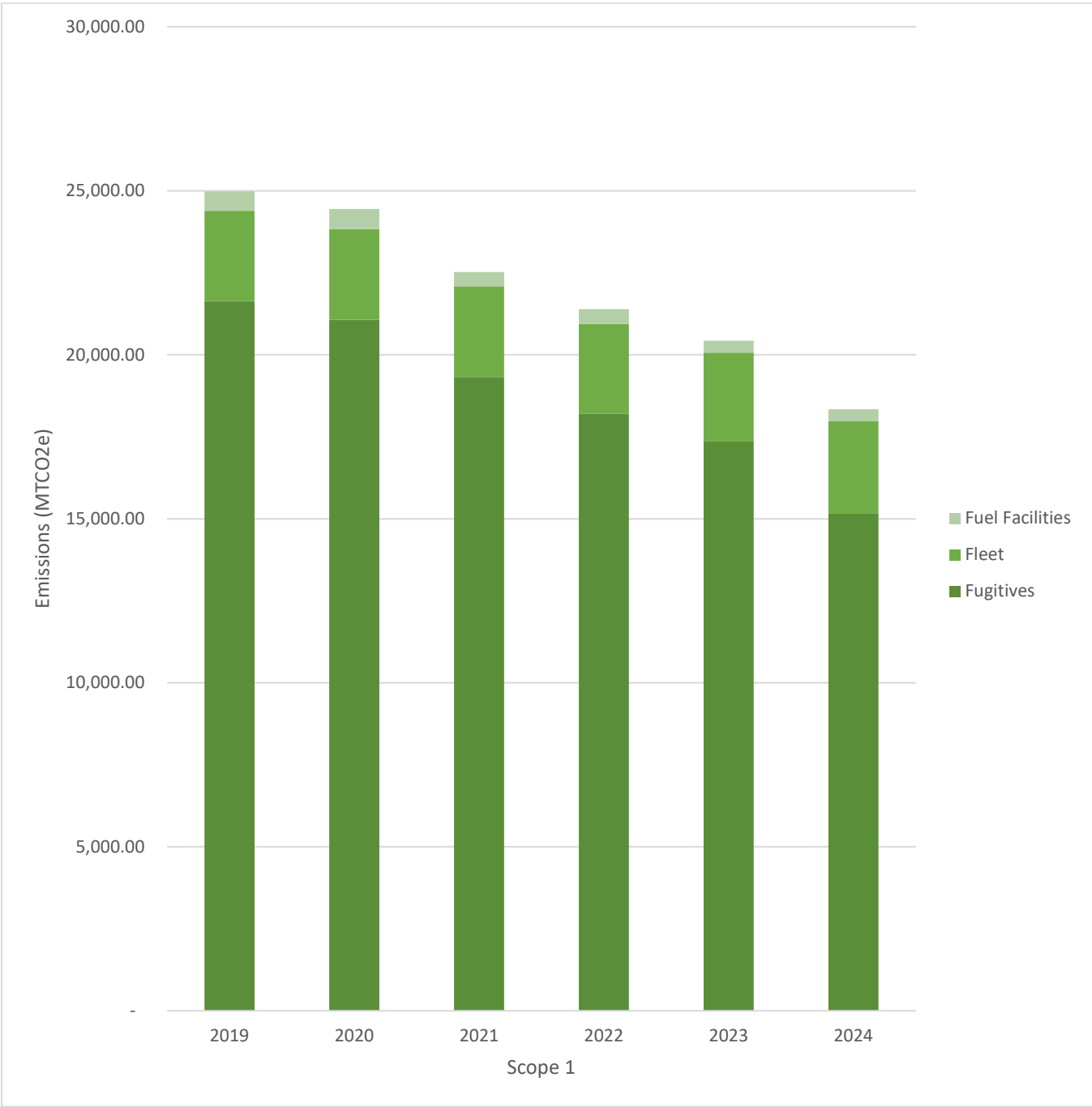


Figure 1: Scope 1 total emissions compared annually.

Fuel Use at Company Facilities

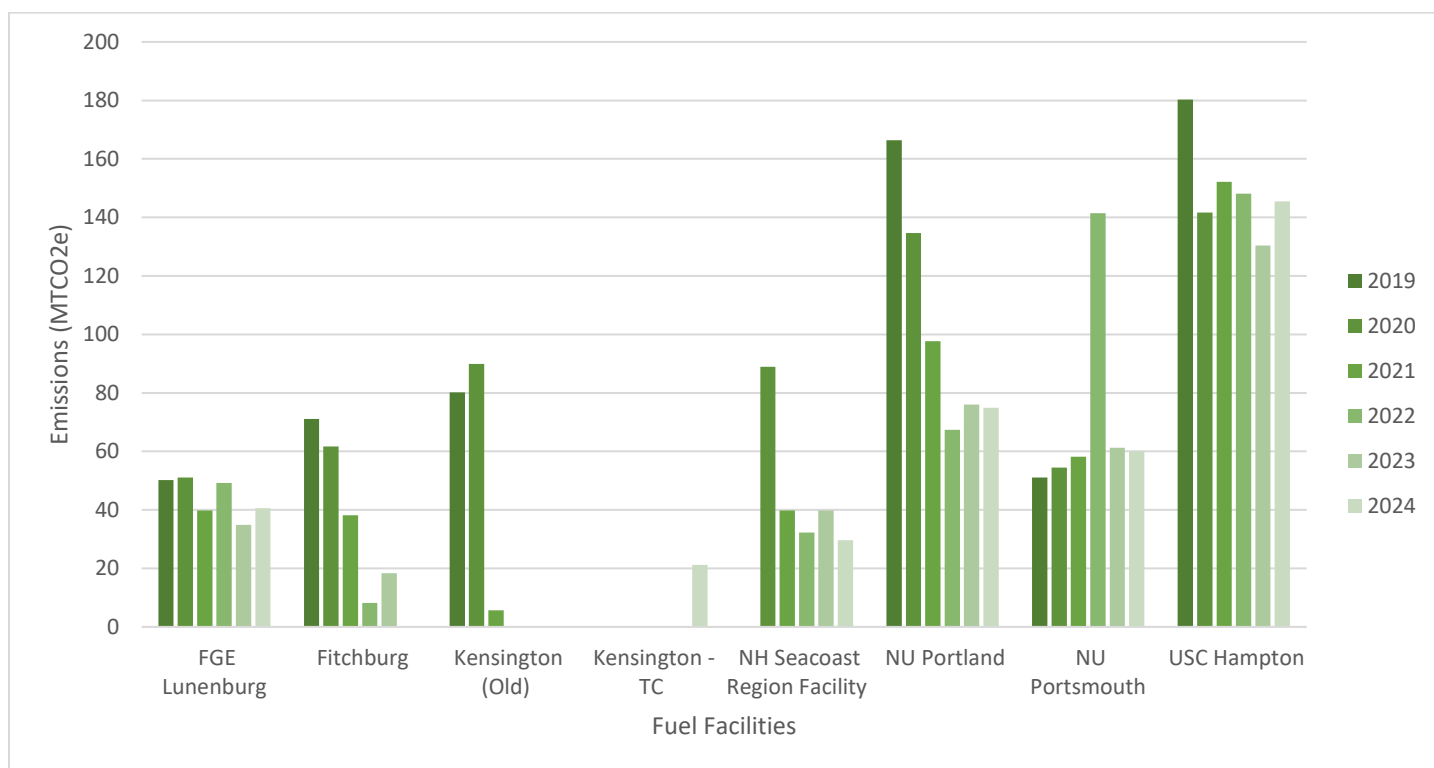


Figure 2: Total annual emissions from fuel consumption across all Unitil facilities

