



# 2025 Greenhouse Gas Inventory Summary Report

## Introduction

Stanford Medicine Children's Health (Stanford Children's) has made a public commitment to reduce our greenhouse gas (GHG) emissions, and measuring our emissions on an annual basis helps us to ensure we are making progress towards that goal. Our first GHG inventory was completed in 2020, covering activity in our 2019 calendar year (CY). Since this initial inventory we have published an inventory each year, now aligning with our fiscal year (FY) from September to August. Our most recent inventory summarized in this report covers activity from September 1, 2024 to August 31, 2025.

## Methodology

Our greenhouse gas inventory aligns with the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard<sup>1</sup> and the Corporate Value Chain (Scope 3) Standard<sup>2</sup> published by the World Resources Institute.

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<sup>1</sup> <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>

<sup>2</sup> <https://ghgprotocol.org/corporate-value-chain-scope-3-standard>

### Inventory Boundary

The GHG Protocol identifies three consolidation approaches for defining an organizational boundary: equity share, financial control, and operational control. The consolidation approach defines which activities fall within an organization's scope 1 and 2 emissions. Stanford Children's uses the **operational control** approach in all inventories. Under the operational control approach, an organization accounts for emissions at facilities where they have the authority to introduce and implement operating policies.

### Emission Sources by Scope

The following sources are included in the fiscal year 2025 (FY25) inventory:

- Scope 1: fleet vehicles, medical gases, refrigerants, natural gas
- Scope 2: purchased electricity, steam, chilled water, hot water
- Scope 3: purchased goods and services, capital goods, fuel and energy related activities, solid waste, business travel, employee commuting, upstream leased assets, downstream transportation and distribution (patient travel)

Due to limited data availability, our emissions inventory currently excludes the following applicable sources:

- Upstream transportation and distribution<sup>3</sup>
- Use of sold products<sup>4</sup>

### Facilities Included

Per the operational control consolidation approach, Stanford Children's includes facilities in our scopes 1 and 2 at which we have the ability to influence day to day operations. Leased spaces where Stanford Children's does not manage operations are included in scope 3, category 8: upstream leased assets. A comprehensive list of facilities included in this inventory and their ownership type is included in **Appendix Table 1**. The following facilities are managed by Stanford Children's and therefore included in scope 1 and 2:

- 725 Welch Road
- 700 Welch Road
- 730 Welch Road
- 750 Welch Road
- 770 Welch Road
- 777 Welch Road
- 14601 S Bascom Avenue
- 14651 S Bascom Avenue
- 4100 Bohannon Drive
- 4700 Bohannon Drive
- 1195 West Fremont Avenue

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<sup>3</sup> Due to data limitations we do not estimate emissions associated with upstream transportation and distribution separately; however, spend-based emission factors currently used to calculate purchased goods & services incorporate margins for transport.

<sup>4</sup> Use of sold product emissions in a hospital setting primarily include metered-dose inhalers sold to patients and the associated emissions from hydrofluorocarbons used as inhaler propellants. We are working to add these emissions to our inventory.

