

2022 Greenhouse Gas Emissions Inventory

Unitil's 2022 greenhouse gas emissions inventory compares results with the 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 (MTCO_{2e}).

2019-2022 Emissions Summary Table

| <i>Emissions Source</i> | <i>Scope</i> | <i>2019 Total Emissions</i> | <i>2020 Total Emissions</i> | <i>2021 Total Emissions</i> | <i>2022 Total Emissions</i> | <i>Percentage Change 2019-2022</i> |
|------------------------------|--------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------------|
| <i>Fuel Facilities</i> | 1 | 598 | 623 | 457 | 548 | -8% |
| <i>Fugitives</i> | 1 | 21635 | 21066 | 19322 | 18196 | -16% |
| <i>Fleet</i> | 1 | 2751 | 2759 | 2766 | 2745 | 0% |
| <i>Consumed Electricity</i> | 2 | 789 | 820 | 752 | 879 | 11% |
| <i>T&D Losses</i> | 2 | 20485 | 17579 | 16214 | 21530 | 5% |
| <i>Delivered Gas</i> | 3 | 1237988 | 1130606 | 1181181 | 1193903 | -4% |
| <i>Delivered Electricity</i> | 3 | 384311 | 384347 | 367788 | 393049 | 2% |
| <i>Waste</i> | 3 | 124 | 111 | 116 | 110 | -11% |
| <i>Water</i> | 3 | 3.2 | 2.3 | 0.6 | 0.7 | -77% |
| <i>Commuting</i> | 3 | 1682 | 691 | 761 | 1125 | -33% |
| <i>Scope 1 Total</i> | 1 | 24984 | 24448 | 22546 | 21489 | -14% |
| <i>Scope 2 Total</i> | 2 | 21274 | 18399 | 16966 | 22409 | 5% |
| <i>Scope 3 Total</i> | 3 | 1624109 | 1515757 | 1549847 | 1588188 | -2% |
| All Scopes: | | 1670367 | 1558605 | 1589358 | 1632086 | |

Table 1: 2019-2022 Total Emissions by Source and Percentage Changes from 2019 Baseline