Table 2: Total annual emissions from fuel consumption across all Unitil facilities

Year	FGE Lunenburg	Fitchburg	Kensington (old)	Kensington - TC	NH Seacoast	NU Portland	NU Portsmouth	USC Hampton
2019	50.2	71.1	80.1	0.0	0.0	166.4	51.0	180.3
2020	51.0	61.7	89.9	0.0	88.9	134.7	54.4	141.7
2021	39.8	38.1	5.6	0.0	39.8	97.7	58.1	152.2
2022	49.2	8.1	0.0	0.0	32.3	67.3	141.5	148.1
2023	34.9	18.3	0.0	0.0	39.8	76.0	61.2	130.4
2024	40.6	0.0	0.0	21.2	29.7	75.0	60.1	145.5
Grand Total	265.6	197.4	175.7	21.2	230.5	617.0	426.4	898.2

Fugitives

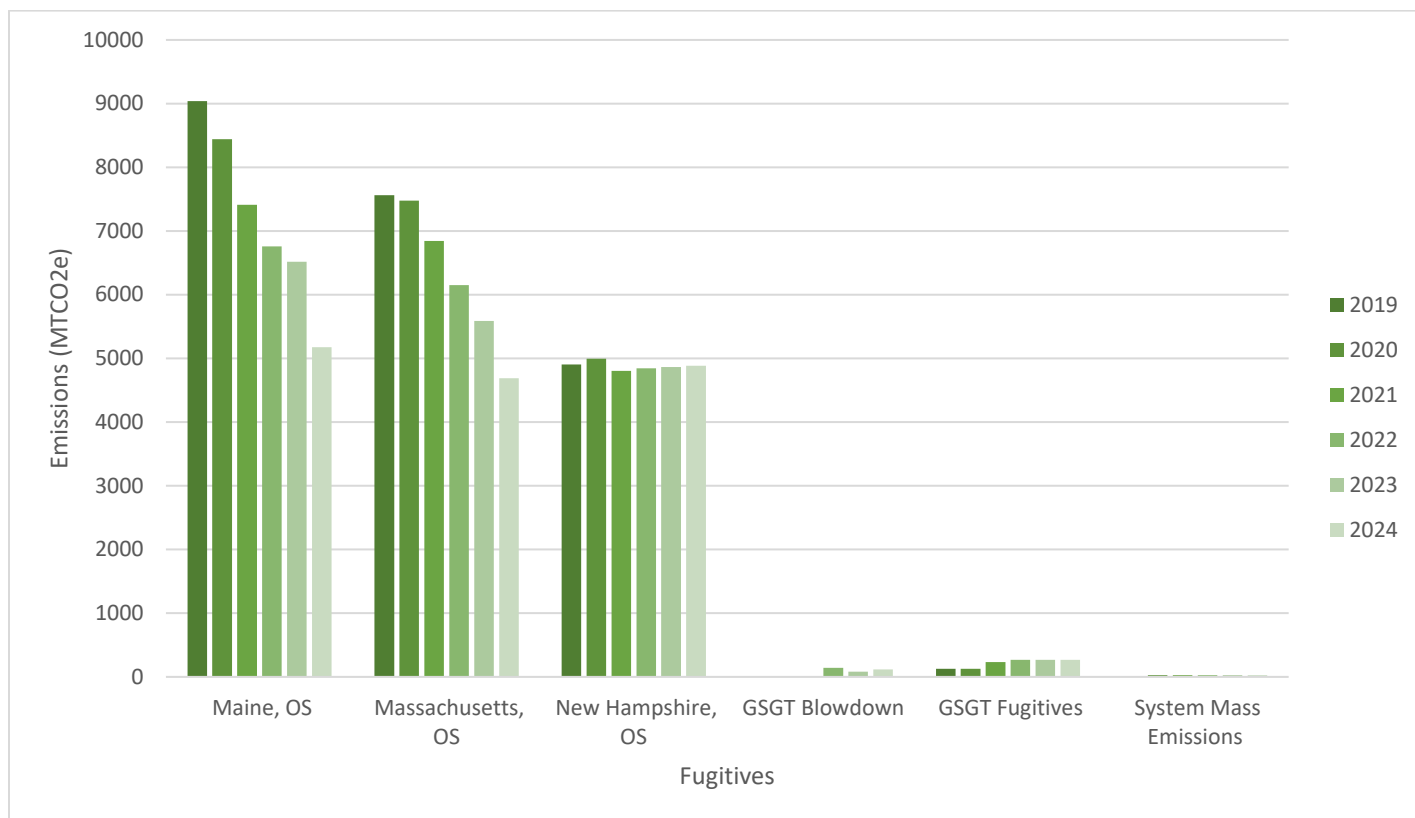


Figure 3: Total annual emissions from fugitives across all operational states and from transmission and distribution

Table 3: Total annual emissions from fugitives across all operational states from transmission and distribution

Year	Maine, OS	Massachusetts, OS	New Hampshire, OS	GSGT Blowdown	GSGT Fugitives	System Mass Emissions
2019	9,040.4	7,563.2	4,906.1	0.0	125.9	0.0
2020	8,442.8	7,474.6	4,993.3	0.0	125.9	28.9
2021	7,412.5	6,842.0	4,806.4	0.0	234.3	26.3
2022	6,760.2	6,150.4	4,845.4	143.4	270.0	27.6
2023	6,516.2	5,589.1	4,863.6	83.5	270.0	27.6
2024	5,178.0	4,690.7	4,882.4	119.0	269.9	26.3
Grand Total	43,350.1	38,309.9	29,297.2	345.9	1,295.9	136.7

Fleet (Company-Owned Vehicles)

