

# 2020 Sustainability Benchmark Data





# Introduction and methods

Practice Greenhealth's Benchmark Report offers the nation's premier analysis of sustainability performance data for the health care sector. The data in this report is designed to assist hospitals in identifying key sustainability program opportunities by benchmarking their own program's performance against other Practice Greenhealth member hospitals. This report is divided into 10 distinct benchmarking profiles on different components of health care environmental stewardship programs.



Each section of the report highlights a mix of qualitative performance measures (actions hospitals have taken to implement sustainability programs) and key quantitative metrics (an assessment of how well the facility is performing on different programs it has implemented). The report also includes aggregate savings or impact for certain programs. For qualitative measures, the report presents the percent of respondents answering in the affirmative for a given question (e.g. the percent of hospitals that indicated they have a policy to address chemicals of concern, or have an energy manager on staff). For quantitative metrics, Practice Greenhealth reports median performance (50<sup>th</sup> percentile) and top performance (90<sup>th</sup> percentile) points across acute-care hospitals in the data set. In the case of most quantitative performance metrics, the report makes an effort to standardize the measurement of sustainability performance for each category through normalization of the data in order to support more informative comparisons among hospitals. Practice Greenhealth normalizes the data based on the most statistically significant factors, allowing hospitals of different sizes and scopes to more accurately assess their sustainability performance. For example, instead of reporting total energy used by institutions of a certain size, it reports energy utilization per square foot.

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## **Data cohorts**

The report provides several distinct cohorts of hospital data to allow for the most useful comparisons. The table below highlights the different ways Practice Greenhealth distills data for maximum comparability.

Cohort	Description	Cohort size
All	All hospitals with overnight beds and operating rooms that responded to a given question on either the Partner for Change or the Partner Recognition award application.	331 hospitals*
Small	Hospitals with fewer than 200 staffed beds. Hospitals in this cohort ranged in size from 10 to 199 staffed beds.	166 hospitals
Large	Hospitals with more than 200 staffed beds. Hospitals in this cohort ranged in size from 200 to more than 1,500 staffed beds.	161 hospitals
Top 25	Top 25 Environmental Excellence award winners. This set of hospitals are recognized for their outstanding overall leadership on sustainability (across all 10 categories of sustainability). They have earned the designation of the top performing all-around health care sustainability leaders in the country.	25 hospitals
Circle	Circle of Excellence award winners (the top 10 institutional performers for each category based on a range of metrics and key performance indicators). These hospitals are the leaders in the field, and their achievements represent the cutting edge of hospital environmental stewardship programs for each category.	Up to 10 hospitals per category
90 <sup>th</sup>	The 90 <sup>th</sup> percentile is the value dividing the top 10% of high-performing hospitals from the data set. The 90 <sup>th</sup> percentile informs hospitals on the long-term target, providing a data-driven determination of how well hospitals can actually perform on a given metric using valid data.	Varies

<sup>\*</sup>Four hospital applicants did not indicate how many staffed beds the facility had and were not included in either the small or large cohort, but were included in the "all" cohort.

### Additional data sets

Practice Greenhealth provides environmental performance data for two other cohorts within the report. The performance metrics for academic medical centers and long-term care facilities are broken out in separate data sets. These two subsets of participating hospitals exhibit unique activity profiles that significantly impact their overall environmental performance.

Cohort	Description	Cohort size
Academic medical centers	An academic medical center is typically a hospital attached to a university medical school and/or a teaching hospital affiliated with a medical school. These hospitals are training grounds for residents, medical and nursing students, PhDs, and post-doctoral researchers. Some academic medical centers (126 of the 193) include on-site research facilities, which host laboratories and other research amenities that can add to their environmental footprint.	173 hospitals
Long-term care	Facilities with overnight beds but no operating rooms, including skilled nursing facilities, assisted living and memory care facilities, behavioral health facilities, long-term acute-care hospitals, and rehabilitation hospitals.	21 facilities



## Methods and analysis

Data is from the 2019 calendar or fiscal year as reported on the 2020 Environmental Excellence Award applications. Hospitals completed the applications between September 2019 and March 2020. Practice Greenhealth reviews all data submitted by award applicants to identify outliers, which can sometimes indicate a mistake in reporting. Practice Greenhealth follows up with applicants where appropriate to inquire about outliers and to correct or remove data from the data set as necessary.

Throughout the report, the "N" (or sample size) for each group varies. This is because the "N" represents how many hospitals answered that question and can differ based on the number of hospitals reporting on that metric — not all hospitals respond to every question or provide data for every metric. Typically, the more hospitals that report on a metric (the larger the N), the more robust the data is.

Practice Greenhealth reports median values for quantitative measures, as these values typically provide a stronger basis for comparisons and benchmarking than averages and standard deviations. Averages and standard deviations can be influenced by outliers or incorrect data and can result in misleading conclusions. Median values (the middle value, or the 50th percentile) provide hospitals the chance to compare their sustainability performance, while the 90th percentile informs hospitals on the long-term target to reach for, providing a data-driven determination of how well hospitals can actually perform on a given metric. This data is then paired with analysis of the programmatic actions utilized by best performing hospitals to support improvement in these key metrics and identifying potential opportunities for action.

## Normalizing data

Normalizing data is an important step to allow comparisons of performance between hospitals and groups of hospitals, regardless of size or number of patients. Practice Greenhealth normalizes the data to help identify comparable metrics for each category. To normalize data is to determine how different characteristics are affected by other variables. For example, instead of looking at waste generation by tons alone, one would look at what variables might impact the amount of waste generated by a facility and then try to normalize or standardize data by those variables (e.g. tons per patient per day). Normalizing data not only helps compare metrics between hospitals, but also helps a hospital compare their own data over a number of years, adjusting for variations in patient volume each year. Through the use of multiple regression techniques, Practice Greenhealth uses statistical analysis to determine which variables have the greatest impact on characteristics of interest that reveal which variables best correlate with each characteristic. The variables that emerge as important influences on each characteristic are called normalizing factors. Practice Greenhealth analyzes each of the following normalization factors (in alphabetical order) for all of the major areas of environmental impact.

Practice Greenhealth wishes to thank the hundreds of individuals, hospitals, facilities, and health systems that participated in providing data for this analysis. The Practice Greenhealth Environmental Excellence Awards are open to all members of Practice Greenhealth.