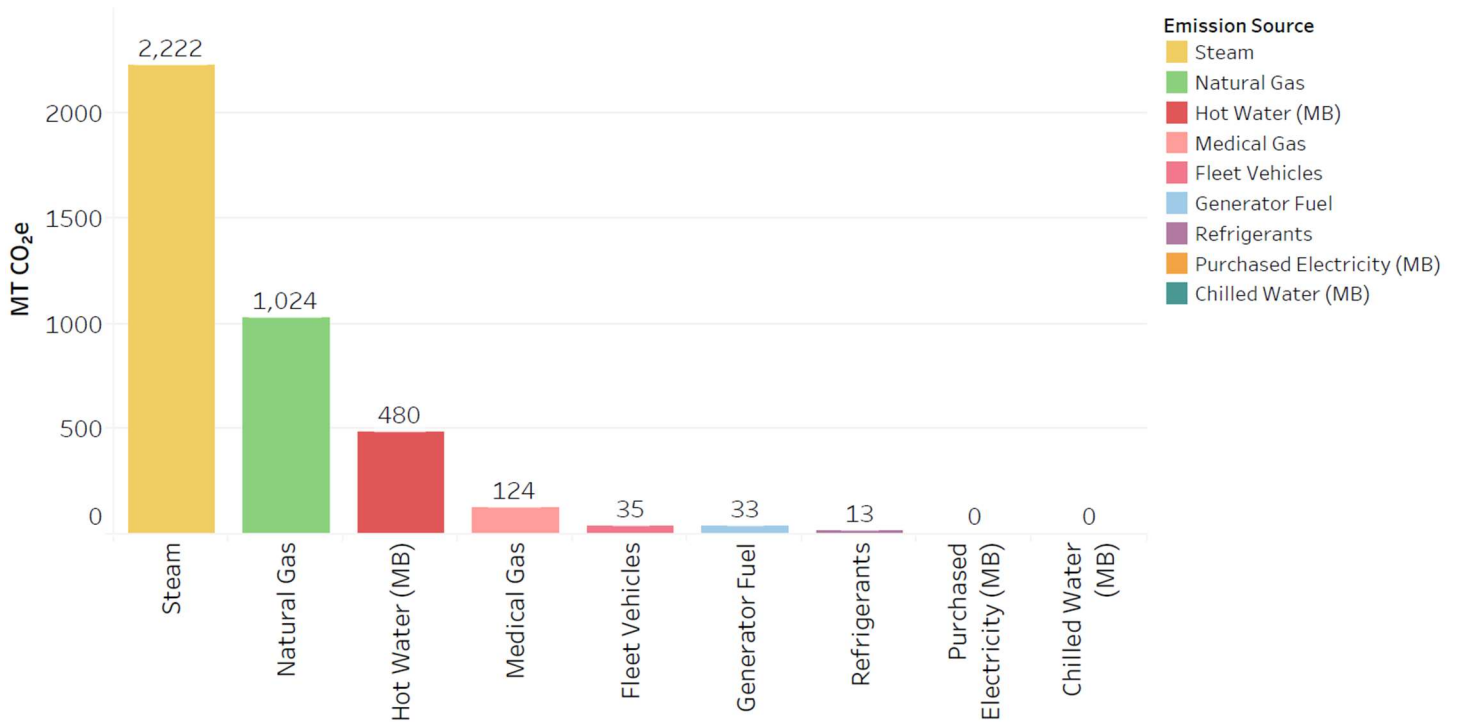
## FY25 Greenhouse Gas Emissions

Emissions presented below are reported in metric tons of carbon dioxide equivalent and are calculated with latest available emissions factors and global warming potential values from the Intergovernmental Panel on Climate Change’s (IPCC) Sixth Assessment Report (AR6). All charts below reflect market-based (MB) emissions, as Stanford Children’s tracks emission reductions using market-based totals. Location-based emissions are reported in **Appendix Table 2** in alignment with the GHG Protocol’s dual-reporting approach.

### Lucile Salter Packard Children’s Hospital Stanford (LPCH)

Our main hospital at 725 Welch Road represents 74% of our GHG scope 1 and 2 emissions. For this reason we prioritize reducing emissions at our hospital as we work towards our FY30 goal of a 50% reduction in scope 1 and 2 emissions from a CY19 baseline. The below chart covers scope 1 and 2 emissions from activities at our main hospital campus at 725 Welch Road in FY25.