Scope 1 Emissions

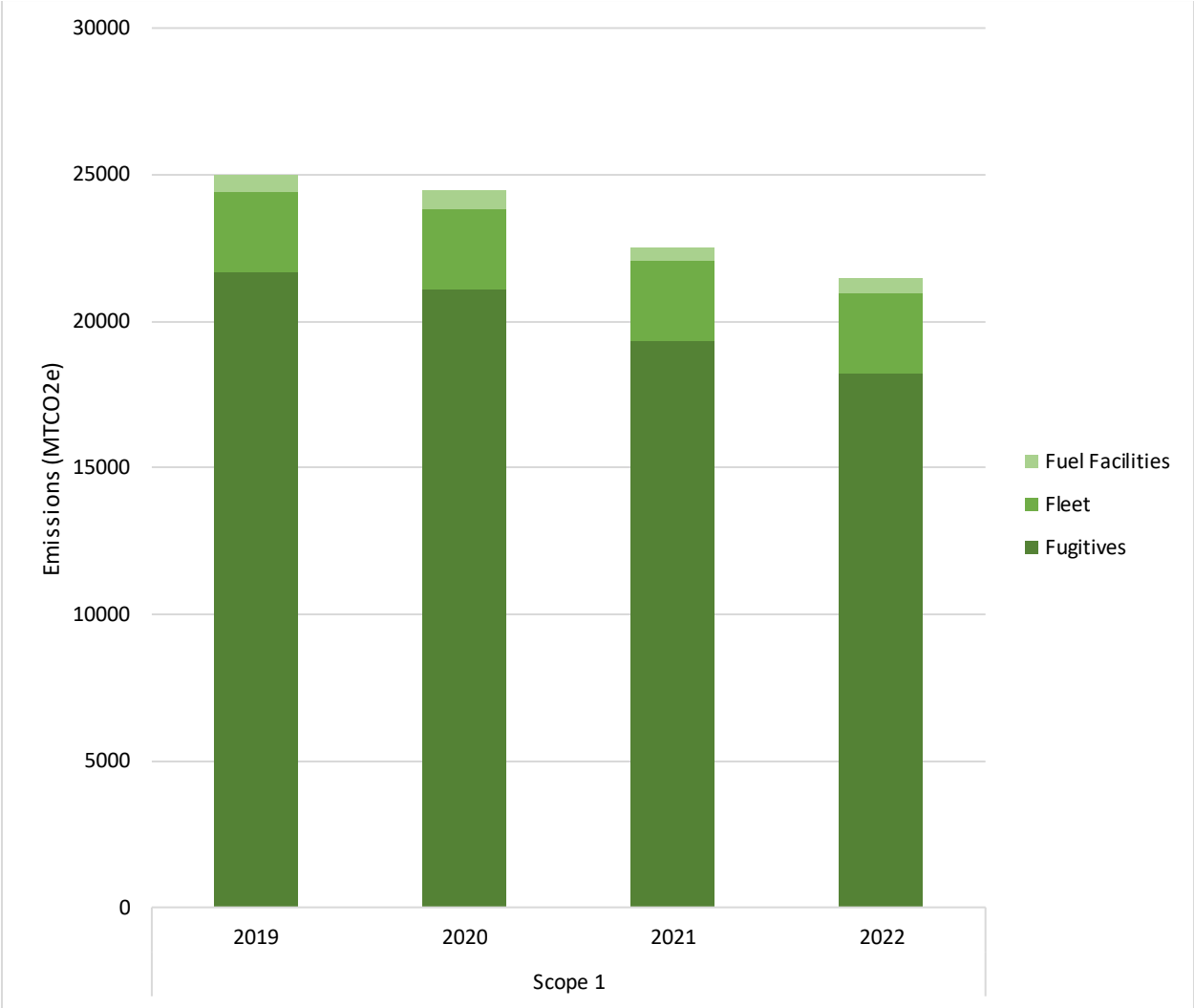


Figure 1: 2019-2022 Scope 1 Summary Chart

Fuel Use at Company Facilities

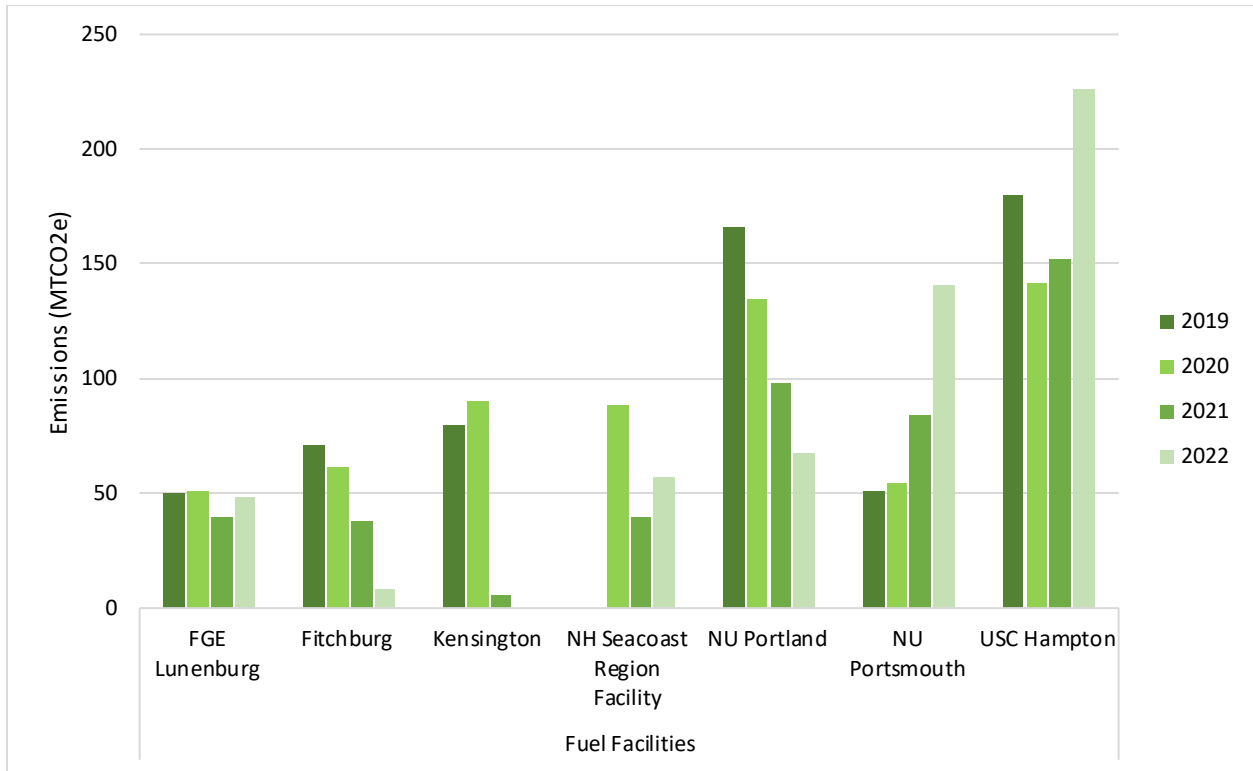


Figure 2: 2019-2022 Emissions from Fuel Use at Company Facilities

| Year | <i>FGE Lunenburg</i> | <i>Fitchburg</i> | <i>Kensington</i> | <i>NH Seacoast Region Facility</i> | <i>NU Portland</i> | <i>NU Portsmouth</i> | <i>USC Hampton</i> |
|-------------|-----------------------------|-------------------------|--------------------------|---|---------------------------|-----------------------------|---------------------------|
| 2019 | 50.2 | 71.1 | 80.1 | 0.0 | 166.0 | 51.0 | 180.0 |
| 2020 | 51.0 | 61.7 | 89.9 | 88.9 | 135.0 | 54.4 | 142.0 |
| 2021 | 39.8 | 38.1 | 5.6 | 39.8 | 97.7 | 84.2 | 152.0 |
| 2022 | 48.4 | 8.1 | 0.0 | 57.0 | 67.3 | 141.0 | 226.0 |

Table 2: 2019-2022 Emissions from Fuel Use at Company Facilities

Fugitives

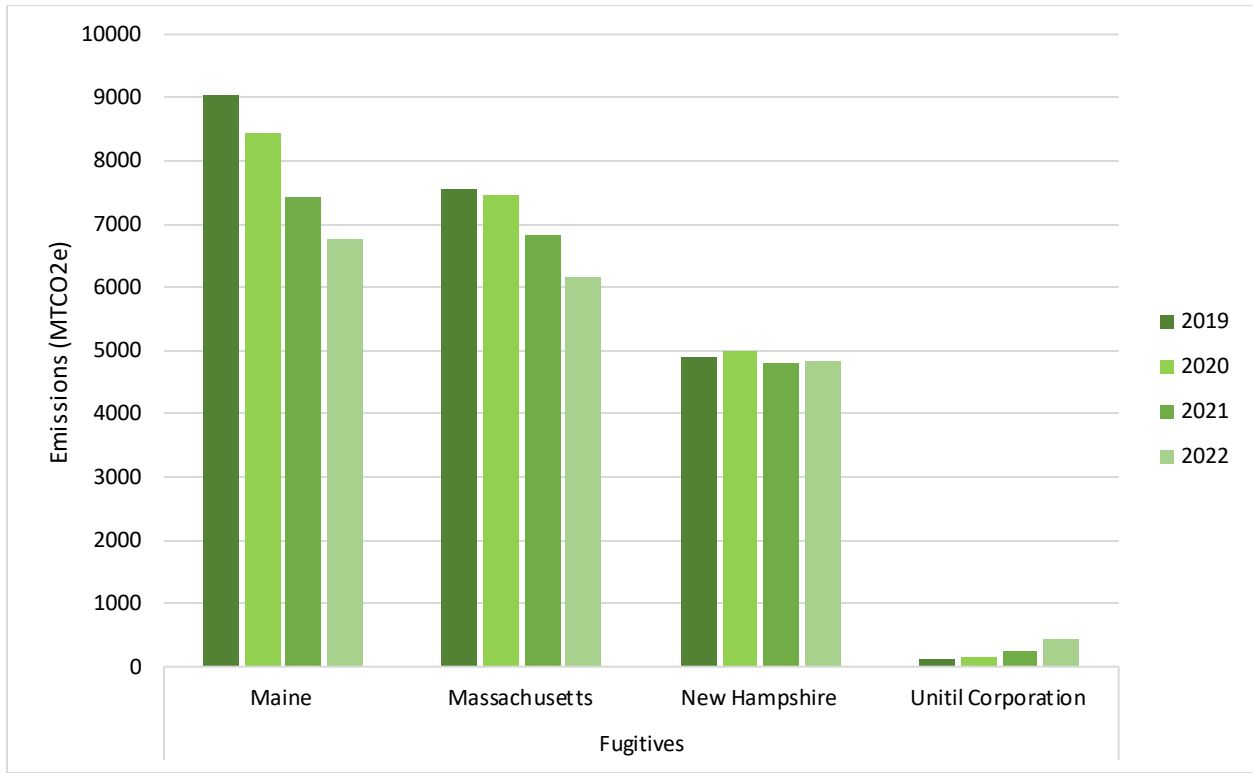


Figure 3: 2019-2022 Emissions from Fugitives

| <i>Year</i> | <i>Maine</i> | <i>Massachusetts</i> | <i>New Hampshire</i> | <i>Unital Corporation</i> |
|-------------|--------------|----------------------|----------------------|---------------------------|
| <i>2019</i> | 9040 | 7563 | 4906 | 126 |
| <i>2020</i> | 8443 | 7475 | 4993 | 155 |
| <i>2021</i> | 7413 | 6842 | 4806 | 261 |
| <i>2022</i> | 6760 | 6150 | 4845 | 441 |

Table 3: 2019-2022 Emissions from Fugitives

Fleet (Company-Owned Vehicles)