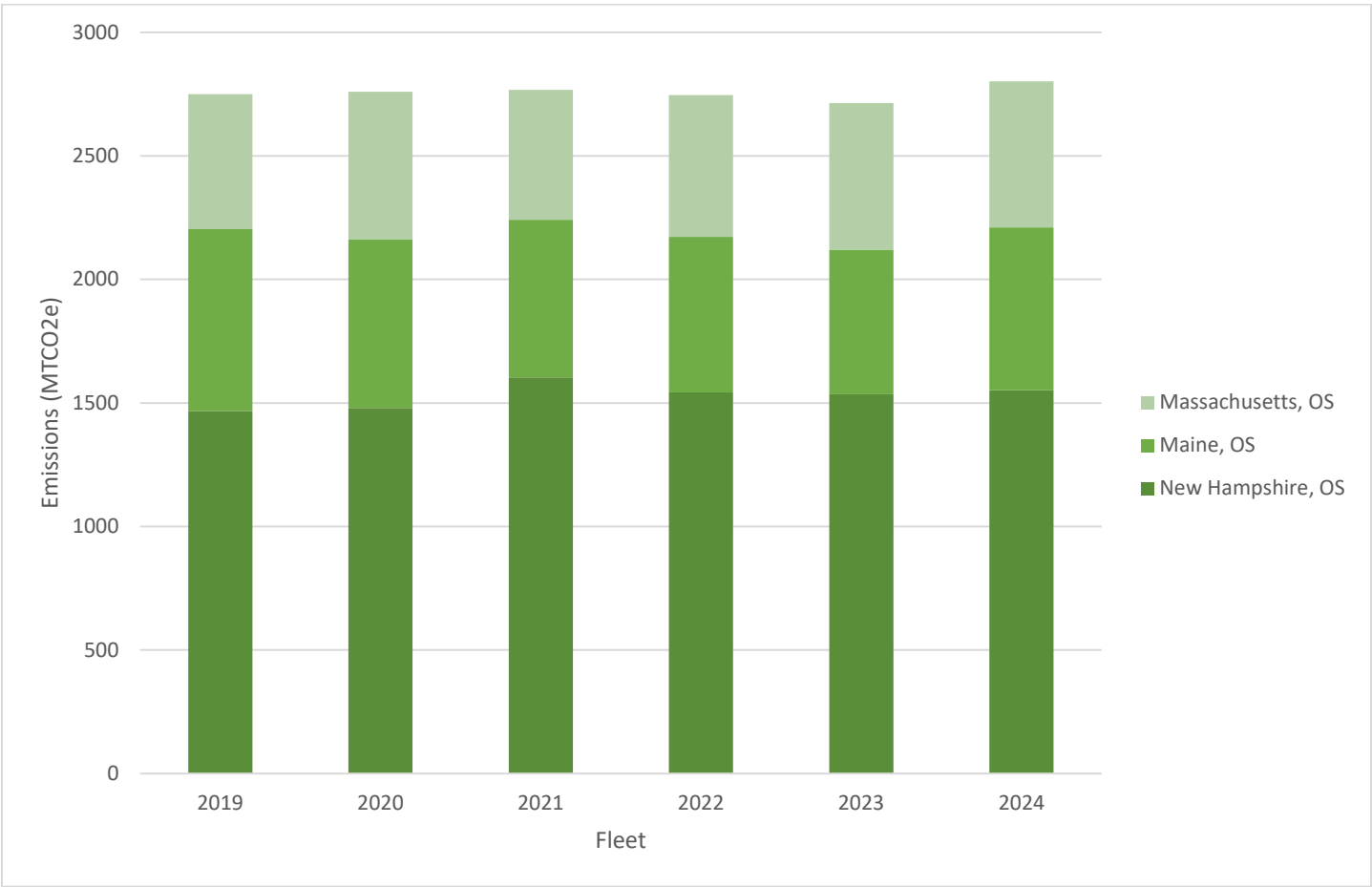


Figure 4: Total annual emissions from company-owned fleet vehicles.

Table 4: Total annual emissions from company-owned fleet vehicles.

Year	Maine, OS	Massachusetts, OS	New Hampshire, OS
2019	738	544	1468
2020	682	598	1480
2021	637	526	1604
2022	629	573	1543
2023	585	593	1536
2024	660	591	1552
Grand Total	3930	3426	9182

Scope 2 Emissions

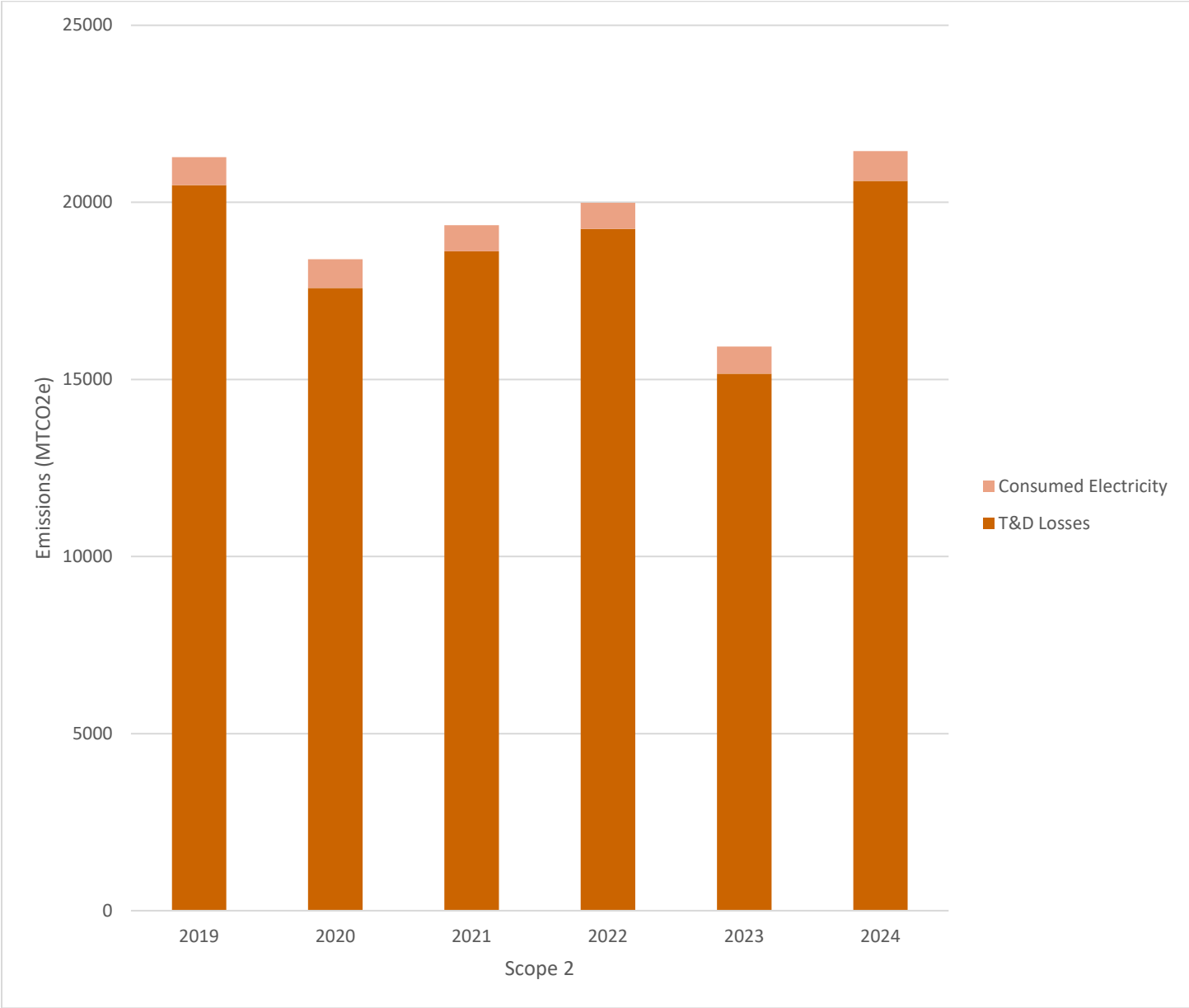


Figure 5: Scope 2 total emissions compared annually.