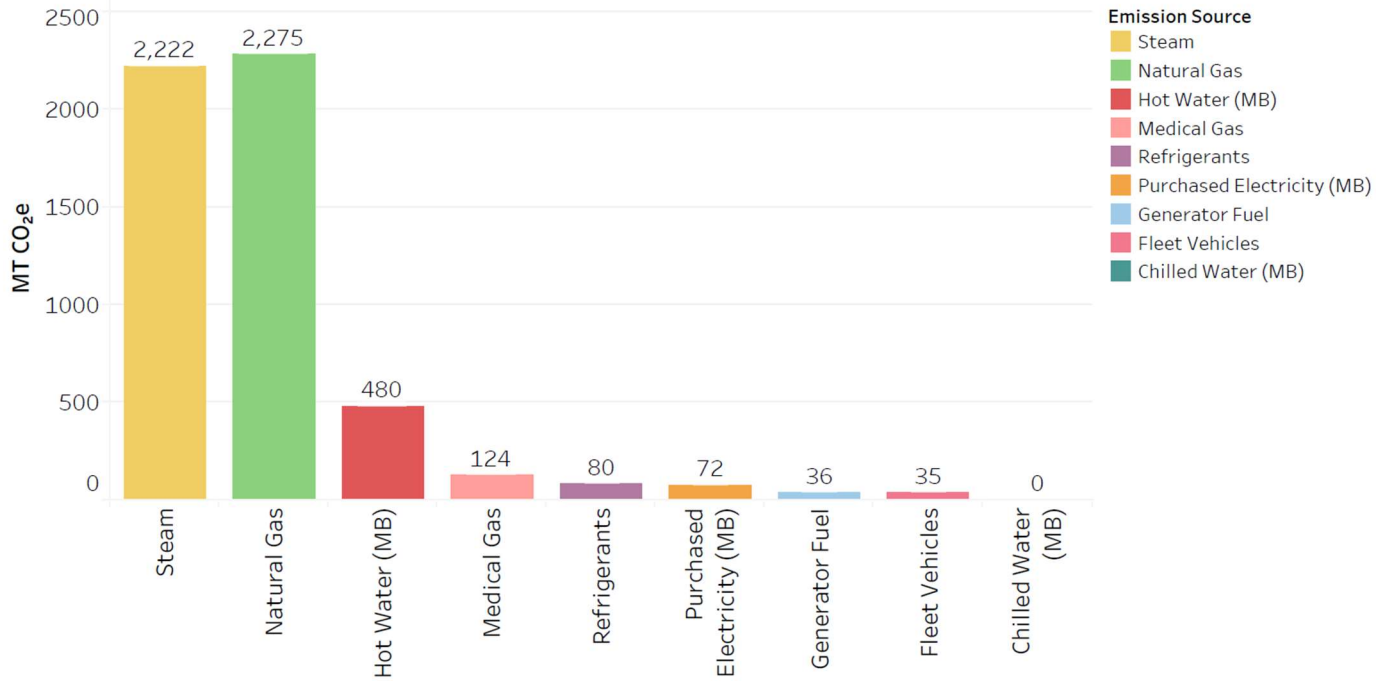
**Figure 1. LPCH FY25 Scope 1 and 2 Greenhouse Gas Emissions**