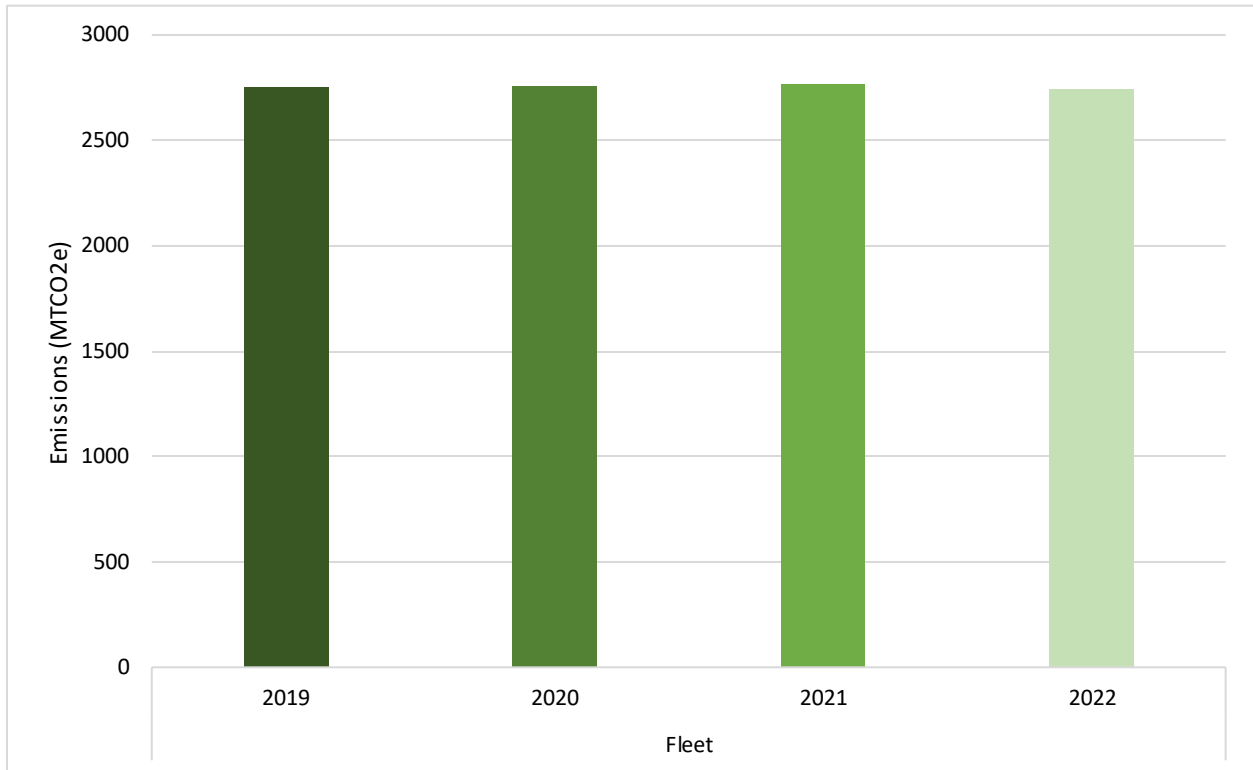


Figure 4: 2019-2022 Emissions from Fleet

| Year | Kensington | ME | MA | NH | NH Seacoast | NU Portsmouth | Unitil Corporation | USC Concord Facility |
|-------------|-------------------|-----------|-----------|-----------|------------------------|--------------------------|-------------------------------|---------------------------------|
| 2019 | 0.0 | 738 | 544 | 166 | 307 | 688 | 113 | 195 |
| 2020 | 0.23 | 682 | 598 | 112 | 314 | 700 | 102 | 251 |
| 2021 | 0.33 | 637 | 526 | 1490 | 0.0 | 0.0 | 113 | 0.0 |
| 2022 | 0.0 | 629 | 573 | 1543 | 0.0 | 0.0 | 0.0 | 0.0 |