Consumed Electricity at Company Facilities

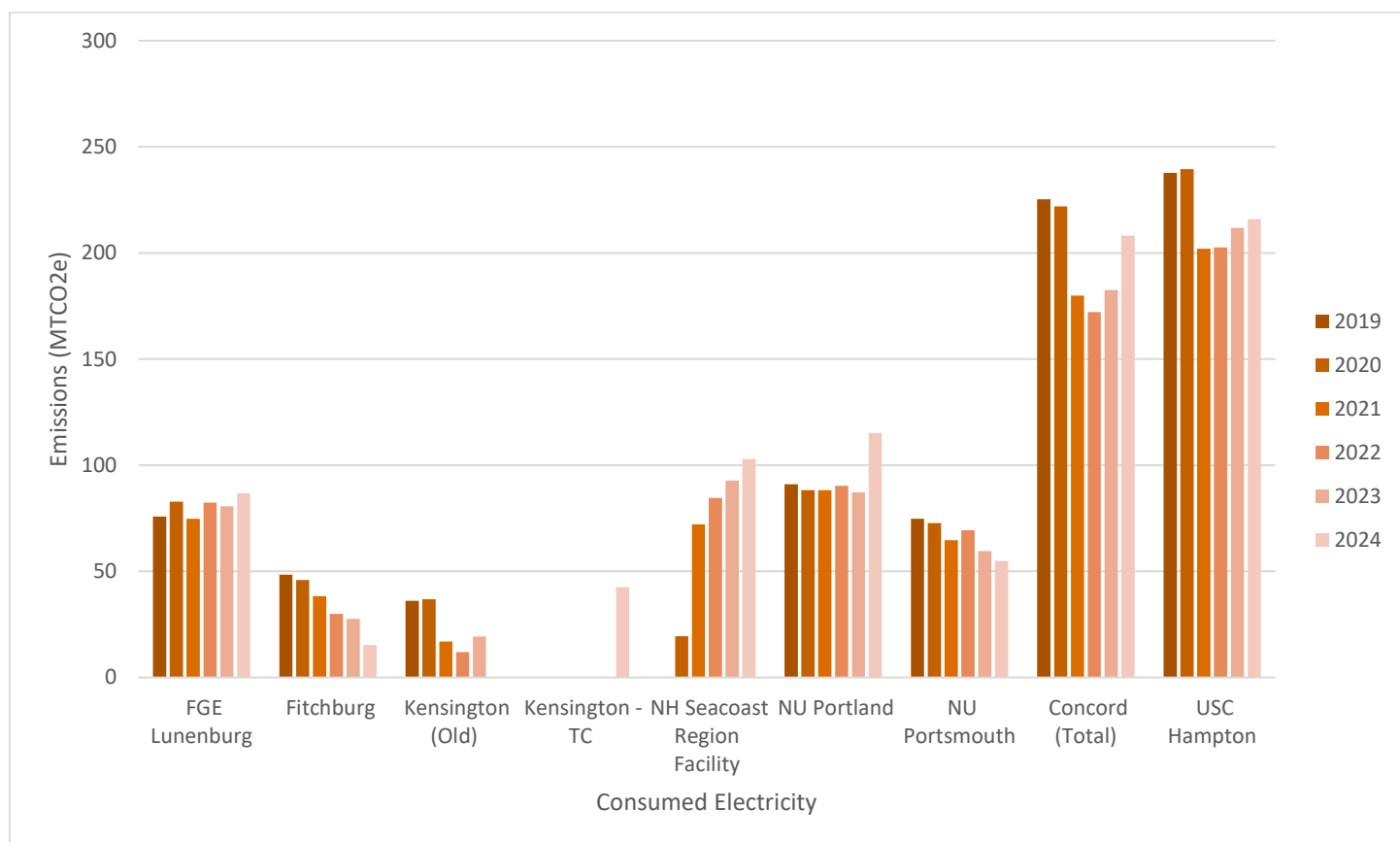


Figure 6: Total annual emissions from electricity consumption across all Unitil facilities

Table 5: Total annual emissions from electricity consumption across all Unitil facilities

Year	FGE Lunenburg	Fitchburg	Kensington	Kensington - TC	NH Seacoast	NU Portland	NU Portsmouth	Concord Total	USC Hampton
2019	75.7	48.4	36.1	0.0	0.0	91.0	74.8	225.3	237.7
2020	82.8	45.9	36.9	0.0	19.4	88.3	72.8	222.0	239.5
2021	74.8	38.4	17.0	0.0	72.1	88.2	64.7	179.9	202.1
2022	82.4	30.0	11.9	0.0	84.6	90.2	69.3	172.1	202.6
2023	80.7	27.7	19.3	0.0	92.8	87.2	59.5	182.6	211.9
2024	86.8	15.3	0.0	42.5	102.9	115.2	54.8	208.1	215.9
Grand Total	483.2	205.6	121.3	42.5	371.8	560.2	395.9	1190.0	1309.6