## Normalization factors

Normalizer	Definition	Median (50th percentile)
Adjusted patient	Adjusted patient days (APD) take into account inpatient and outpatient activity and are generally calculated as: APD = (total patient days)x(total patient	98,680
days	revenue/inpatient revenue); where total patient revenue = inpatient + outpatient revenue.	
Cleanable square feet	Cleanable square feet denotes the space routinely cleaned by environmental services. To calculate cleanable square feet when a measured value is not available, the facility can estimate that cleanable square feet = gross square feet minus walls (1.5% of gross square feet) minus square footage of non-cleanable areas (i.e., electrical closets, mechanical rooms, storage rooms).	625,580
Gross square feet / gross floor area	The gross floor area (GFA) is the total property square footage, measured between the outside surface of the exterior walls of the building(s). This includes all areas inside the building(s), including supporting areas. GFA is not the same as rentable space, but rather includes all area inside the building(s), including lobbies, tenant areas, common areas, meeting rooms, break rooms, atriums (count the base level only), restrooms, elevator shafts, stairwells, mechanical equipment areas, basements, and storage rooms. Not included in GFA: exterior spaces, balconies, patios, exterior loading docks, driveways, covered walkways, outdoor courts (tennis, basketball, etc.), parking, the interstitial plenum space between floors (which house pipes and ventilation), and crawl spaces (per ENERGY STAR Portfolio Manager glossary).	744,560
Licensed beds	The maximum number of beds a hospital is licensed to staff.	256
Operating rooms	An operating room is defined as a room in the surgical suite that meets the requirements of a restricted area and is designated and equipped for performing surgical operations or other invasive procedures that require an aseptic field. This is in contrast to a procedure room, which is defined as a room for the performance of procedures that do not require an aseptic field but may require the use of sterile instruments or supplies.	10
OR procedures	A count of total surgical cases with a primary surgical procedure(s) performed in an operating room. This count should not include the number of procedures that occur during a single surgical case, but rather the total number of surgery cases. This would be a total count of patient in OR to patient out of OR events. This count should include surgeries performed in hospital-based ORs and operationally affiliated ambulatory surgery center ORs.	5,885
Outpatient visits	A count of outpatient visits annually. An outpatient visit/use/event is any visit made during the person's reference period to a hospital outpatient department, such as a unit of a hospital (or a facility connected with a hospital) providing health and medical services to individuals who receive services from the hospital but do not require hospitalization overnight. Examples of outpatient clinics include well-baby clinics/pediatric OPD; obesity clinics; eye, ear, nose, and throat clinics; family planning clinics; cardiology clinics; internal medicine departments; alcohol and drug abuse clinics; physical therapy clinics; and radiation therapy clinics. Hospital outpatient departments may also provide general primary care.	272,916
Patient days	A unit of measure denoting lodging facilities provided and services rendered to one inpatient between the census taking hour on two successive days. (Synonymous terms include inpatient day, inpatient service day, census day, bed occupancy day, occupied bed day.) Staffed beds are those in-service and patient-ready for more than half of the days in the reporting period. Staffed beds does not include beds ordinarily occupied for less than 24 hours, such as those in the emergency department, clinic, labor (birthing) rooms, surgery and recovery rooms, and outpatient holding beds.	47,004
Staffed beds	The number of beds available for use by patients during the reporting period. A bed means an adult bed, pediatric bed, birthing room, or newborn bed maintained in a patient care area for lodging patients in acute, long-term, or domiciliary areas of the hospital.	212
Total on-site full-time equivalents (FTEs)	Total on-site FTEs is the sum of full-time equivalent employees plus FTE physicians, FTE medical students, and FTE contracted full-time employees (such as environmental services, food service, and pharmacy). The number of full-time equivalent workers should be computed as the total number of hours worked by all workers in a week divided by the standard hours worked by one full-time worker in a week. Workers may include employees of the property and volunteers who perform regular on-site tasks. Workers should not include visitors to the property such as clients, customers, patients or subcontractors.	1,872

Leadership for environmental stewardship	All	Small	Large	Top 25	Circle
Any member of the executive leadership team actively implemented or led strategies to improve environmental performance or address sustainability considerations	71%	69%	73%	100%	100%
Has appointed or hired someone to lead sustainability efforts at the facility level	75%	74%	76%	100%	100%
Of the 249 facilities indicating a sustainability lead, the position is:					
Full-time: Facility level	33%	25%	40%	52%	50%
Part-time: Facility level	6%	5%	7%	0%	0%
Other duties within existing job assignment	62%	70%	54%	48%	50%
Of the 299 facilities indicating a sustainability lead on the system level, the position is:					
Full-time: System level	80%	77%	82%	90%	100%
Part-time: System level	12%	13%	11%	5%	0%
Other	8%	10%	6%	5%	0%
Identified clinical champion(s) to lead efforts on clinical engagement and education	65%	61%	71%	100%	100%
Leadership commitment	All	Small	Large	Top 25	Circle
Established an organizational environmental commitment statement/principles/charter for integrating environmental sustainability that is approved by top leadership	84%	83%	84%	96%	100%
Developed a minimum of three publicly available sustainability goals	53%	54%	52%	96%	90%
Created a strategic sustainability plan that aligns with other organizational priorities or embeds sustainability objectives or goals within the overall strategic plan	65%	68%	62%	100%	100%
Human resources	All	Small	Large	Top 25	Circle
Added sustainability measures into performance objectives/evaluations for leadership staff	53%	56%	50%	88%	90%
Added language to job descriptions on the organization's commitment to the environment and the role that each employee plays	50%	54%	45%	56%	80%
Included an overview of organizational sustainability goals in new employee orientation	66%	64%	69%	96%	100%
Included questions about sustainability/environmental stewardship program in its employee engagement/ satisfaction survey in 2019	25%	28%	23%	52%	80%
Finance	All	Small	Large	Top 25	Circle
Formulated a sustainability program budget	57%	57%	58%	72%	70%
Developed a green revolving fund	32%	35%	29%	68%	70%

Reporting	All	Small	Large	Top 25	Circle
Implemented annual sustainability reporting to the Board of Directors/Trustees	66%	70%	62%	92%	100%
Reported sustainability initiatives within its Community Benefit Report to the IRS (for non-profit organizations) through IRS Schedule H, Form 990	38%	34%	42%	40%	60%
Wrote a publicly available annual report that details environmental stewardship accomplishments at least every two years	65%	63%	65%	88%	100%
Of the 212 facilities publishing a report, these report types were identified:					
Annual sustainability report	52%	59%	44%	77%	80%
Annual sustainability report using GRI framework	7%	5%	10%	14%	10%
Annual report that specifically highlights environmental stewardship	45%	43%	47%	73%	80%
Community benefit report that specifically highlights environmental stewardship	40%	35%	45%	45%	80%
Other report highlighting environmental stewardship	37%	35%	40%	50%	60%

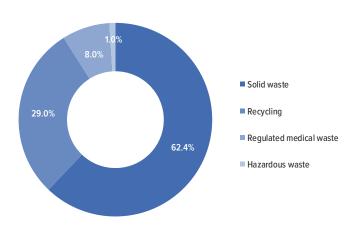
Communication and community connections	All	Small	Large	Top 25	Circle
Developed education and communication strategies to convey the organization's sustainability initiatives	89%	86%	91%	96%	100%
Of the 293 facilities developing education and communication, these strategies were identified:					
Internal webpage for staff	90%	90%	90%	100%	100%
Public webpage	58%	51%	65%	88%	90%
E-learning modules	45%	44%	47%	71%	90%
Newsletter	83%	81%	85%	88%	100%
Poster campaign	60%	63%	58%	92%	100%
Other	60%	59%	62%	88%	90%
Educated the community on environmental topics	62%	60%	66%	96%	100%
Shared its environmental sustainability successes in a media story in 2019	51%	45%	57%	88%	100%
Featured a sustainability topic connecting health and the environment in at least one grand rounds event	31%	29%	34%	56%	70%
Presented publicly on the organization's sustainability efforts in 2019	45%	43%	47%	84%	100%
Provided mentoring to other health care facilities either within health system or externally in 2019	56%	53%	60%	100%	100%
Worked with city government or local organizations to promote sustainability locally or plan local events in 2019	52%	46%	60%	100%	100%