Table 4: 2019-2022 Emissions from Fleet

Scope 2 Emissions

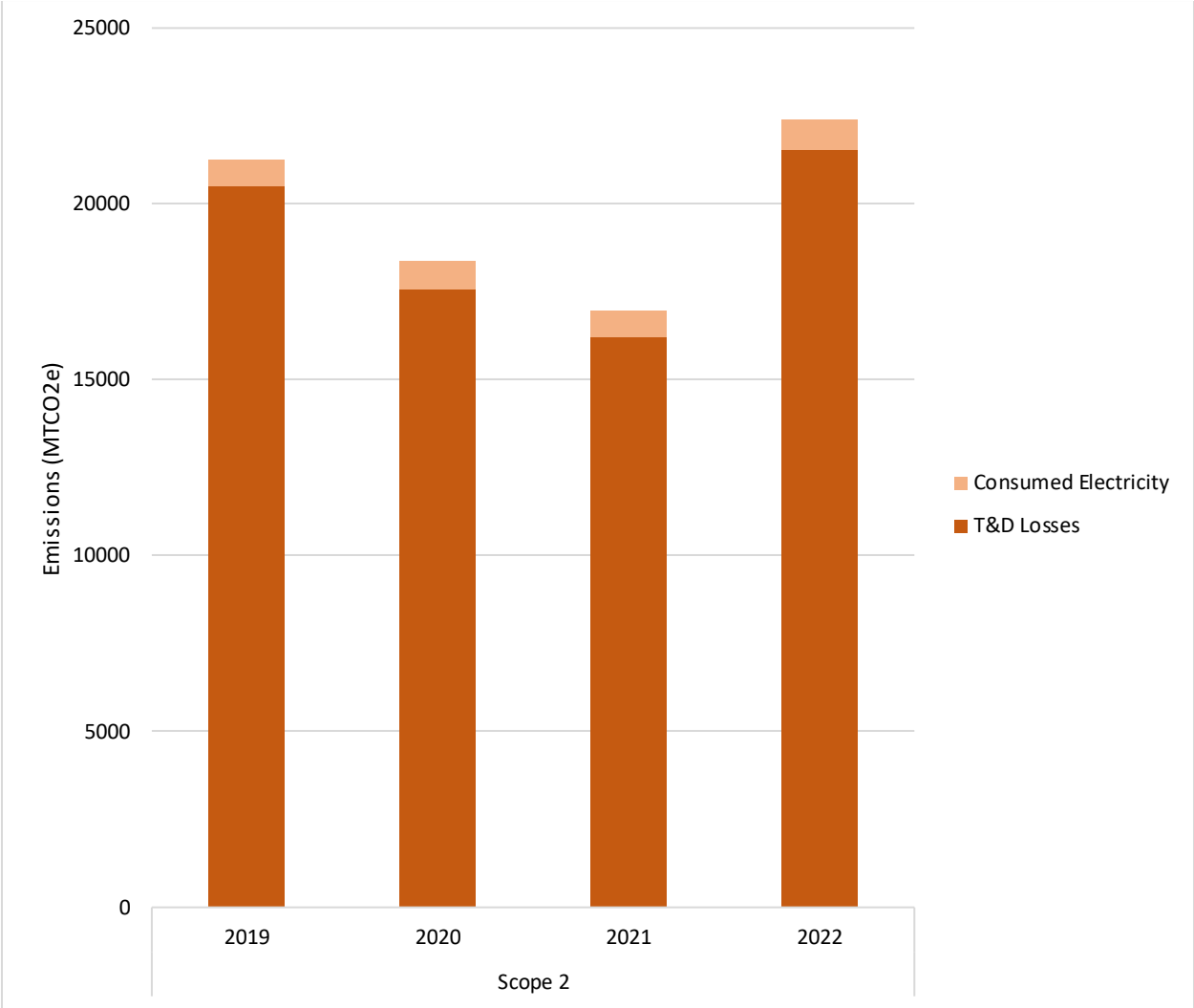


Figure 5: 2019-2022 Scope 2 Summary Chart

Consumed Electricity at Company Facilities

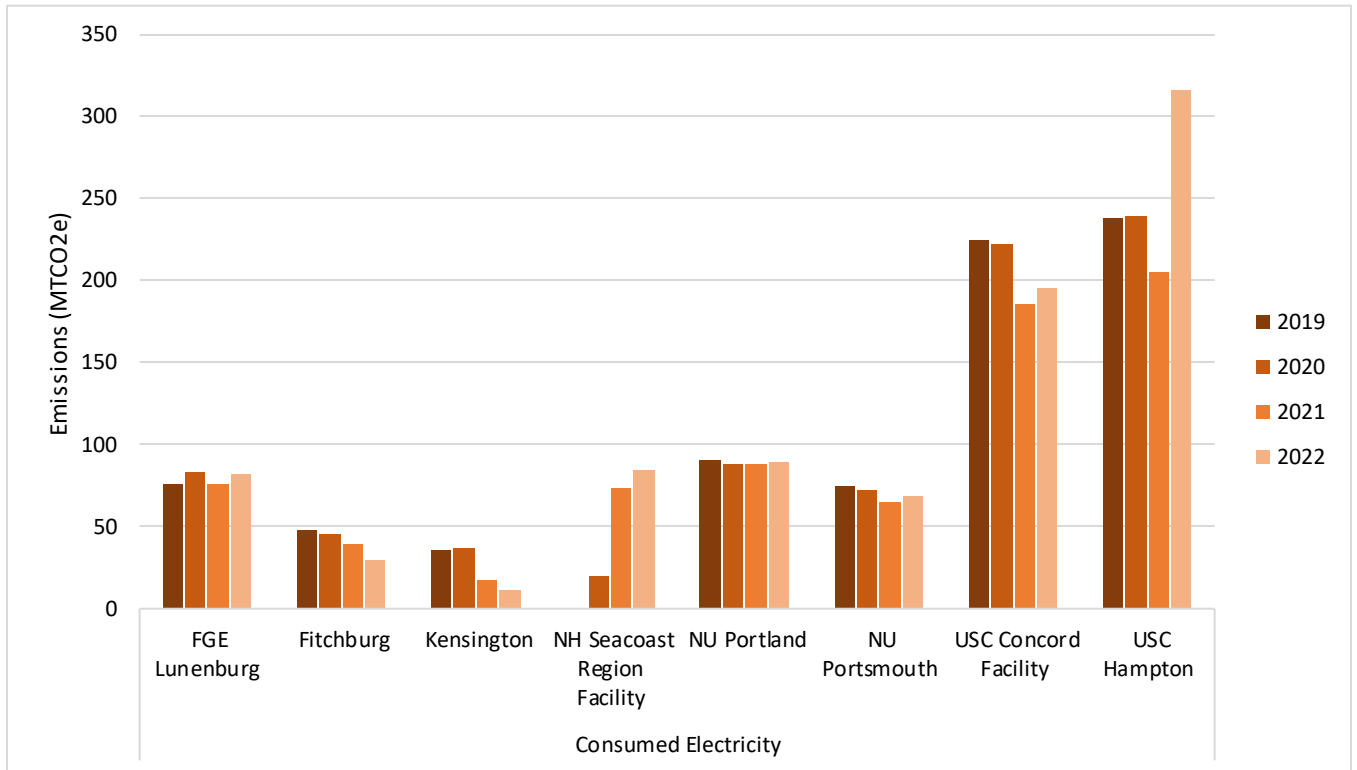


Figure 6: 2019-2022 Emissions from Consumed Electricity at Company Facilities

| <i>Year</i> | <i>FGE Lunenburg</i> | <i>Fitchburg</i> | <i>Kensington</i> | <i>NH Seacoast</i> | <i>NU Portland</i> | <i>NU Portsmouth</i> | <i>Unitil Corp.</i> | <i>USC Concord Facility</i> | <i>USC Hampton</i> |
|-------------|----------------------|------------------|-------------------|--------------------|--------------------|----------------------|---------------------|-----------------------------|--------------------|
| <i>2019</i> | 75.7 | 48.4 | 36.1 | 0.0 | 91.0 | 74.8 | 0.0 | 225.0 | 238.0 |
| <i>2020</i> | 82.8 | 45.9 | 36.9 | 19.4 | 88.3 | 72.8 | 13.1 | 222.0 | 239.0 |
| <i>2021</i> | 76.2 | 39.1 | 17.5 | 73.5 | 88.3 | 65.5 | 0.0 | 186.0 | 206.0 |
| <i>2022</i> | 82.4 | 30.0 | 11.9 | 84.6 | 90.0 | 68.3 | 0.0 | 196.0 | 316.0 |