T&D (Transmission & Distribution) Losses

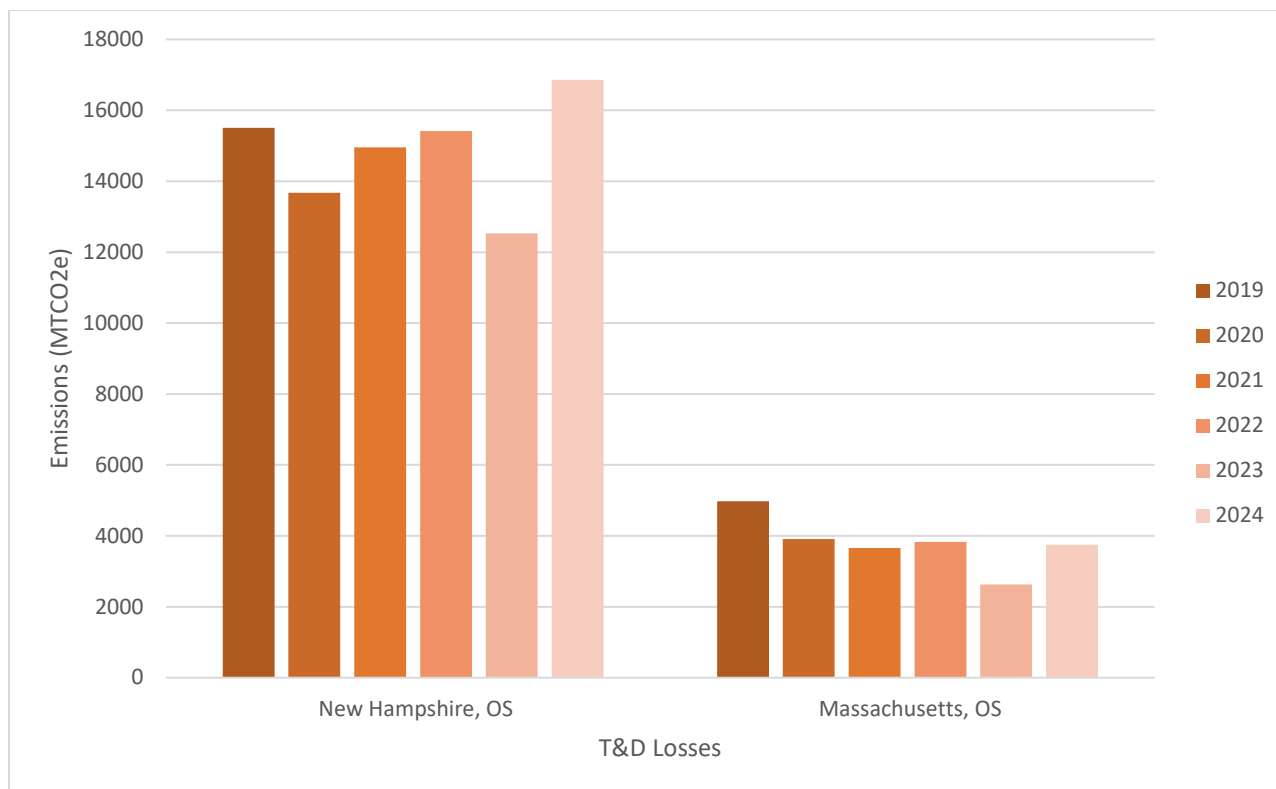


Figure 7: Total annual emissions from T&D losses across all operational states

Table 6: Total annual emissions from T&D losses across all operational states

Year	Massachusetts, OS	New Hampshire, OS
2019	4,974	15,511
2020	3,910	13,676
2021	3,658	14,958
2022	3,829	15,419
2023	2,633	12,532
2024	3,748	16,862
Grand Total	22,753	88,957

Scope 3 Emissions

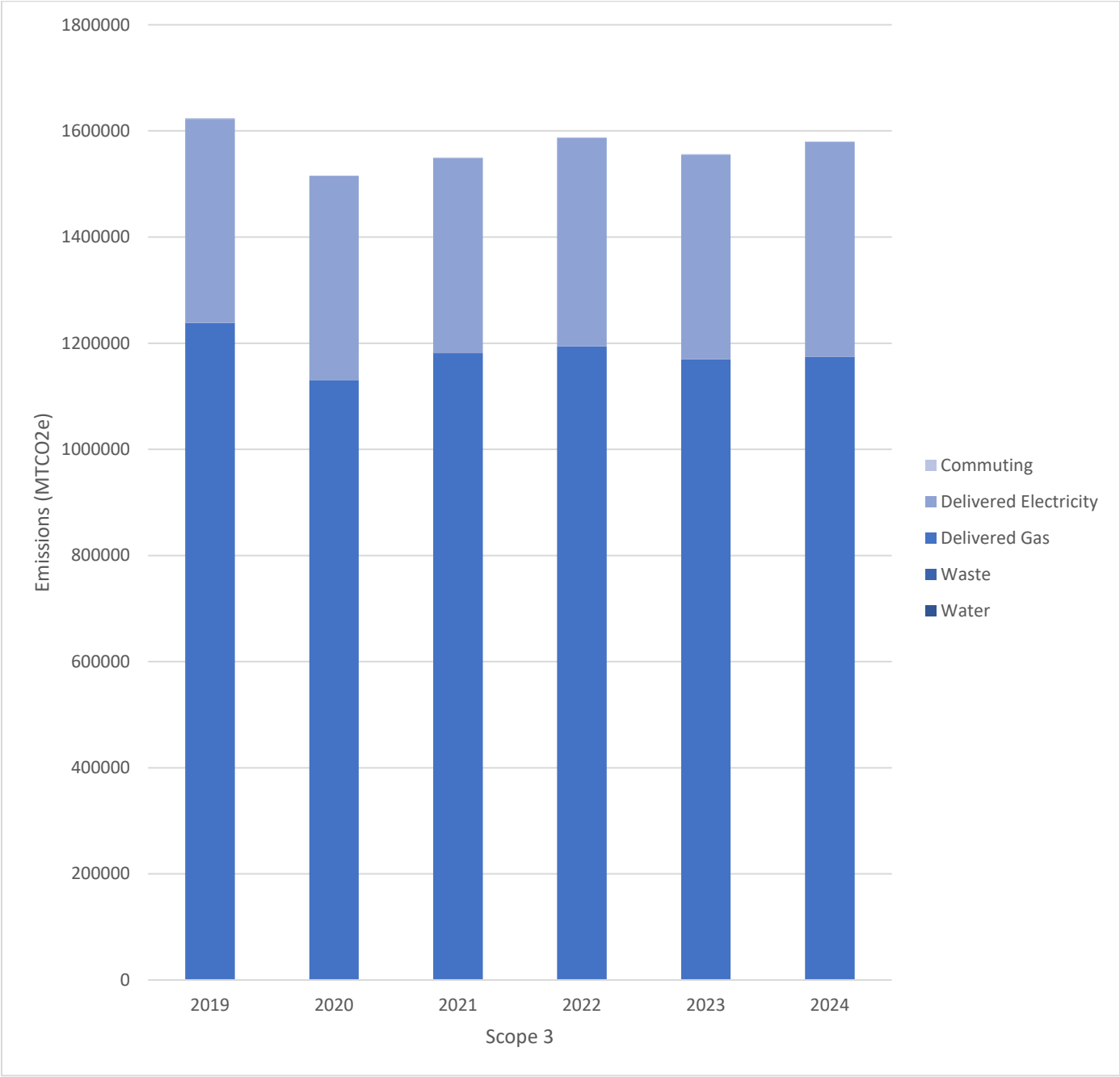


Figure 8: Scope 3 total emissions compared annually.