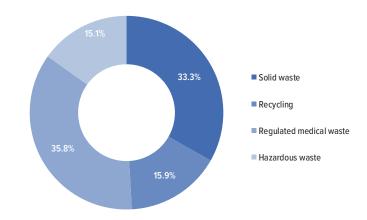
Median tons of waste by type as a percent of total waste	All	Small	Large	Top 25	Circle
Solid waste	65%	63%	65%	62%	55%
Recycling	27%	29%	25%	32%	38%
Regulated medical waste	6.0%	6.0%	8.0%	5.0%	4.0%
Hazardous waste	0.4%	0.4%	0.4%	0.6%	1.2%

Median cost of waste disposal by type as a percent of total waste	All	Small	Large	Top 25	Circle
Solid waste	33%	35%	32%	31%	30%
Recycling	13%	14%	13%	18%	19%
Regulated medical waste	35%	31%	35%	35%	33%
Hazardous waste	11%	12%	9%	15%	15%

#### Average tons of waste by type as a percent of total waste



#### Average cost of waste generation by type as a percent of total waste

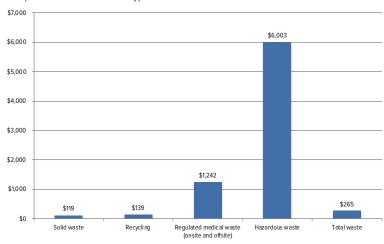




Median cost per ton	All	Small	Large	Top 25	Circle	
Solid waste	\$119	\$120	\$120	\$138	\$144	
Recycling	\$139	\$135	\$145	\$165	\$154	
Regulated medical waste (onsite and offsite)	\$1,242	\$1,532	\$1,133	\$1,435	\$1,918	
Hazardous waste	\$6003	\$7279	\$5000	\$5464	\$4193	
Total waste	\$265	\$273	\$260	\$257	\$288	
Note: Total waste is the sum of solid waste, recycling, regulated medical waste, and hazardous waste. Pharmaceutical and food waste are counted as subsets of those four waste streams. Cost for recycling includes only those						

#### Cost per ton of different waste types

facilities that had a net cost (not a profit) for their recycling program.



Solid waste medians	All	Small	Large	Top 25	Circle
Solid waste as a percent of total waste (tons)	65%	63%	65%	62%	55%
Solid waste as a percent of total waste (cost)	33%	35%	32%	31%	30%
Median cost of solid waste per ton	\$119	\$120	\$120	\$138	\$144

Disposal mechanism for solid waste (non-pharmaceutical)	All	Small	Large	Top 25	Circle
Landfill	77%	80%	75%	84%	80%
Municipal waste incinerator	1%	0%	2%	0%	0%
Waste-to-energy incinerator	11%	11%	12%	12%	20%



Solid waste reduction and prevention	All	Small	Large	Top 25	Circle
Developed an internal reuse program or strategy for office supplies, clinical products and equipment, and furniture before making these materials available for external donation	83%	82%	84%	100%	100%
Developed an equipment and supplies donation program (domestic or abroad) for materials, equipment and furniture that can no longer be used internally	80%	81%	78%	80%	80%

Donation	All	Small	Large	Top 25	Circle		
Of the 264 facilities that developed a donation program, this is the percent of facilities that routinely donate these materials:							
Unexpired/unopened consumable clinical supplies	63%	58%	70%	75%	63%		
Expired/opened consumable clinical supplies	44%	40%	48%	70%	75%		
Capital medical equipment	71%	70%	74%	90%	100%		
Electronics	66%	67%	64%	75%	63%		
Furniture	78%	76%	80%	90%	88%		
Linens	33%	30%	37%	55%	75%		
Other supplies	43%	42%	43%	80%	63%		

Paper reduction	All	Small	Large	Top 25	Circle
Implemented a paper reduction program	84%	83%	85%	100%	100%
Of the 278 facilities that implemented a paper reduction program facilities that indicated they had a paper	er reduction progr	am, these are the	programmatic ac	tivities pursued:	
Reduced network printers	86%	90%	82%	88%	80%
Made double-sided printing the default on printers/copiers	78%	74%	81%	92%	80%
Reduced number of automatically printed reports	72%	70%	74%	100%	100%
Implemented EMR/EHR system	64%	64%	66%	72%	90%
Created digital signage	42%	36%	49%	88%	70%
Increased electronic meetings	50%	42%	59%	72%	80%
Engaged supply chain around paper reduction	35%	24%	46%	80%	90%
Other	27%	26%	28%	72%	80%



Recycling medians	All	Small	Large	Top 25	Circle
Recycling as a percent of total waste (tons)	27%	29%	25%	32%	38%
Recycling as a percent of total waste (cost)	13%	14%	13%	18%	19%
Median cost of recycling per ton, includes universal waste	\$139	\$135	\$145	\$165	\$154
Median cost of recycling per ton, not including universal waste	\$126	\$132	\$122	\$164	\$138
lote: Cost data above includes only those facilities that had a net cost (not a profit) for their recycling program. Median cost per ton for non-universal recycling when facilities that made a profit are included is \$112.					

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Normalized recycling metrics	All	Small	Large	Top 25	Circle
Total recycling pounds per adjusted patient day (APD)	5.5	5.3	5.6	6.0	6.0
Total recycling pounds per total full-time equivalent (FTE) per year	279	285	268	279	273
Total recycling tons per operating room per year	24	22	26	40	37
Total recycling pounds per square foot	0.79	0.74	0.89	1.01	0.93
Total recycling tons per staffed bed	1.4	1.6	1.2	2.1	2.2
Total recycling pounds per staffed bed/day	7.9	9.0	6.8	11.7	11.8
Total recycling pounds per patient day (PD)	11.7	14.7	10.3	15.6	17.7

Recycling of medical plastics	All	Small	Large	Top 25	Circle
Recycled clinical/medical plastics	64%	61%	66%	100%	100%
Of the 211 facilities recycling clinical/medical plastics, the items recycled include:					
Irrigation bottles	82%	79%	85%	92%	100%
Skin prep solution bottles	41%	33%	48%	68%	80%
Trays	61%	61%	61%	76%	90%
Overwraps	21%	16%	25%	24%	20%
Rigid inserts	45%	41%	49%	64%	80%
Blue wrap	34%	27%	39%	40%	60%
Tyvek	6%	5%	8%	8%	10%
Basins	52%	54%	50%	92%	70%
Urinals/bedpans	25%	27%	23%	44%	60%
Other	20%	20%	21%	48%	60%



Top 10 recycled materials (by weight in tons) in 2019	All
Paper-HIPAA	52,142
Lead aprons	26,772
Cardboard	18,451
Paper-mixed (includes newspaper)	6,609
Food waste composting	6,492
Metals mixed (brass/copper/steel-not C&D)	3,542
Computers & electronic waste	3,320
Paper-white	2,777
Wood (do not include avoided waste through pallet reuse)	907
Batteries	726

Food waste disposal	All
Percent of facilities composting food waste	38%
Total tons of food waste composted	6492
Median cost per ton food waste composting	\$192
Median cost per ton solid waste	\$119