Table 5: 2019-2022 Emissions from Consumed Electricity at Company Facilities

T&D Losses

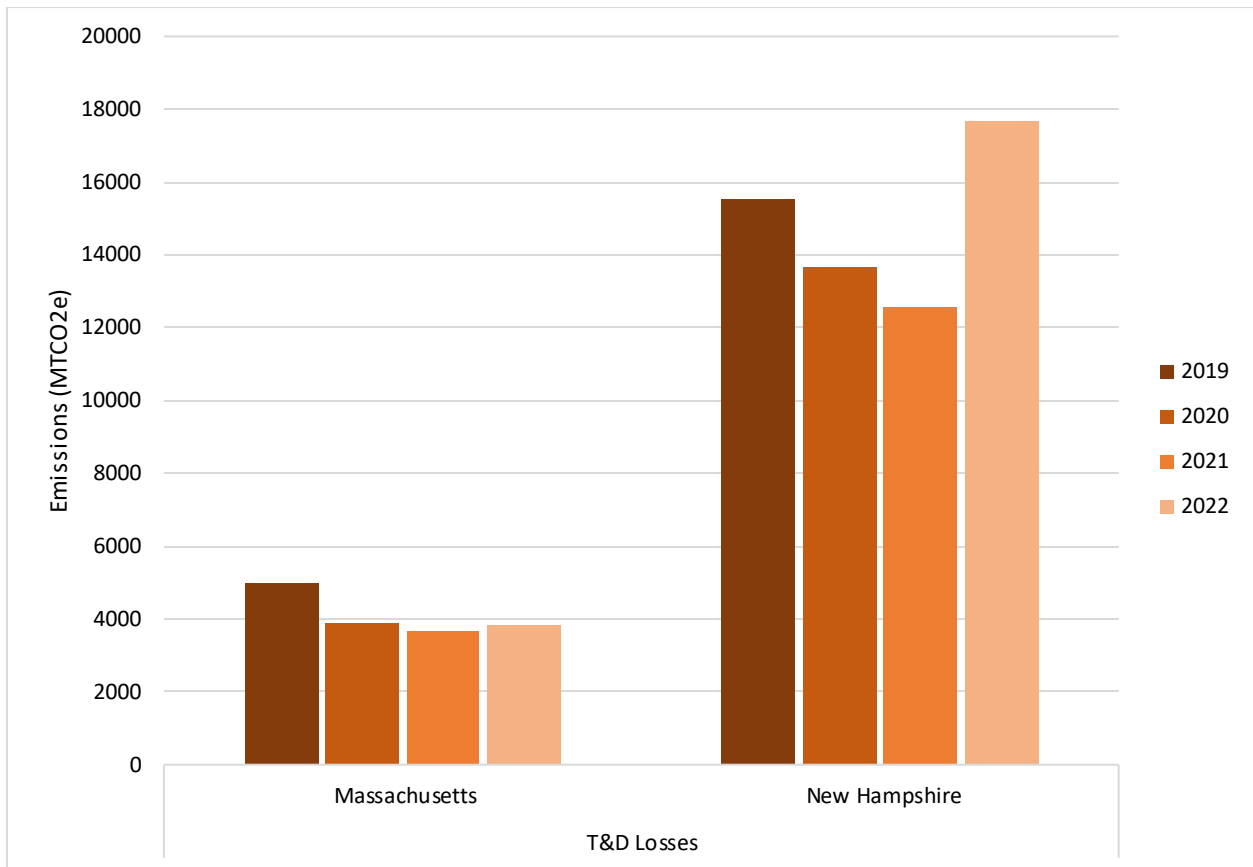


Figure 7: 2019-2022 Emissions from Transmission and Distribution Losses

| <i>Year</i> | <i>Massachusetts</i> | <i>New Hampshire</i> |
|-------------|----------------------|----------------------|
| <i>2019</i> | 4974 | 15511 |
| <i>2020</i> | 3910 | 13669 |
| <i>2021</i> | 3658 | 12556 |
| <i>2022</i> | 3829 | 17701 |