Delivered Gas

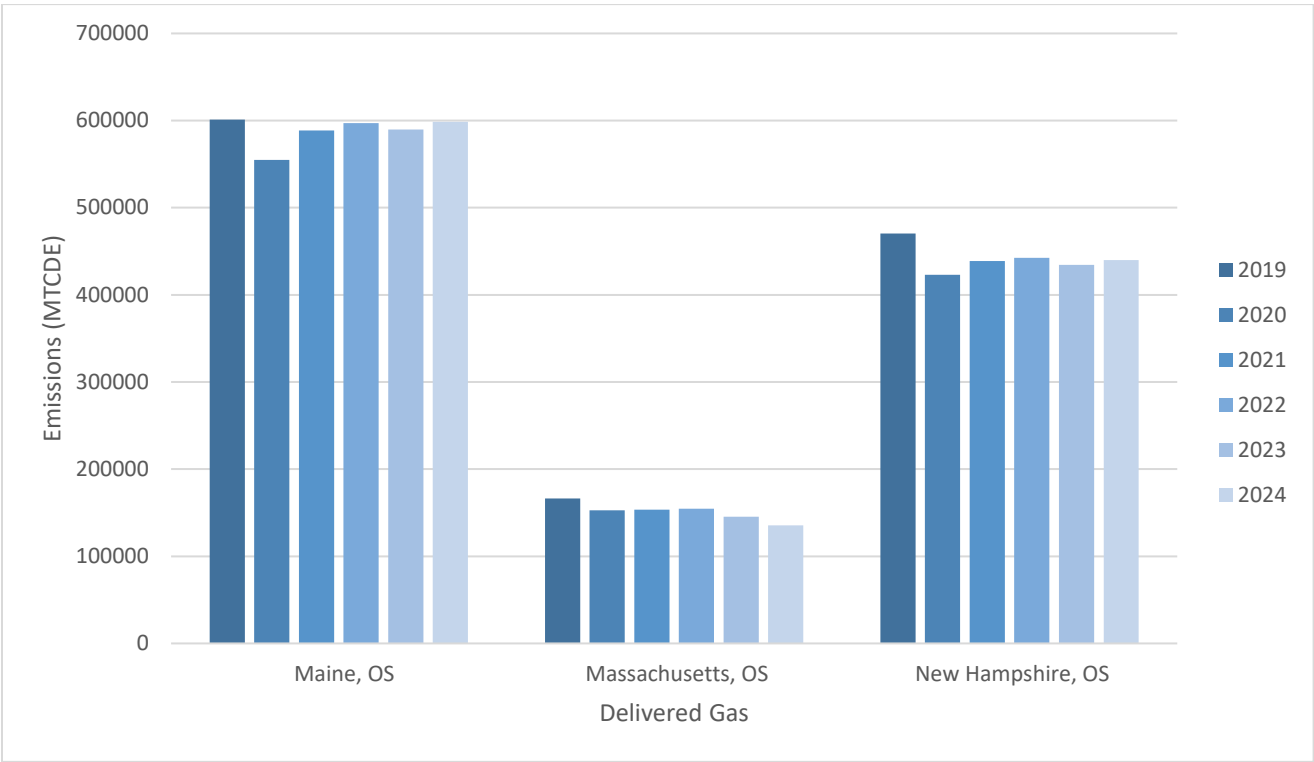


Figure 9: Total annual emissions from delivered gas across all operational states

Table 7: Total annual emissions from delivered gas across all operational states

Year	Maine, OS	Massachusetts, OS	New Hampshire, OS
2019	601,006	166,426	470,554
2020	554,849	152,588	423,167
2021	588,649	153,541	438,989
2022	596,914	154,472	442,515
2023	589,803	145,417	434,403
2024	598,638	135,350	440,059
Grand Total	3,529,859	907,795	2,649,687

Delivered Electricity

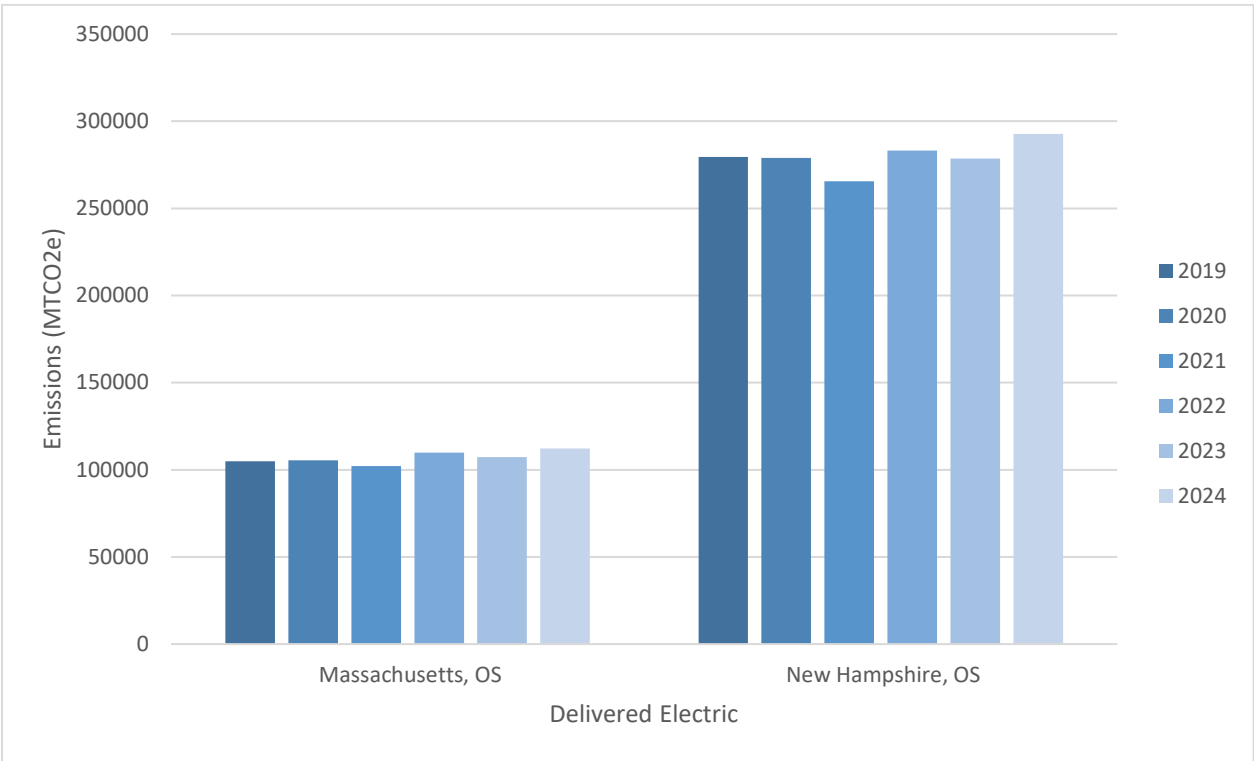


Figure 10: Total annual emissions from delivered electricity across all operational states

Table 8: Total annual emissions from delivered electricity across all operational states

Values	Massachusetts, OS	New Hampshire, OS
2019	104,880	279,431
2020	105,420	278,928
2021	102,188	265,600
2022	109,885	283,158
2023	107,270	278,628
2024	112,154	292,687
Grand Total	641,798	1,678,432