Aggregate recycling totals	All
Total solid waste recycling tonnage for all facilities	141,171
Total universal waste recycling tonnage for all facilities	99,808
Total recycling tonnage for all facilities	240,979
Total recycling costs for all facilities (reporting a net cost for their recycling program)	\$12,939,044
Total additional cost for solid waste recycling vs solid waste disposal to landfill	\$967,266



Regulated medical waste minimization	All	Small	Large	Top 25	Circle
Disinfected/treated RMW using onsite technology	14%	8%	19%	12%	30%
Eliminated the standard use of red bag waste (RMW) containers in regular patient rooms	67%	69%	66%	92%	80%
Implemented a reusable sharps container program	72%	63%	82%	76%	100%
Of the 107 facilities that provided data on reusable sharps container program:					
Median reusable sharps container program cost-savings per facility annually*	\$10,674	\$6,368	\$18,626	\$12,971	\$9,834
Implemented a single-use device (SUD) reprocessing program with an FDA-approved third party reprocessor	73%	70%	76%	68%	80%

Note: The median cost-savings from reusable sharps container programs was an analysis of reported savings data from hospitals in the data set. The average savings were higher at \$39,655 per facility annually. Practice Greenhealth also calculated potential cost-savings by looking at the tons of plastic container waste diverted from disposal through reusable containers and multiplying that tonnage by the median cost per ton of sharps disposal. This resulted in significantly higher potential cost-savings of \$56,757 per facility annually. What is not considered in this second analysis is any additional fees the facility may be paying a hauler to collect or utilize the reusable sharps containers through a turnkey service.

Regulated medical waste treatment technologies	All	Small	Large	Top 25	Circle
Incinerated a portion of its regulated medical waste (RMW)	64%	61%	66%	100%	100%
Of the 211 facilities that indicated they incinerate a portion of RMW, the following medical waste stream	s are incinerated:				
General RMW	25%	28%	22%	28%	10%
Path/chemo	92%	91%	93%	96%	100%
Sharps	25%	25%	24%	28%	20%
Non-RCRA pharmaceuticals	55%	52%	56%	48%	70%
Other	6%	4%	7%	4%	0%
Disinfects/treats RMW using onsite technology	14%	8%	19%	12%	30%
Of the 47 facilities that treat RMW onsite, these treatment technologies are employed:					
Autoclave	87%	100%	84%	67%	100%
Rotoclave	4%	0%	6%	33%	0%
Chemical disinfection	4%	0%	6%	0%	0%
Incineration	2%	0%	3%	0%	0%
Other	2%	0%	0%	0%	0%

Note: While only 64% of all facilities reported incinerating a portion of RMW, it is Practice Greenhealth's belief that 100% of facilities are actually incinerating their anatomical/pathological/trace chemotherapeutic waste per standard treatment practice in the United States--and that this discrepancy represents a lack of understanding of the application question or incomplete knowledge of the treatment options being utilized by haulers.



Regulated medical waste medians	All	Small	Large	Top 25	Circle
RMW as a percent of total waste (tons)	6.3%	5.6%	7.7%	5.5%	4.5%
RMW as a percent of total waste (cost)	35%	31%	35%	35%	33%
Median RMW cost per ton	\$1,242	\$1,532	\$1,133	\$1,435	\$1,918
Comparison of median cost per ton of regulated medical waste (RMW) for facilities treating RMW onsite and offsite	All	Small	Large	Top 25	Circle
RMW cost per ton - onsite treatment	\$1,134	\$2,113	\$1,122	\$2,138	\$2,138
RMW cost per ton - offsite treatment	\$1,272	\$1,564	\$1,139	\$1,351	\$1,697
Normalized regulated medical waste metrics	All	Small	Large	Top 25	Circle
Total RMW pounds per OR procedure	20.3	13.4	24.2	21.4	15.2
Total RMW tons per operating room (OR) per year	6.4	4.4	8.6	6.5	5.0
Total RMW pounds per total full-time equivalent (FTE) per year	73	51	84	52	32
Total RMW tons per staffed bed per year	0.34	0.31	0.37	0.34	0.28
Total RMW pounds per staffed bed per day	1.9	1.7	2.0	1.9	1.5
Total RMW pounds per patient day (PD)	3.0	3.0	2.8	2.6	2.0
Total RMW pounds per adjusted patient day (APD)	1.4	1.0	1.7	1.2	0.9
Total RMW pounds per square foot per year	0.19	0.13	0.26	0.18	0.12
Pharmaceutical waste and cost as percent of total waste	All	Small	Large	Top 25	Circle
Pharm waste as a percent of total waste (tons)	0.46%	0.44%	0.47%	0.47%	1.04%
Pharm waste as a percent of total waste (cost)	10%	8%	10%	10%	11%
Median pharmaceutical waste cost per ton (RCRA and non-RCRA)	\$4,330	\$6,109	\$3,733	\$3,980	\$3,050
Note: Pharmaceutical waste is actually a subset of both RCRA-hazardous and either RMW or solid waste and thus is not shown in	n the breakdown by was	te type above			



Pharmaceutical waste disposal methods	All	Small	Large	Top 25	Circle
Method of handling waste pharmaceuticals that are not regulated as hazardous waste (such as antic	lepressants, statins, a	intibiotics, etc.)			
Treat all pharm waste as RCRA-hazardous to better protect human health and the environment	42%	38%	47%	80%	60%
Pharm waste is being disposed of in red bags or sharps containers	12%	11%	14%	8%	0%
Pharm waste is going down the drain	2%	1%	4%	0%	0%
Pharm waste is going into clear trash bags (solid waste)	3%	2%	4%	4%	0%
Other	33%	34%	31%	20%	20%
Don't know	2%	2%	1%	0%	0%
Taken any measures to reduce the generation of pharmaceutical waste		<u>'</u>			
Staff education	69%	70%	69%	92%	90%
Inventory management	60%	59%	61%	96%	90%
Implemented a samples policy	23%	23%	23%	56%	40%
Monitored dating and utilized stock rotation for emergency syringes	37%	39%	37%	60%	30%
Prescription review	30%	31%	29%	44%	50%
Primed and flushed chemotherapy IV lines with saline solution	25%	25%	25%	36%	20%
Replaced prepackaged unit dose liquids with patient-specific oral syringes	21%	17%	25%	40%	10%
Other	19%	21%	17%	40%	50%
Hazardous waste and cost as percent of total waste	All	Small	Large	Top 25	Circle
Hazardous waste as a percent of total waste (tons)	0.4%	0.4%	0.4%	0.6%	1.2%
Hazardous waste as a percent of total waste (cost)	11%	12%	9%	15%	15%
Median hazardous waste cost per ton	\$6,003	\$7,279	\$5,000	\$5,464	\$4,193



Universal/hazardous waste recycling	All	Small	Large	Top 25	Circle
Established a contract with a certified electronics waste/recycling vendor that is certified to e-Stewards (or subcontractors that use e-Stewards-certified vendors) for legal and environmentally responsible electronics (or e-waste) management and recycling.	63%	56%	68%	68%	80%
Handling of fluorescent lamps					
Ship to recycler	83%	82%	84%	92%	100%
Crush onsite	3%	2%	3%	4%	0%
Dispose in dumpster	1%	1%	0%	0%	0%
Other	5%	5%	6%	4%	0%
Recycled its batteries	91%	90%	92%	100%	100%