Table 6: 2019-2022 Emissions from Transmission and Distribution Losses

Scope 3 Emissions

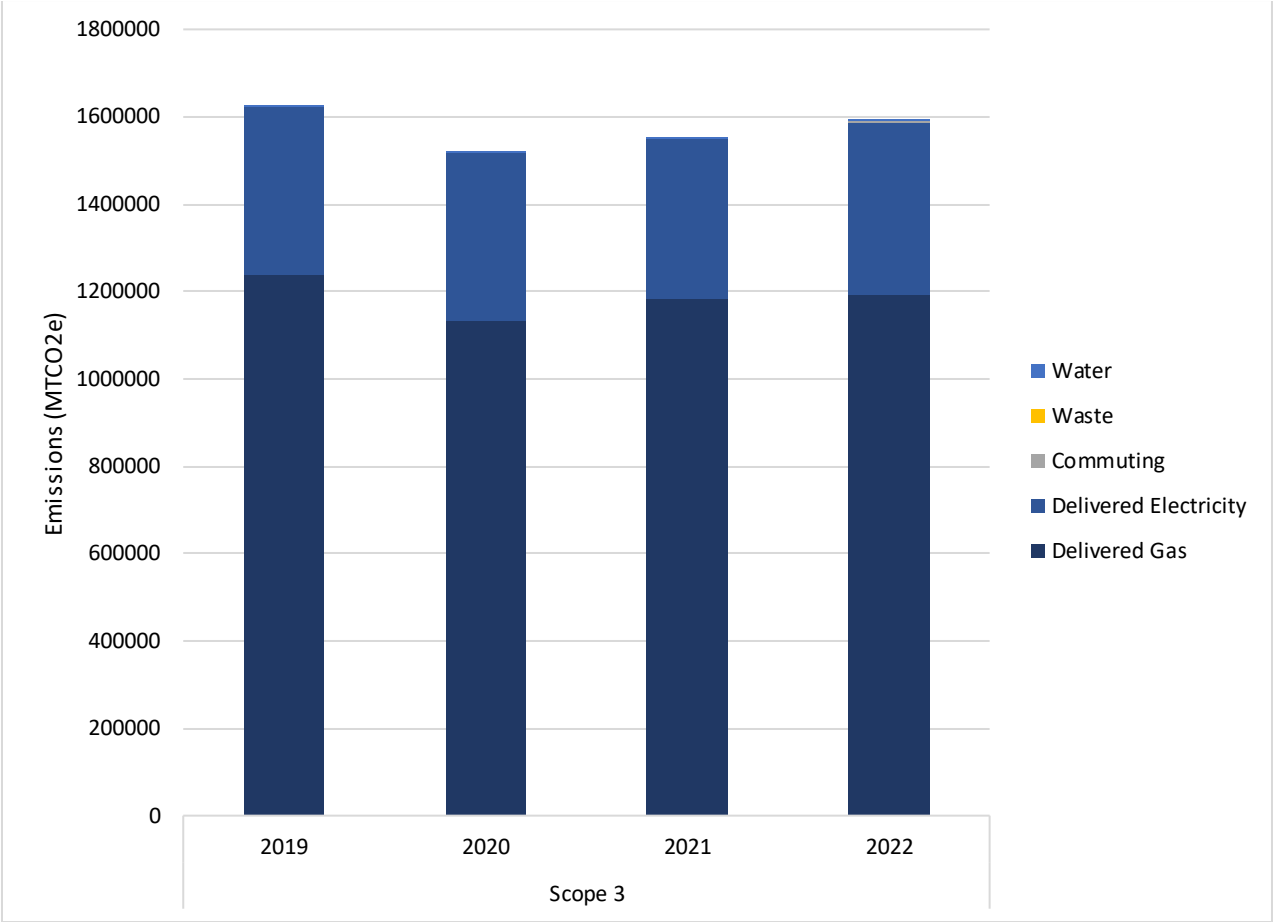


Figure 8: 2019-2022 Scope 3 Summary Chart

Delivered Gas

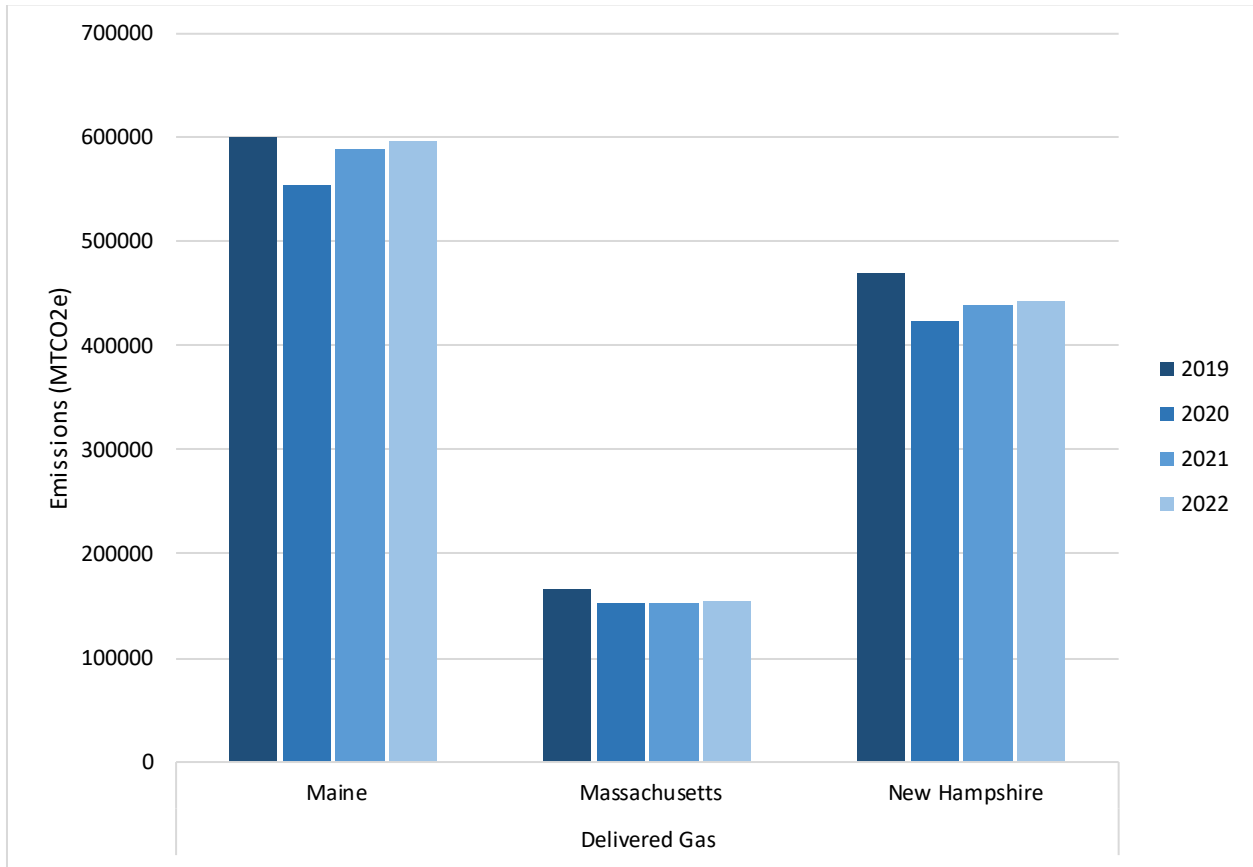


Figure 9: 2019-2022 Emissions from Delivered Gas

| <i>Year</i> | <i>Maine</i> | <i>Massachusetts</i> | <i>New Hampshire</i> |
|-------------|--------------|----------------------|----------------------|
| <i>2019</i> | 601007 | 166426 | 470555 |
| <i>2020</i> | 554850 | 152588 | 423168 |
| <i>2021</i> | 588650 | 153542 | 438989 |
| <i>2022</i> | 596915 | 154472 | 442516 |

Table 7: 2019-2022 Emissions from Delivered Gas

Delivered Electricity

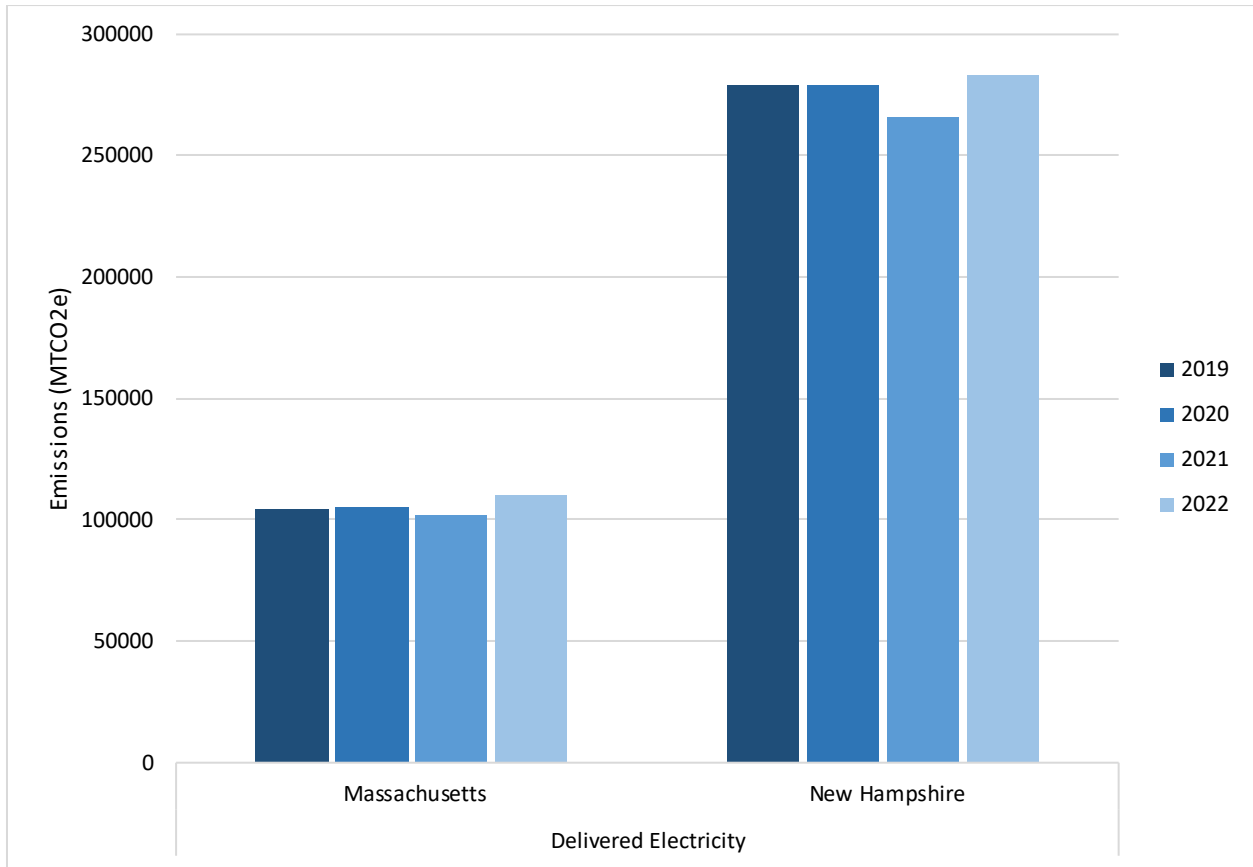


Figure 10: 2019-2022 Emissions from Delivered Electricity

| <i>Year</i> | <i>Massachusetts</i> | <i>New Hampshire</i> |
|-------------|----------------------|----------------------|
| <i>2019</i> | 104880 | 279431 |
| <i>2020</i> | 105420 | 278927 |
| <i>2021</i> | 102188 | 265600 |
| <i>2022</i> | 109887 | 283162 |