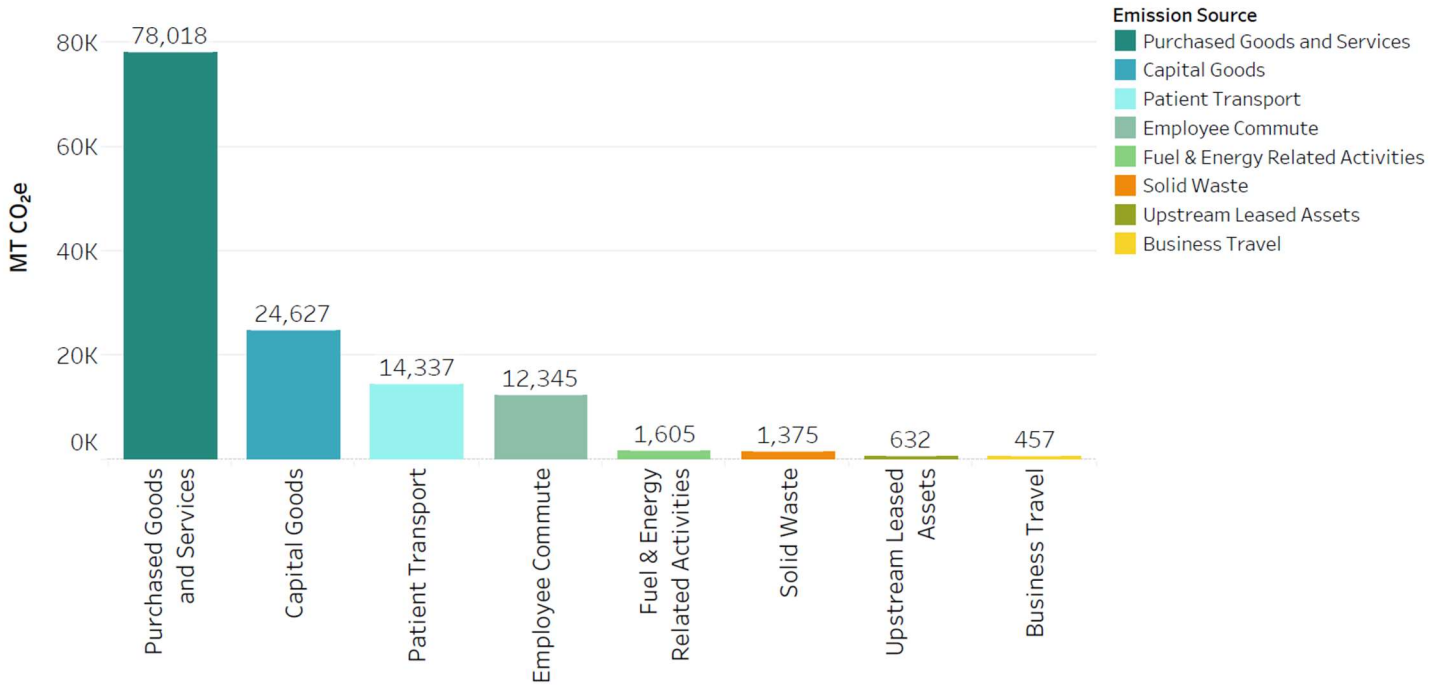
### Organization-Wide

Charts below represent organization-wide FY25 emissions for all Stanford Children’s sites listed in Table 1. Scope 1 and 2 emissions contributions from our ambulatory sites include electricity, natural gas, and refrigerants. Due to data limitations, business travel, purchased goods and services, and capital goods data were provided in aggregate at the entity-wide level and are included in 725 Welch Road emissions.

**Figure 2. Stanford Children's FY25 Scope 1 and 2 Greenhouse Gas Emissions**



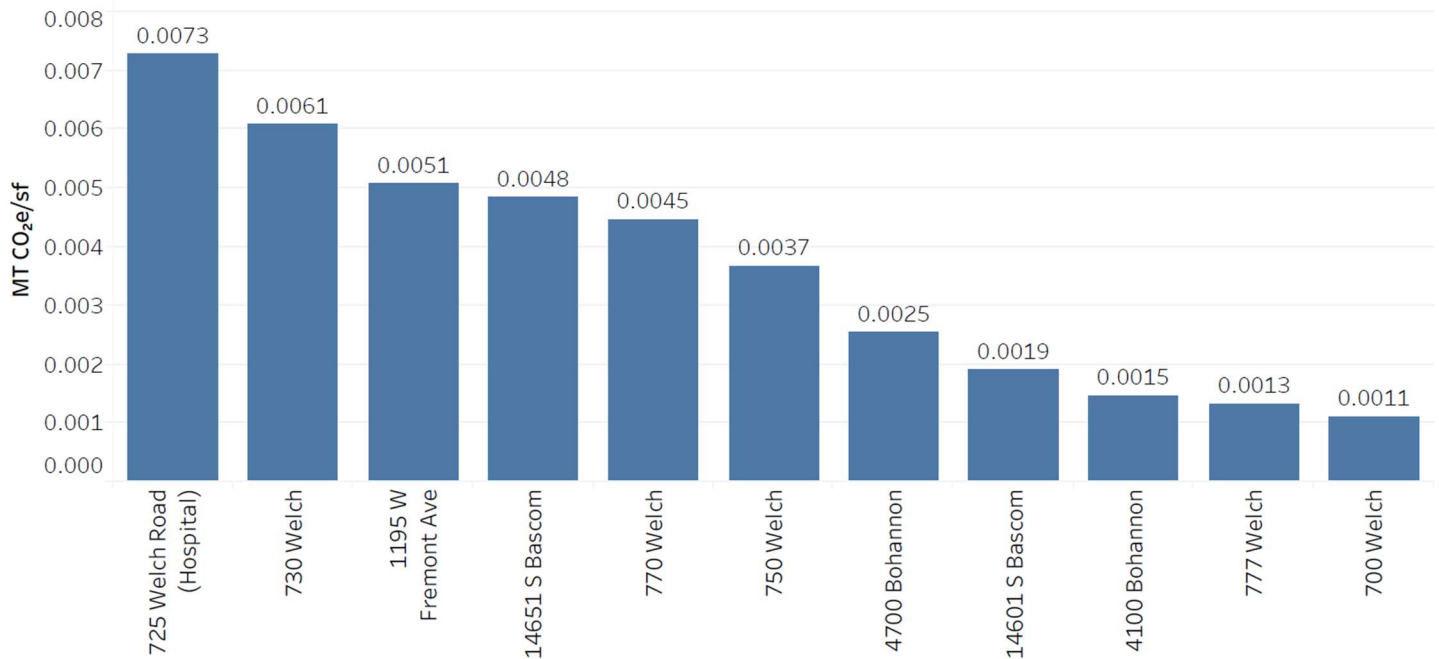
**Figure 3. Stanford Children's FY25 Scope 3 Greenhouse Gas Emissions**