Battery recycling (by type)	All				
Of the 302 facilities that indicated they were recycling batteries, the following types of battery recycling were indicated:					
Ni-Cd	95%				
Lead-acid	93%				
Lithium ion	97%				
Alkaline	77%				
Mercuric oxide	43%				
Ni-MH	75%				
Other	15%				

Hazardous waste reduction	All	Small	Large	Top 25	Circle
Has a laboratory on-site	90%	89%	90%	100%	100%
Of the 297 facilities that have onsite laboratories, percent of facilities that did work to green their laboratories:	60%	57%	64%	88%	100%



Solvent distillation	All	Small	Large	Top 25	Circle
Recycled, reprocessed or distilled solvents, alcohols, or other chemicals from the lab (such as xylene, alcohols or formalin)	26%	20%	34%	52%	90%
Median total cost savings per hospital (among facilities that reprocess solvents)	\$7,857	\$2,944	\$14,974	\$16,730	\$16,959
Total gallons distilled annually	38,327	4,555	33,773	12,027	11,036
Total annual savings from avoided virgin solvent purchase	\$821,013	\$47,018	\$773,995	\$584,984	\$137,182
Total annual savings from reduced disposal costs	\$110,042	\$20,535	\$89,507	\$37,133	\$42,702
Total savings from solvent reprocessing	\$931,055	\$67,553	\$863,502	\$622,117	\$179,884

Total waste tons and cost	All
Median tons of total waste generated per year per facility	1,002
Median total cost of waste disposal and treatment per facility in 2019	\$300,570
Total waste tons generated by all hospitals in 2019	503,003
Total waste disposal and treatment cost for all hospitals in 2019	\$95,190,729

Note: not all hospitals included costs for all waste streams. These facilities were omitted from the medians because they did not submit full costs. However, they are included in the sums for all facilities.

Normalized total waste metrics	All	Small	Large	Top 25	Circle
Total waste pounds per adjusted patient day (APD)	21.2	20.4	22.0	20.7	18.4
Total waste pounds per patient day (PD)	44.8	50.2	40.0	46.6	40.9
Total waste tons per licensed bed	4.7	4.6	4.7	5.5	4.9
Total waste tons per operating room (OR)	95.7	81.1	109.0	127.9	87.7
Total waste pounds per total full-time equivalent (FTE)	1069	996	1156	902	926
Total waste tons per staffed bed	5.4	5.7	5.1	6.7	5.6
Total waste pounds per staffed bed per day	29.7	31.0	28.2	36.4	30.7
Total waste pounds per OR procedure	283	247	296	311	286
Total waste pounds per square foot	2.90	2.44	3.36	3.06	2.71



Chemical policies	All	Small	Large	Top 25	Circle*
Contracted for, or performed internally, a hazardous chemical/material audit by hospital department and update at least annually	66%	64%	68%	96%	100%
Have chemical or purchasing policies that identify and avoid specific chemicals of concern contained in products that may be hazardous to human health and the environment	83%	86%	80%	100%	100%

Chemicals of concern	All	Small	Large	Top 25	Circle*
Of the 274 facilities that have chemical or purchasing policies, the policies include these chemicals of	of concern:				
Mercury	91%	91%	91%	100%	100%
Latex	73%	75%	70%	88%	100%
Lead	70%	72%	68%	84%	100%
Formaldehyde	65%	70%	61%	80%	100%
Volatile organic compounds (VOCs)	65%	66%	63%	88%	100%
Polyvinyl chloride, or PVC	64%	61%	67%	84%	100%
Flame retardants, including chlorinated, brominated, and phosphate-based flame retardants	62%	62%	61%	76%	100%
Persistent, Bioaccumulative, and Toxic substances (PBTs)	59%	63%	55%	80%	100%
Phthalates (DEHP, BBP, DnHP, DIDP, DBP, DINP, and DiBP)	57%	57%	55%	76%	96%
Triclosan	56%	56%	56%	80%	100%
Perfluorinated compounds (PFAS)	55%	54%	56%	76%	100%
Triclocarban	52%	51%	52%	76%	100%
Bisphenol A and its structural analogues	50%	51%	49%	68%	100%
Polystyrene	36%	37%	34%	68%	67%
CA Proposition 65 listed chemicals (carcinogens and reproductive toxicants)	31%	32%	29%	52%	37%
Other prioritized chemical constituents	10%	11%	9%	32%	7%



Green cleaning	All	Small	Large	Top 25	Circle*
Conducted an inventory in the last 18 months of all products used at the facility for cleaning and disinfection of surfaces	81%	82%	80%	96%	100%
Actively working on the transition to third-party certified green cleaning chemicals, in alignment with Practice Greenhealth's Green Cleaning Goal	60%	61%	60%	92%	100%
Utilized any Green Seal or UL ECOLOGO-certified cleaning products	91%	91%	91%	100%	100%
Environmental services collaborated with the infection control committee to identify areas where use of disinfectants can safely be minimized or eliminated	82%	83%	81%	92%	81%
Utilized automatic scrubbing machines that use only water for floor cleaning	69%	60%	78%	92%	89%
Of those that utilized automatic scrubbing machines:					
Reduced or replaced other cleaning chemical use as a result of automatic scrubbing machines	91%	93%	89%	100%	96%
Utilized ultraviolet germicidal irradiation (UVGI) technology for surface disinfection in any area of the organization	56%	52%	60%	80%	81%
Of those that utilized ultraviolet germicidal irradiation (UGVI) technology for surface disinfection, these a	re the clinical area	as where this tech	nology was used:		
All patient rooms	48%	50%	46%	55%	45%
Isolation rooms	82%	86%	78%	75%	100%
OR	81%	88%	75%	75%	86%
Other	44%	36%	52%	75%	55%
Replaced any cleaning product types with a chemical-free method, such as ionized water or ozone	34%	28%	40%	60%	48%
Of those that utilized a chemical-free cleaning method, the following methods were indicated:					
lonized water	73%	74%	72%	73%	85%
Ozone	14%	9%	17%	27%	15%
Other	19%	17%	20%	20%	8%
Cleaning products	All	Small	Large	Top 25	90 <sup>th</sup> percentile
187 facilities indicated the cleaning products used at the facility (including both conventional and green-	certified products)	:			
General purpose (hard surface) cleaners	66%	71%	64%	59%	100%
Window/glass cleaners	100%	100%	100%	100%	100%
Carpet and upholstery cleaners	89%	100%	75%	66%	100%
Bathroom/restroom cleaners	90%	100%	83%	100%	100%