Table 8: 2019-2022 Emissions from Delivered Electricity

Waste

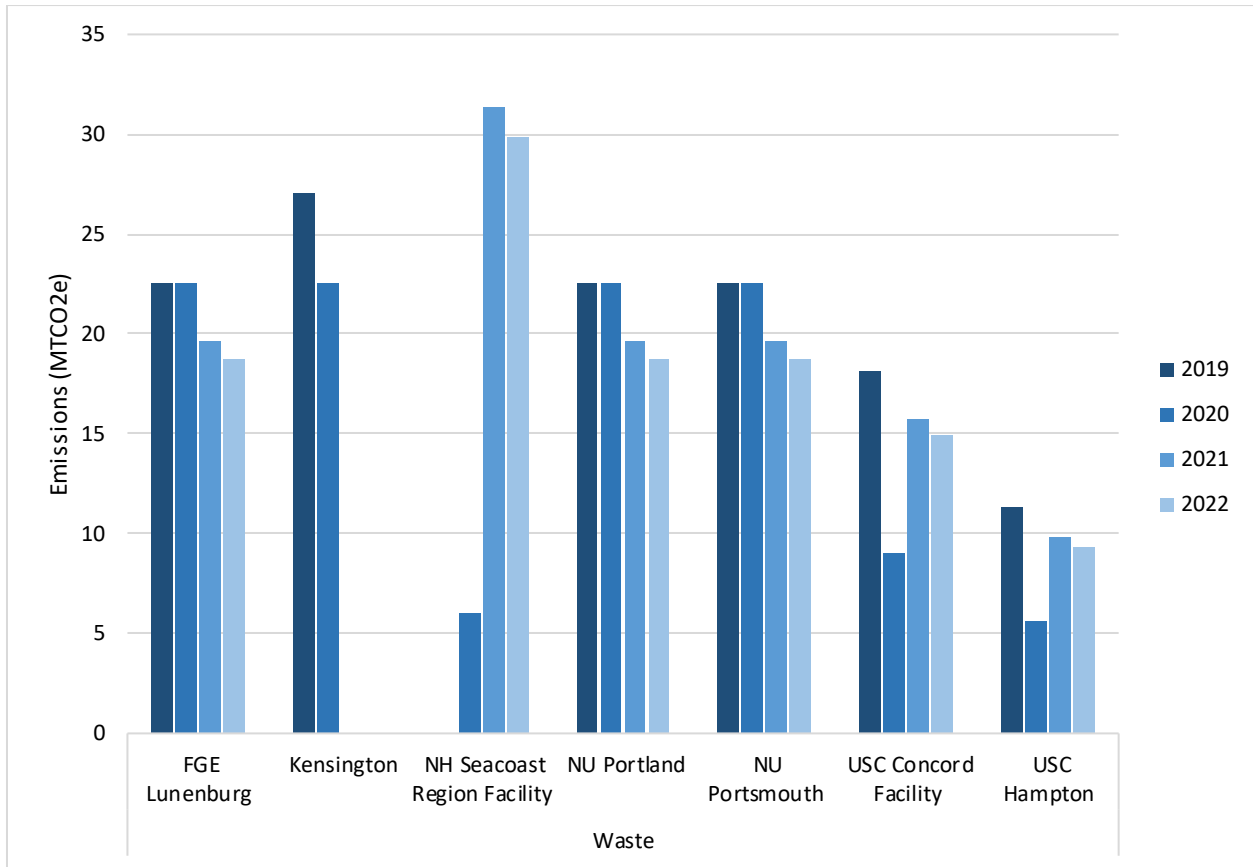


Figure 11: 2019-2022 Emissions from Waste

| Year | <i>FGE Lunenburg</i> | <i>Kensington</i> | <i>NH Seacoast Region Facility</i> | <i>NU Portland</i> | <i>NU Portsmouth</i> | <i>USC Concord Facility</i> | <i>USC Hampton</i> |
|-------------|-----------------------------|--------------------------|---|---------------------------|-----------------------------|------------------------------------|---------------------------|
| 2019 | 22.60 | 27.10 | 0.00 | 22.60 | 22.60 | 18.10 | 11.30 |
| 2020 | 22.60 | 22.60 | 6.03 | 22.60 | 22.60 | 9.04 | 5.65 |
| 2021 | 19.60 | 0.0 | 31.40 | 19.60 | 19.60 | 15.70 | 9.82 |
| 2022 | 18.7 | 0.0 | 29.9 | 18.7 | 18.7 | 14.9 | 9.3 |