### Emissions Intensity by Facility

Emissions intensity measures the magnitude of emissions produced by a facility, normalized by total facility square footage. This metric helps identify emissions “hot spots” in our organization’s portfolio.

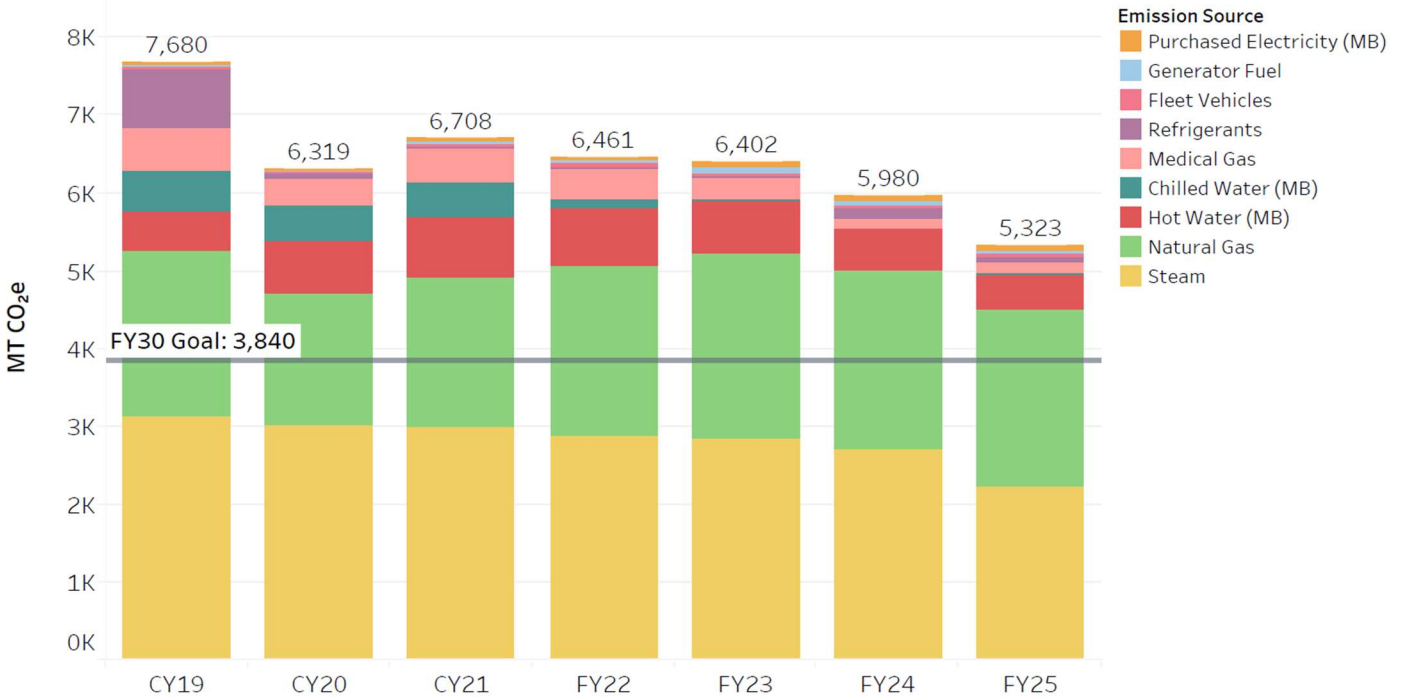
**Figure 4. Stanford Children’s FY25 Scope 1 and 2 Building Intensity**