100%

100%

100%

100%

100%

Floor cleaners



Percent green spend for cleaning chemicals	All	Small	Large	Top 25	90 <sup>th</sup> percentile
Of the 183 facilities indicating they purchased products in the five target categories (general purpose, wi cleaning spend data:	ndow/glass, bath	oom, carpet/rug c	leaner and floor	cleaners) and pro	vided green
Median percent of green spend on 5 target cleaning chemical categories	42%	41%	53%	42%	99%
Of the 187 facilities that provided green cleaning spend data:					·
Median total percent of green spend on cleaning chemicals	28%	30%	27%	34%	91%
Safer hand hygiene spend	All	Small	Large	Top 25	90 <sup>th</sup> percentile
Of the 200 facilities reporting hand hygiene data:					
Median percent total hand hygiene spend on products that do not contain triclosan or triclocarban	100%	100%	100%	100%	100%
Safer hand hygiene	All	Small	Large	Top 25	Circle*
Actively working on the elimination of hand hygiene products that contain triclosan and triclocarban, in alignment with Practice Greenhealth's Safer Hand Hygiene Goal	82%	78%	84%	96%	100%
Completely eliminated the purchase and use of antimicrobial hand hygiene products that contain triclosan or triclocarban throughout the facility	82%	83%	81%	100%	100%
Eliminated the purchase and use of hand hygiene products that contain any antimicrobial in non-clinical areas	59%	58%	60%	68%	100%
Sterilization and disinfection	All	Small	Large	Top 25	Circle*
Eliminated the use of the high-level disinfectant glutaraldehyde and moved to safer alternatives (as defined by the ICRA process involving infection prevention and control and employee health)	86%	85%	86%	88%	96%
Of those that have eliminated the high-level disinfectant glutaraldehyde, these alternatives are used:					·
OPA (ASP cidex OPA, metrex metricide OPA)	79%	79%	79%	77%	85%
Hydrogen peroxide	71%	70%	73%	86%	42%
Peracetic acid	23%	19%	27%	32%	12%
Other	19%	19%	18%	18%	8%
Eliminated the use of the sterilant ethylene oxide (EtO) onsite	82%	84%	79%	84%	96%
Of those that have eliminated the use of EtO, these alternatives are used:					
Steam sterilization	87%	88%	87%	81%	73%
Ozone plasma	4%	6%	3%	0%	0%
Low temperature hydrogen peroxide gas plasma	40%	38%	43%	62%	58%
Peracetic acid	20%	22%	18%	33%	8%
Other	6%	6%	6%	5%	0%



Integrated pest management (IPM)	All	Small	Large	Top 25	Circle*
Reduced or eliminated the use of chemical pesticides by implementing an IPM program	83%	84%	82%	100%	100%
Developed a written IPM plan/policy for the facility that includes attention to both indoor and outdoor (buildings and grounds) pest habitats and issues, which focuses on prevention as the primary means of pest management (see checklist for prevention strategies)	74%	77%	70%	100%	100%
Required EVS or other relevant staff to be trained in IPM (In particular, are staff trained to monitor and prevent pest problems by spotting conditions that are conducive to pest infestations)	77%	78%	77%	96%	96%
DEHP/PVC reduction	All	Small	Large	Top 25	Circle*
Actively worked to reduce the purchase of medical products containing PVC and DEHP, in alignment with Practice Greenhealth's PVC and DEHP Reduction Goal	58%	56%	60%	92%	100%
Of those that worked to reduce PVC and DEHP in medical products, the facility:			1		
Encoded this commitment in policy, program, guideline, or purchasing specifications	55%	55%	55%	74%	96%
Eliminated both PVC and DEHP from at least two product lines	63%	58%	68%	96%	85%
Of those that eliminated PVC and DEHP from at least two product lines, the product lines include:				·	
Breast pumps and accessories	52%	52%	54%	54%	74%
Enteral nutrition products	43%	46%	40%	54%	35%
Enteral tubes	40%	38%	42%	42%	26%
General urological	32%	38%	28%	33%	22%
Gloves	60%	63%	60%	79%	65%
Parenteral infusion devices and sets	35%	35%	36%	25%	13%
Respiratory therapy products	28%	32%	25%	21%	26%
Vascular catheters	39%	40%	36%	54%	17%
Other	10%	6%	14%	13%	17%
PVC and DEHP in the NICU	All	Small	Large	Top 25	Circle*
Of those that indicated their facility had a NICU:					
Actively worked to achieve a DEHP-free NICU	49%	54%	47%	91%	92%
Actively worked to achieve a PVC-free NICU	61%	63%	59%	91%	92%
Healthy interiors	All	Small	Large	Top 25	Circle*
Actively worked to purchase furnishings and furniture that eliminate the use of all of the following target chemicals of concern: flame retardants, formaldehyde, perfluorinated compounds, PVC (vinyl) and antimicrobials in alignment with Practice Greenhealth's Healthy Interiors Goal	58%	56%	60%	100%	100%



Healthy interiors spend	All	Small	Large	Top 25	90 <sup>th</sup> percentile	
Of the 183 facilities reporting healthy interiors data:						
Median percent total spend on furnishings and furniture that eliminate 5 target chemical categories of concern (of those that reported green spend)	84%	83%	85%	80%	100%	
Total dollars spent on furnishings that avoid target chemicals of concern (for all facilities)	\$164,442,684	\$17,501,673	\$146,740,768	\$64,377,468	\$130,670,508	
Median dollars spent on furnishings that avoid target chemicals of concern (for all facilities)	\$195,110	\$99,939	\$407,835	\$407,835	\$2,294,565	
Note: median percent spend is from facilities that spent money on furnishings and furniture that eliminate target chemicals. Zeros are not included.						

Mercury elimination	All	Small	Large	Top 25	Circle*
Percent of facilities that have won the Making Medicine Mercury Free Award (MMMF) at some point	43%	40%	47%	80%	56%
Of those facilities that have already won the Making Medicine Mercury-Free award:					
Periodically inventory purchasing practices to make certain that mercury-containing devices are not purchased and re-entering the facility	80%	80%	80%	95%	53%
Conducted an inventory of mercury-containing products within the institution in last five years	64%	67%	64%	95%	93%
Of those facilities that have not yet won the Making Medicine Mercury-Free award:					
Established a mercury-free purchasing policy (a stand-alone policy or included in a broader policy with other constituents of concern)	58%	61%	55%	100%	100%
Established protocols and written procedures for safe handling of any mercury remaining onsite	63%	66%	60%	100%	100%
Included proper mercury disposal language in demolition contract templates	38%	39%	36%	60%	33%
Included mercury-free language in building and renovation contract templates	38%	39%	36%	60%	50%
Inventoried (and labeled where possible) all mercury devices/sources within the organization and have a plan in place to substitute non-mercury devices	46%	49%	43%	80%	92%
Replaced all clinical thermometers with mercury-free patient thermometers	85%	90%	81%	100%	100%
Eliminated the use of mercury-containing blood pressure devices (sphygmomanometers)	85%	90%	81%	100%	100%
Eliminated the use of mercury-containing clinical devices (e.g., bougies, miller-abbott tubes, cantor tubes, dilators)	71%	76%	66%	100%	100%
Specified and purchased, where possible, these laboratory items free of mercury:					
Thermometers	77%	79%	75%	100%	100%
Solutions	71%	73%	69%	80%	100%
Equipment	69%	70%	67%	80%	100%
Spoke with the lab manager to inventory mercury-containing laboratory chemicals	64%	68%	61%	100%	100%
Eliminated the use of B5 fixative in the laboratory	67%	69%	64%	100%	100%
Eliminated the use of zenkers solution in the laboratory	68%	70%	66%	100%	100%
Identified other product substitutions in the lab that eliminate mercury	30%	33%	27%	40%	50%

<sup>\*</sup> Not all Chemicals circle winners are included in the circle statistics in the benchmark report.