Waste

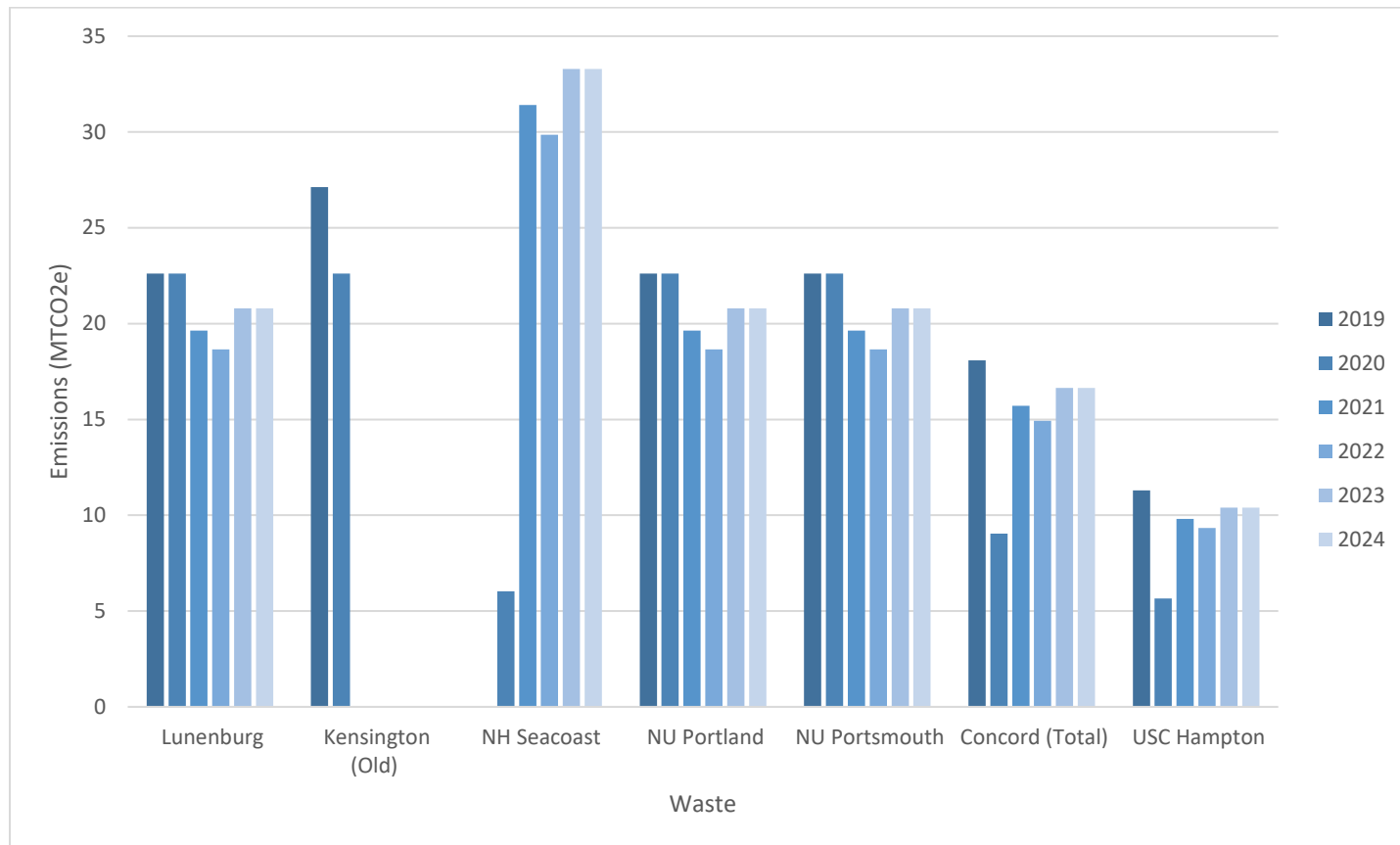


Figure 11: Total annual emissions from waste generation across all Unitil facilities

Table 9: Total annual emissions from waste generation across all Unitil facilities

Year	FGE Lunenburg	Kensington	NH Seacoast	NU Portland	NU Portsmouth	Concord Total	USC Hampton
2019	22.6	27.1	0.0	22.6	22.6	18.1	11.3
2020	22.6	22.6	6.0	22.6	22.6	9.0	5.7
2021	19.6	0.0	31.4	19.6	19.6	15.7	9.8
2022	18.7	0.0	29.9	18.7	18.7	14.9	9.3
2023	20.8	0.0	33.3	20.8	20.8	16.6	10.4
2024	20.8	0.0	33.3	20.8	20.8	16.6	10.4
Grand Total	125.1	49.7	133.9	125.1	125.1	91.0	56.9