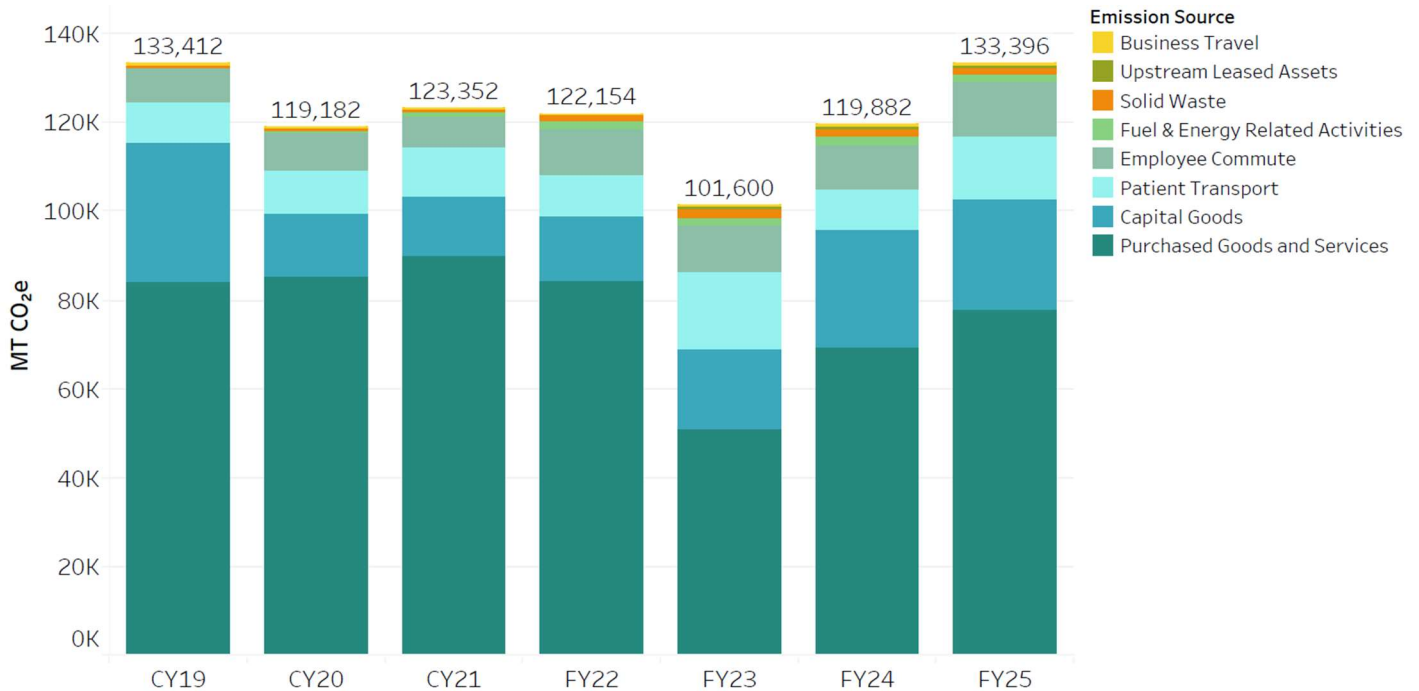
### Year Over Year Greenhouse Gas Emissions

As we work to achieve a 50% reduction in scope 1 and 2 emissions by FY30 from CY19 and net-zero emissions by 2050, it is important that we track year over year progress. We are committed to transparent disclosure of all emissions data. Below figures provide a visual of year over year emissions by emission category. More detailed numerical values for each emissions category by year can be found in **Appendix Table 2**. Figures displayed in the below charts may not align with previously published annual report numbers – please see **Appendix Table 3** for a list of updates made to previous year inventories for an explanation as to why any historical values might have changed.

**Figure 5. Stanford Children's Scope 1 and 2 Year Over Year Greenhouse Gas Emissions**



**Figure 6. Stanford Children's Scope 3 Year Over Year Greenhouse Gas Emissions**



## Highlights and Next Steps

### FY25 Emission Reduction Drivers

In FY25 we reduced our scope 1 and 2 emissions 11% from FY24. This decrease resulted in large part from reduced steam usage by strategically reevaluating and adjusting humidified spaces in our main hospital. In addition to reducing steam, we also finalized the decommissioning of our bulk nitrous delivery system, fully transitioning to local nitrous cylinder use only. While most of the associated emissions savings were realized in FY24, this operational switch achieved a 77% reduction in medical gas emissions overall from our CY19 baseline.