Sustainable food policy and practices	All	Small	Large	Top 25	Circle
Had a clinical champion outside of the food service department that supports increased access to healthy, local, and sustainable foods for patients, staff, and the community	66%	63%	69%	96%	100%
Developed and implemented a sustainable food service policy	55%	51%	60%	88%	90%
Developed and implemented contract and/or request for proposal (RFP) language that includes local and sustainable food purchasing and other environmental stewardship goals with food vendors	60%	55%	63%	92%	90%
Outsourced its food services department or management	34%	31%	38%	16%	20%

Less meat: Meat reduction strategies and outcomes	All	Small	Large	Top 25	Circle
Actively worked to reduce the amount of meat and poultry purchased for cafeteria/retail and patient food service, in alignment with Practice Greenhealth's Less Meat Goal	76%	76%	76%	100%	100%
Of the 251 facilities actively working to reduce meat, the following strategies were implemented:					
Committed to the World Resource Institute (WRI) Cool Food Pledge in an effort to reduce GHG emissions from food production	21%	15%	27%	36%	60%
Decreased portion size	50%	43%	58%	88%	90%
Meat-free day(s)	39%	33%	45%	56%	40%
Substituted with seafood	66%	63%	70%	100%	90%
Substituted with whole plant-based proteins (beans, nuts, seeds, soy, etc.)	71%	65%	76%	84%	100%
Meat blending strategies	37%	29%	46%	64%	70%
Station layout to highlight salad bar or plant-based options	59%	48%	70%	88%	90%
Increased offering of vegetarian and vegan dishes	80%	71%	89%	80%	70%
A la carte menu	51%	47%	57%	56%	40%
Other	10%	10%	11%	20%	10%

Less meat from baseline year metrics	All	Small	Large	Top 25	Circle
Of the 104 facilities reporting valid meat data for current and baseline year:					
Total pounds of all meat bought by those facilities in current year	13,026,738				
Total pounds of all meat bought by those facilities in baseline year	13,931,593				
Change in total pounds of all meat bought by those facilities since baseline year	904,854				
Change percentage in total pounds of all meat bought by those facilities since baseline year	6%				
Percentage of facilities reporting a decrease in total pounds of meat	63%	67%	61%	67%	56%
Of the 65 facilities reporting valid decrease in meat from baseline year:					
Median percent meat reduction from baseline year	14%	16%	11%	15%	9%
Of the 39 facilities reporting valid increase in meat from baseline year:					
Median percent meat increase from baseline year	6%	7%	6%	7%	24%
Note: Propried Completelly discipated the use of the group of the grou	Garden to Garden. The control				1911

Note: Practice Greenhealth eliminated the use of the per meal normalizer, because it was being tracked inconsistently from facility to facility. The organization instead was looking at absolute meat reduction, but there are still some challenges in that it does not account for increases of meat due to patient census or other new activities at the site. It is likely that for the facilities reporting an increase in meat/poultry purchases and are currently working to reduce meat/poultry, it is because they have increased their food service in some way.

All	Small	Large	Top 25	Circle
17,022,653				
16,960,352				
-62,302				
0%				
53%	56%	51%	52%	50%
5%	5%	5%	7%	5%
5%	5%	4%	9%	15%
	17,022,653 16,960,352 -62,302 0% 53%	17,022,653 16,960,352 -62,302 0% 53% 56%	17,022,653 16,960,352 -62,302 0% 53% 56% 51% 5% 5% 5%	17,022,653 16,960,352 -62,302 0% 53% 56% 51% 52% 5% 5% 7%

Note: Practice Greenhealth eliminated the use of the per meal normalizer, because it was being tracked inconsistently from facility to facility. The organization instead was looking at absolute meat reduction, but there are still some challenges in that it does not account for increases of meat due to patient census or other new activities at the site. It is likely that for the facilities reporting an increase in meat/poultry purchases and are currently working to reduce meat/poultry, it is because they have increased their food service in some way.

Less meat-by-category greenhouse gas emissions	All	Small	Large	Top 25	Circle					
Of the 251 actively working to reduce the amount of meat and poultry purchased for cafeteria/retail and patient food service, in alignment with Practice Greenhealth's Less Meat Goal:										
Tracked their meat/poultry purchases by category	73%	71%	75%	80%	90%					
Of the 95 facilities providing valid category meat data for current and previous year:										
Percent of facilities reporting a decrease in GHG emissions from meat from previous year	58%	63%	54%	62%	50%					
Median percent reduction in GHG emissions from meat from previous year (for the 55 facilities achieving a reduction)	6%	5%	6%	5%	4%					
Median percent increase in GHG emissions from meat from previous year (for the 40 facilities that increased)	8%	8%	8%	8%	18%					
Of the 58 facilities providing valid category meat data for current and baseline year:										
Percent of facilities reporting a decrease in GHG emissions from meat from baseline year	71%	72%	70%	91%	57%					
Median percent reduction in GHG emissions from meat from baseline year (for the 41 facilities achieving a reduction)	14%	13%	14%	13%	12%					
Median percent increase in GHG emissions from meat from baseline year (for the 17 facilities that increased)	12%	16%	9%	84%	16%					

Note: Practice Greenhealth eliminated the use of the per meal normalizer, because it was being tracked inconsistently from facility to facility. The organization instead was looking at absolute meat reduction, but there are still some challenges in that it does not account for increases of meat due to patient census or other new activities at the site. It is likely that for the facilities reporting an increase in meat/poultry purchases and are currently working to reduce meat/poultry, it is because they have increased their food service in some way.

Better meat: Sustainably-produced meat and poultry	All	Small	Large	Top 25	Circle					
Preferentially purchase sustainably-produced (better) meat and poultry.	66%	61%	70%	96%	100%					
Of the 219 facilities that preferentially purchase sustainably-produced meat, the following certifications or label claims were used to verify that meat and/or poultry items purchased were raised without routine, non-therapeutic antibiotics:										
Regenerative Organic	1%	1%	1%	0%	0%					
Certified Humane (Raised and Handled)	32%	29%	35%	42%	50%					
Certified Organic	34%	28%	40%	67%	80%					
Global Animal Partnership	17%	15%	19%	17%	20%					
American Grassfed Certified	16%	15%	16%	25%	30%					
Certified Grassfed by A Greener World	2%	2%	2%	0%	0%					
Certified Grassfed by Food Alliance	4%	5%	4%	8%	0%					
100% Grassfed Certified by PCO	3%	3%	3%	4%	0%					
Certified Responsible Antibiotic Use (CRAU) chicken and turkey standard	27%	25%	30%	50%	50%					
USDA Process Verified Program (PVP) Label Claims such as Raised Without Antibiotics or No Antibiotics Ever	74%	74%	75%	96%	100%					
Other	21%	25%	18%	21%	20%					

Better meat metric	All	Small	Large	Top 25	Circle
Of the 175 facilities that provided spend numbers for sustainably-produced meat/poultry:					
Median percent spend on sustainably-produced meat/poultry	23%	20%	25%	38%	60%

Local food purchasing	All	Small	Large	Top 25	Circle
Encouraged their food suppliers (including distributors and GPOs) to improve tracking and traceability of local and sustainable foods and beverages in their ordering, invoicing, and reporting systems	82%	80%	84%	100%	100%
Purchased locally grown and produced foods and beverages	82%	77%	88%	100%	100%
Of the 272 facilities indicating they purchased local food and beverages, these are the methods used:					
On contract with GPO	56%	50%	62%	80%	90%
On contract with food service management company	35%	35%	35%	36%	20%
Greenhealth Exchange (GX)	1%	1%	1%	4%	20%
Food hub or aggregator	6%	4%	8%	8%	20%
Farm-direct purchasing	10%	8%	11%	24%	50%
Farmer cooperative	9%	5%	13%	24%	40%
Local produce vendors	42%	31%	51%	68%	100%
Other	13%	15%	11%	48%	20%

Local food metric	All	Small	Large	Top 25	Circle
Of the 128 facilities providing valid data for local food purchasing:					
Median percent spend on local food purchases	6%	7%	6%	16%	27%
Total dollars spent on local food and beverage purchasing in 2019 (by all facilities reporting valid, separate spend data*)	\$30,872,321				
Note: Only facilities that indicated they were successfully able to separate spend numbers for local and sustainable food and beverage purchases were used in the percent and total spend analysis.					