Table 9: 2019-2022 Emissions from Waste

Water

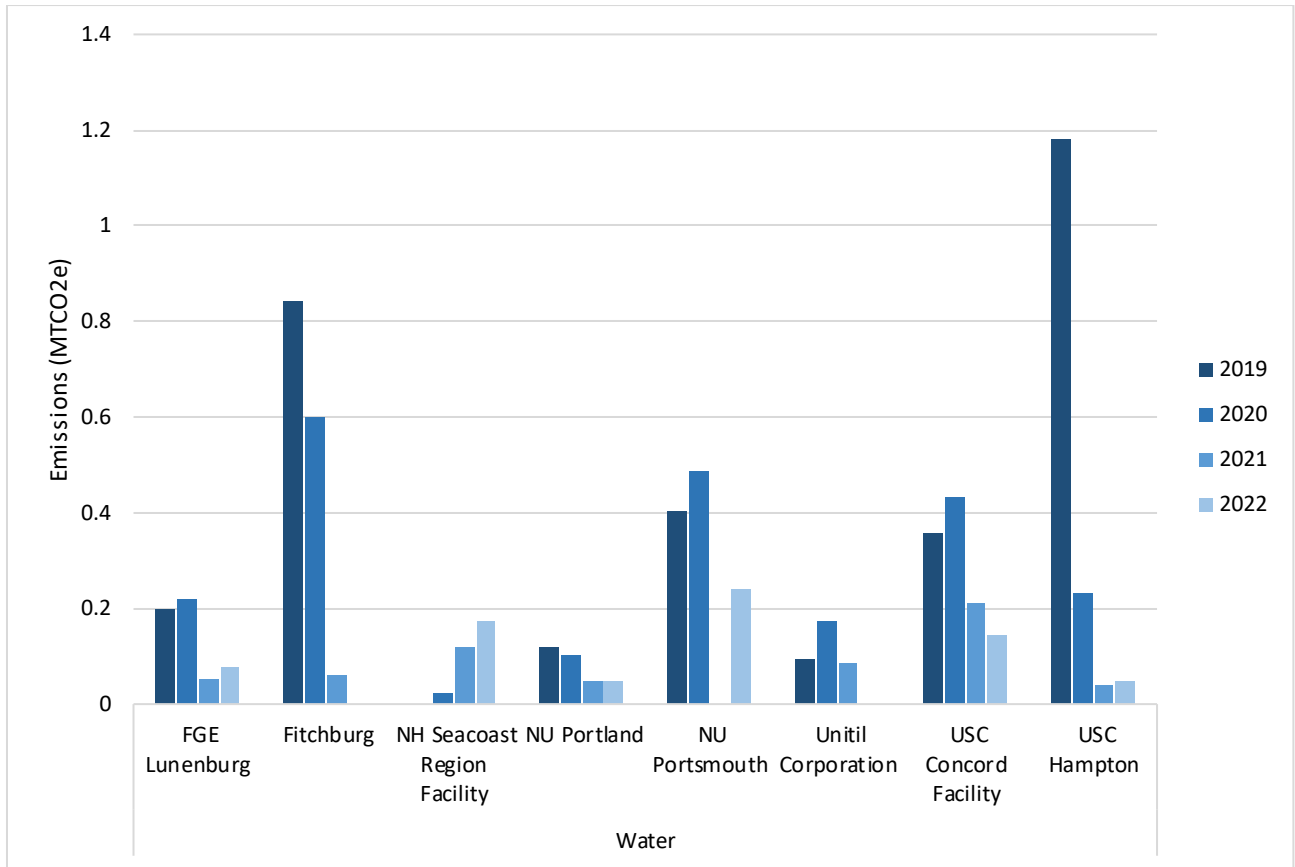


Figure 12: 2019-2022 Emissions from Water

| Year | <i>FGE Lunenburg</i> | <i>Fitchburg</i> | <i>NH Seacoast</i> | <i>NU Portland</i> | <i>NU Portsmouth</i> | <i>Unitil Corp.</i> | <i>USC Concord Facility</i> | <i>USC Hampton</i> |
|-------------|-----------------------------|-------------------------|---------------------------|---------------------------|-----------------------------|----------------------------|------------------------------------|---------------------------|
| 2019 | 0.20 | 0.84 | 0.00 | 0.12 | 0.40 | 0.10 | 0.36 | 1.18 |
| 2020 | 0.22 | 0.60 | 0.02 | 0.10 | 0.49 | 0.17 | 0.43 | 0.23 |
| 2021 | 0.05 | 0.06 | 0.12 | 0.05 | 0.00 | 0.09 | 0.21 | 0.04 |
| 2022 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 0.0 | 0.1 | 0.0 |

Table 10: 2019-2022 Emissions from Water

Commuting

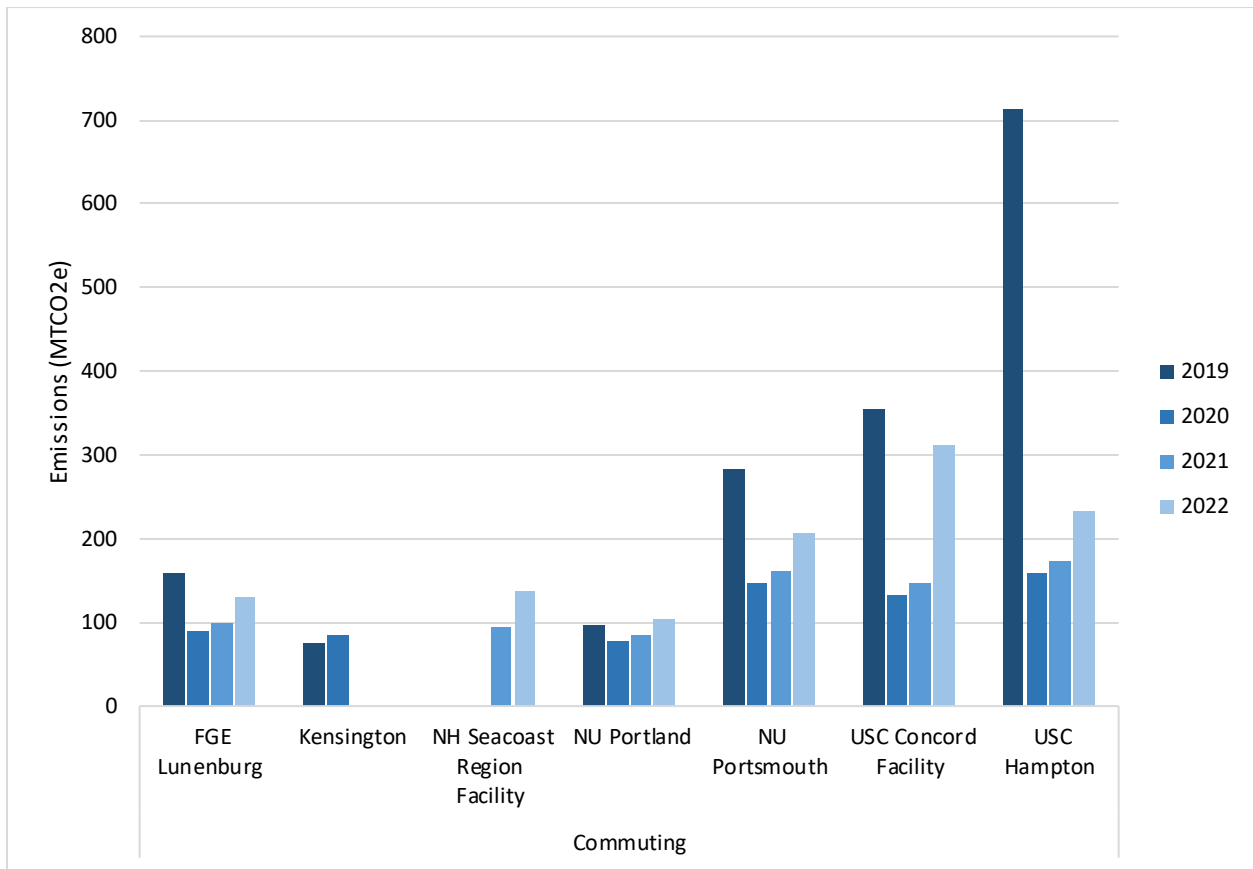


Figure 13: 2019-2022 Emissions from Commuting

| Year | <i>FGE Lunenburg</i> | <i>Kensington</i> | <i>NH Seacoast</i> | <i>NU Portland</i> | <i>NU Portsmouth</i> | <i>USC Concord Facility</i> | <i>USC Hampton</i> |
|-------------|---------------------------------|--------------------------|-------------------------------|-------------------------------|---------------------------------|--|-------------------------------|
| 2019 | 159.0 | 74.90 | 0.0 | 96.20 | 284.0 | 354.0 | 714.0 |
| 2020 | 89.8 | 85.70 | 0.0 | 77.50 | 147.0 | 133.0 | 158.0 |
| 2021 | 98.8 | 0.0 | 94.30 | 85.30 | 162.0 | 147.0 | 174.0 |
| 2022 | 130.0 | 0.0 | 138.0 | 104.0 | 207.0 | 313.0 | 233.0 |

Table 11: 2019-2022 Emissions from Commuting