### Next Steps

As we work towards our ambitious 50% scope 1 and 2 reduction goal, our sustainability department plans to increase focus on our key ambulatory sites that contribute to our scope 1 and 2 emissions. These locations represent a smaller, but not insignificant, portion of our overall scope 1 and 2. In addition, we continue longer-term capital project planning for decarbonizing, working in coordination with our partners across the organization to identify future opportunities to shift away from natural gas-based equipment.

## Appendix

**Table 1. Emissions by Facility**

Facility Address	Ownership Type	Facility Type	Total Scope 1, 2, and 3 Emissions (MT CO2e)	% of Total Scope 1, 2, and 3 Emissions
725 Welch Rd.	Owned	Hospital	130,680	87.90%
1195 West Fremont Ave.	Operated Leased Asset	Medical Office Building	4,723	3.18%
730 Welch Rd.	Operated Leased Asset	Medical Office Building	2,851	1.92%
770 Welch Rd.	Operated Leased Asset	Medical Office Building	1,194	0.80%
4700 Bohannon Dr.	Operated Leased Asset	Office	927	0.62%
321 Middlefield Rd.	Upstream Leased Asset	Medical Office Building	691	0.46%
2452 Watson Ct.	Upstream Leased Asset	Medical Office Building	646	0.43%
14601 S. Bascom Ave.	Operated Leased Asset	Medical Office Building	548	0.37%
750 Welch Rd.	Operated Leased Asset	Medical Office Building	514	0.35%
14651 S. Bascom Ave.	Operated Leased Asset	Office	511	0.34%
700 Welch Rd.	Operated Leased Asset	Office	462	0.31%
2500 Grant Rd.	Upstream Leased Asset	Hospital	449	0.30%
777 Welch Rd.	Owned	Office	427	0.29%
1100 Van Ness Ave.	Upstream Leased Asset	Medical Office Building	422	0.28%
106 La Casa Via	Upstream Leased Asset	Medical Office Building	375	0.25%
1685 Commercial Way	Upstream Leased Asset	Medical Office Building	353	0.24%
401 Quarry Rd.	Upstream Leased Asset	Medical Office Building	349	0.24%
4100 Bohannon Dr.	Operated Leased Asset	Office	311	0.21%
2495 Hospital Dr.	Upstream Leased Asset	Medical Office Building	240	0.16%
5000 Pleasanton Ave.	Upstream Leased Asset	Medical Office Building	191	0.13%
3480 Buskirk Ave.	Upstream Leased Asset	Medical Office Building	179	0.12%
2490 Hospital Dr.	Upstream Leased Asset	Medical Office Building	161	0.11%
212 San Jose St.	Upstream Leased Asset	Medical Office Building	144	0.10%
180 El Camino Real	Upstream Leased Asset	Office	138	0.09%
1601 Ygnacio Valley Road	Upstream Leased Asset	Office	128	0.09%
200 E. Granger Avenue	Upstream Leased Asset	Medical Office Building	124	0.08%
1720 El Camino Real	Upstream Leased Asset	Medical Office Building	122	0.08%
4200 Bohannon Dr.	Upstream Leased Asset	Office	104	0.07%
1174 Castro St.	Upstream Leased Asset	Medical Office Building	103	0.07%
4600 Bohannon Dr.	Upstream Leased Asset	Home pharmacy/office	97	0.07%
555 Knowles Dr.	Upstream Leased Asset	Office	79	0.05%
2900 Whipple Ave.	Upstream Leased Asset	Medical Office Building	75	0.05%
1290 59th St.	Upstream Leased Asset	Medical Office Building	73	0.05%
4300 Bohannon Dr.	Upstream Leased Asset	Office	70	0.05%
2147 Mowry Ave.	Upstream Leased Asset	Medical Office Building	55	0.04%
1371 E. Foxhill Drive	Upstream Leased Asset	Apartments	40	0.03%
170 Alameda de las Pulgas	Upstream Leased Asset	Hospital	36	0.02%
2800 L Street	Upstream Leased Asset	Medical Office Building	29	0.02%
350 Park Dr.	Upstream Leased Asset	Apartments	26	0.02%
14777 Los Gatos Blvd	Upstream Leased Asset	Medical Office Building	16	0.01%