Water

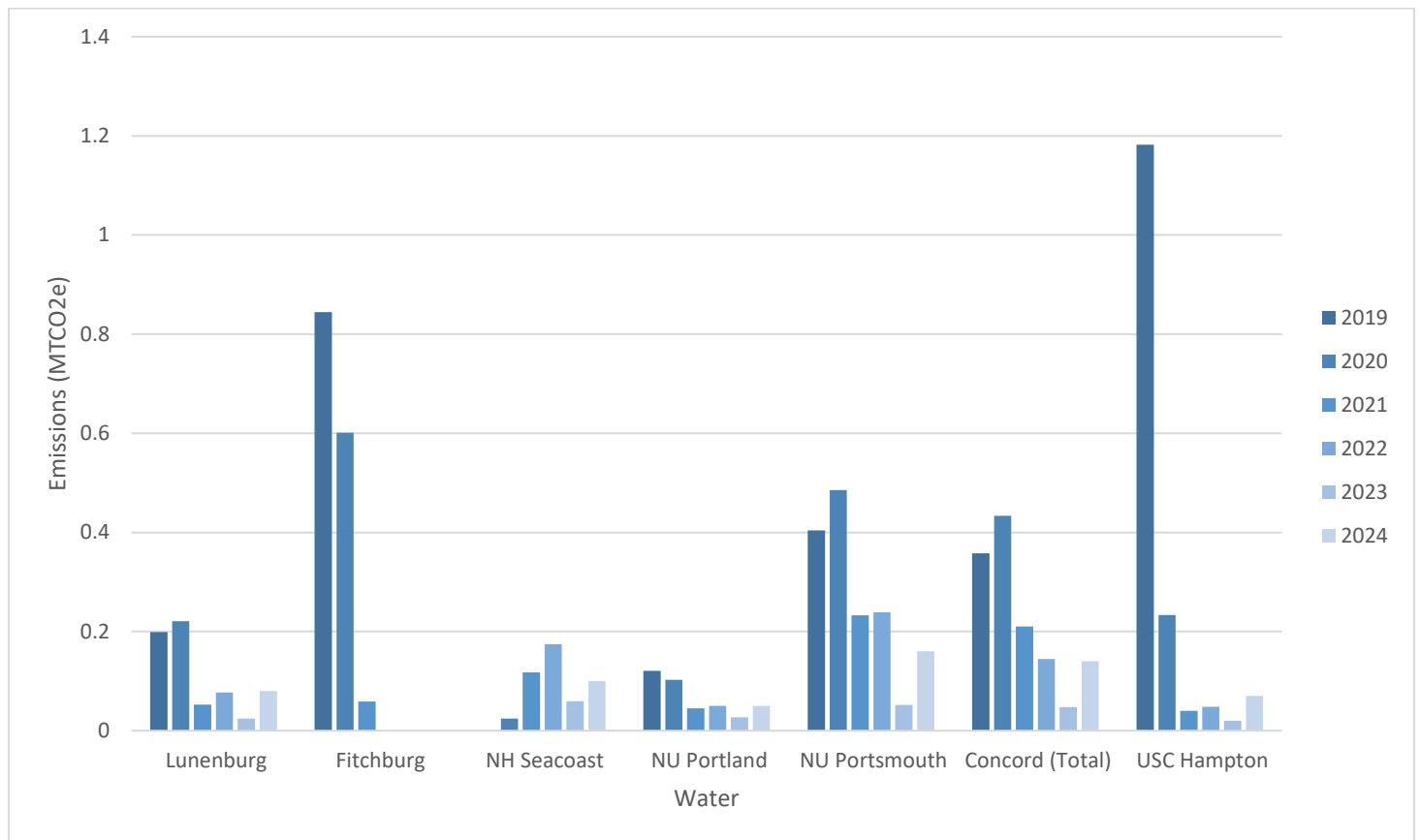


Figure 12: Total annual emissions from water consumption across all Unitil facilities

Table 10: Total annual emissions from water consumption across all Unitil facilities

Year	FGE Lunenburg	Fitchburg	NH Seacoast	NU Portland	NU Portsmouth	Concord Total	USC Hampton
2019	0.20	0.84	0.00	0.12	0.40	0.36	1.18
2020	0.22	0.60	0.02	0.10	0.49	0.43	0.23
2021	0.05	0.06	0.12	0.04	0.23	0.21	0.04
2022	0.08	0.00	0.17	0.05	0.24	0.14	0.05
2023	0.02	0.00	0.06	0.03	0.05	0.05	0.02
2024	0.08	0.00	0.10	0.05	0.16	0.14	0.07
Grand Total	0.57	1.50	0.38	0.34	1.41	1.19	1.52

Commuting

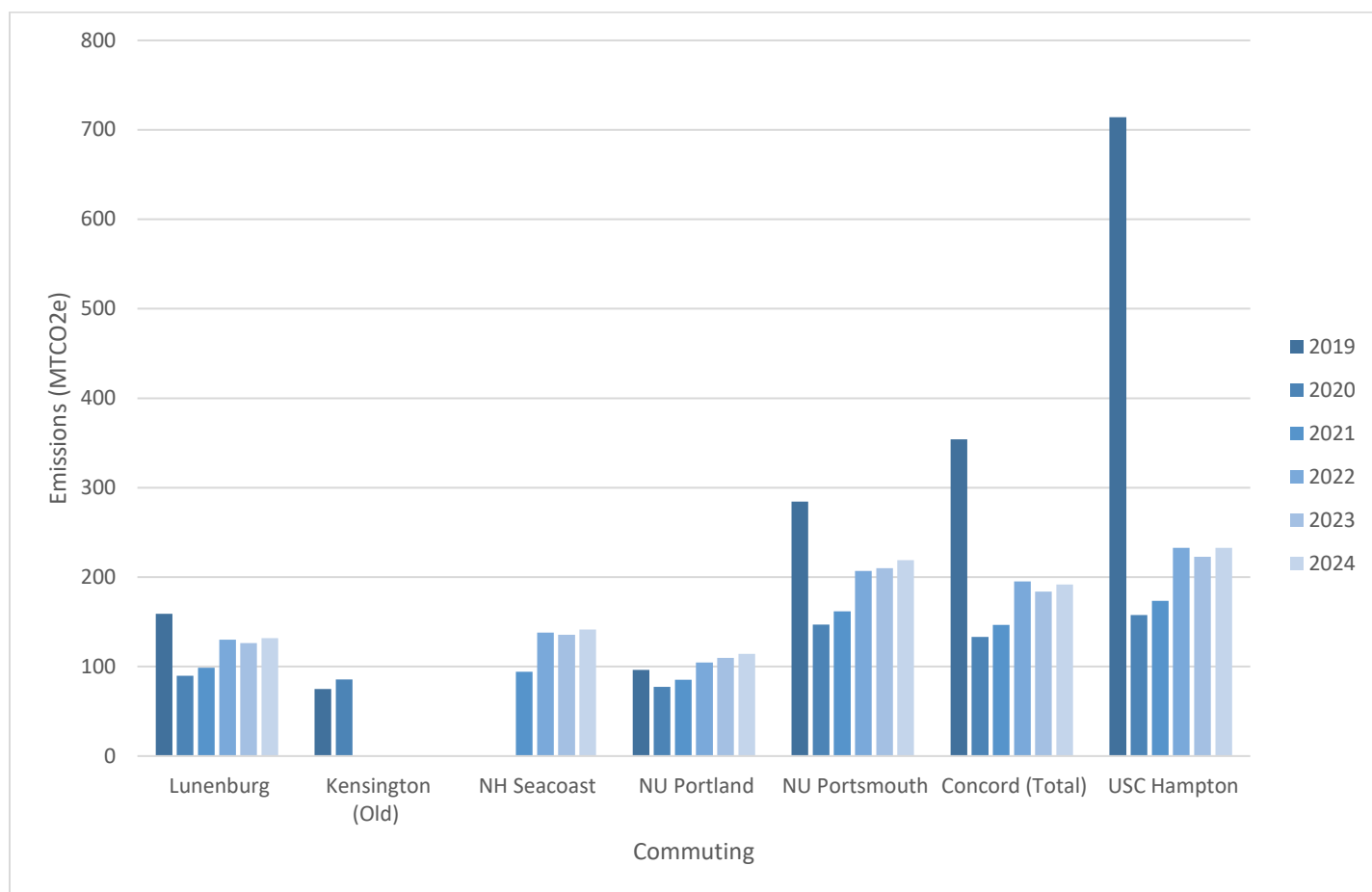


Figure 13: Total annual emissions from commuting across all Unitil facilities

Table 11: Total annual emissions from commuting across all Unitil facilities

Year	FGE Lunenburg	Kensington	NH Seacoast	NU Portland	NU Portsmouth	Concord Total	USC Hampton
2019	159.1	74.9	0.0	96.2	284.4	354.2	714.1
2020	89.8	85.7	0.0	77.5	146.9	133.3	157.8
2021	98.8	0.0	94.3	85.3	161.7	146.7	173.7
2022	130.1	0.0	138.0	104.5	207.0	195.2	232.6
2023	126.3	0.0	135.6	109.6	209.9	183.9	222.9
2024	131.8	0.0	141.5	114.4	219.0	191.9	232.6
Grand Total	604.1	160.6	367.9	473.2	1009.9	1013.3	1501.1