**Table 2. Organization-Wide Year Over Year Emissions**

Scope	Emissions Category	CY19 (baseline)	CY20	CY21	FY22	FY23	FY24	FY25
		MT CO <sub>2</sub> e						
Scope 1	Fleet Vehicle Use	21	12	48	50	43	46	35
	Refrigerants	767	74	14	14	11	132	80
	Generator Fuel	34	31	37	45	71	54	37
	Medical Gas	533	344	428	412	291	133	124
	Natural Gas	2,132	1,687	1,924	2,063	2,255	2,297	2,275
Scope 2	CEF: Chilled Water (Market-Based)	529	442	466	107	0	0	0
	CEF: Chilled Water (Location-Based)	1051	937	977	921	948	992	856
	CEF: Hot Water (Market-Based)	522	691	771	724	700	526	480
	CEF: Hot Water (Location-Based)	673	844	945	959	1022	825	752
	Purchased Electricity (Market-Based)	24	21	31	33	67	81	72
	Purchased Electricity (Location-Based)	7,396	7,376	8,148	8,270	7,665	7,705	7,625
	Steam	3,119	3,015	2,989	2,891	2,853	2,710	2,222
Scope 3	Purchased Goods and Services	84,276	85,406	90,029	84,493	50,933	69,298	78,018
	Capital Goods	31,406	14,130	13,405	14,455	17,980	26,617	24,627
	Fuel & Energy Related Activities	--	0	840	2,074	1,836	1,817	1,604
	Solid Waste	776	797	887	1,426	1,866	1,756	1,375
	Business Travel	509	181	112	275	552	603	457
	Employee Commuting	7,405	8,978	6,800	10,003	10,255	10,033	12,345
	Upstream Leased Assets	--	--	--	--	604	664	632
	Patient Transport	9,040	9,690	11,279	9,428	17,574	9,049	14,337
<b>Total Market-Based Emissions</b>		<b>141,092</b>	<b>125,499</b>	<b>130,060</b>	<b>128,493</b>	<b>107,891</b>	<b>125,879</b>	<b>138,721</b>
<b>Total Location-Based Emissions</b>		<b>149,137</b>	<b>133,502</b>	<b>138,862</b>	<b>137,779</b>	<b>116,759</b>	<b>134,794</b>	<b>147,402</b>

**Table 3. Inventory Change Log**

Change Description	Inventory Year Affected
<ul style="list-style-type: none"> <li>Chilled and hot water emission factors were updated to reflect Stanford Energy System Innovations (SESI) newly developed emission factors for the Central Energy Facility (CEF)</li> </ul>	CY19-FY24
<ul style="list-style-type: none"> <li>Scope 1 and 2 updated to include additional locations beyond 725 Welch</li> </ul>	CY19-FY23
<ul style="list-style-type: none"> <li>1195 W Fremont Ave. electricity usage was updated to correct previous double counting</li> </ul>	FY24
<ul style="list-style-type: none"> <li>Biohazardous waste tonnage at 725 Welch Rd. was updated to correct previous double counting</li> </ul>	FY24
<ul style="list-style-type: none"> <li>Scope 3 purchased goods and services spend data was updated to exclude building rent payments and donations</li> </ul>	FY24
<ul style="list-style-type: none"> <li>Anesthetic gas isoflurane and sevoflurane purchase quantities were updated to correct previous undercounting</li> </ul>	FY23 and FY24

Each year we strive to provide the most accurate and up-to-date inventory. Updates made to our greenhouse gas inventory reflect the integration of new guidelines and procedures, as well as further analysis and peer review. These modifications ensure that the inventories are aligned with the latest standards and practices, enhancing accuracy and reliability. Additionally, adjustments to historical data help maintain consistency, enabling a clearer understanding of trends and impacts over time. Such revisions are crucial for improving emissions tracking and supporting comprehensive long-term emissions reduction strategies.