Sustainable food purchasing	All	Small	Large	Top 25	Circle					
Encouraged their food suppliers (including distributors and GPOs) to improve tracking and traceability of local and sustainable foods and beverages in their ordering, invoicing, and reporting systems	82%	80%	84%	100%	100%					
Purchased sustainably grown and produced foods and beverages	75%	67%	83%	100%	100%					
Of the 248 facilities indicating they purchased sustainably grown and produced food and beverages, these are the categories prioritized:										
Produce (All forms: fresh, whole or minimally-processed; frozen; canned)	64%	61%	66%	84%	90%					
Meat and poultry	61%	61%	60%	92%	100%					
Seafood	51%	53%	49%	60%	60%					
Dairy (including fluid milk)	54%	55%	54%	76%	80%					
Eggs (shelled, fluid and hard boiled)	37%	28%	43%	60%	80%					
Grocery/dry goods	27%	29%	25%	32%	30%					
Beverages	29%	23%	35%	52%	60%					

Sustainable food metrics	All	Small	Large	Top 25	Circle
Of the 144 facilities providing data for sustainable food purchasing:					
Median percent spend on sustainable food purchases	12%	9%	14%	23%	24%
Total dollars spent on sustainable food and beverage purchasing in 2019 (by all facilities reporting spend data*) \$49,868,422					
Note: Only facilities that indicated they were successfully able to separate spend numbers for local and sustainable food and beverage purchases were used in the percent and total spend analysis.					

Food and beverage environments: Education & promotion	All	Small	Large	Top 25	Circle
Strategies utilized to market healthy local and sustainable food options:					
Communication of healthy local and sustainably produced foods through menu labeling	56%	46%	66%	76%	100%
Pricing incentives on healthy local and sustainable food options	33%	31%	37%	52%	80%
Placement of healthy local and sustainable food options	64%	58%	70%	88%	80%
Sampling of healthy local and sustainable food options	50%	43%	58%	64%	70%
Other promotions	42%	36%	47%	72%	100%
We do not yet promote local and sustainable foods	15%	18%	12%	0%	0%
Conducted a facility-wide education campaign that improves the visibility of healthier, sustainable food	78%	75%	81%	96%	100%
Methods used to educate on healthier/sustainable food:					
Cafeteria signage	81%	78%	85%	96%	100%
Internal newsletters	56%	52%	60%	84%	80%
Featured events	65%	58%	73%	84%	90%
Catering	26%	20%	34%	44%	80%
Patient trays	35%	36%	34%	44%	70%
Other	29%	23%	34%	44%	60%

Tap water access and healthy beverages	All	Small	Large	Top 25	Circle
The following activities have been implemented to increase access to tap water and to promote the purc	hasing of healthie	er beverages:			
Eliminated bottled water from patient menus and cafeterias	17%	22%	12%	28%	30%
Installed filtered water stations, 'spa water' and/or installed water bottle filling stations throughout the facility or in cafeterias	77%	77%	78%	92%	90%
Provided free 'spa water' or pitchers at functions and meetings instead of bottled water	62%	56%	68%	80%	80%
Provided and promoted reusable beverage containers	55%	45%	65%	92%	80%
Changed the relative price of healthy vs. unhealthy beverages to make healthy choices more affordable and desirable	34%	31%	39%	56%	70%
Prioritized the placement of healthier beverages in coolers and at fountain stations	53%	46%	60%	68%	70%
Other	18%	17%	20%	40%	40%



Healthy beverage metric	All	Small	Large	Top 25	Circle	
Actively worked to increase healthy beverage options in alignment with Practice Greenhealth's Healthier Beverages Goal	82%	78%	87%	100%	100%	
Of the facilities reporting beverage purchasing data:						
Median percent healthy beverage spend	58%	60%	57%	67%	80%	
Total dollars spent on healthy beverages in 2019 (by all facilities reporting valid spend data)	\$33,714,282					

ealthy food access and community benefit	All	Small	Large	Top 25	Circle
rategies to increase access to healthy food:					
Hosted local farmers market	49%	36%	62%	76%	70%
Hosted on-site community supported agriculture (CSA) food box program for patients, employees, and/or community residents	29%	24%	34%	48%	60%
Supported on-site hospital farm and/or food-producing garden	23%	23%	23%	60%	70%
Supported off-site community garden or farm	20%	18%	21%	36%	70%
Developed and offered a fruit and vegetable prescription program	13%	13%	13%	40%	40%
Conducted food insecurity screenings	32%	29%	35%	76%	90%
Created food based interventions as part of community benefit program (nonprofit hospitals)	20%	16%	24%	52%	70%
Other	31%	30%	32%	56%	70%
rategies to utilize community benefit to promote healthy food access/healthy food systems in the comm	nunity:				
Financial investments	15%	12%	18%	40%	70%
Grants	12%	8%	14%	28%	30%
Staff time	45%	41%	49%	80%	100%
In-kind support	21%	19%	22%	36%	60%
We do not have a community benefit requirement	10%	9%	11%	16%	0%
We do not engage in these activities					
Do not know					

Food serviceware: Purchasing and disposal	All	Small	Large	Top 25	Circle
Areas where reusable food serviceware was used:					
Cafeteria dine-in	41%	45%	38%	56%	70%
Cafeteria to-go	14%	15%	12%	24%	40%
Patient tray	90%	90%	91%	96%	100%
Catering	44%	39%	48%	56%	80%
Other retail outlets	4%	2%	6%	20%	20%
Virtually eliminated polystyrene (Styrofoam) purchase and usage in food service	66%	64%	68%	76%	90%
Offered the option to recycle in the cafeteria as part of a commingled or other recycling program	74%	73%	74%	100%	90%
Removed plastic straws from retail and catering outlets	45%	40%	50%	56%	90%
Purchased certified commercially compostable single-use food serviceware (such as certified by Biodegradable Products Institute (BPI))	60%	55%	63%	64%	80%
Of the 198 facilities that purchased compostable food serviceware, the following are methods being	used for disposal:			<u>'</u>	
On-site digestion	4%	2%	5%	19%	13%
On-site compost	5%	3%	5%	0%	0%
Off-site digestion	7%	7%	7%	6%	0%
Off-site compost	29%	24%	33%	50%	38%
Landfill	71%	79%	63%	50%	63%
Less food to landfill	All	Small	Large	Top 25	Circle
Working to reduce food waste	81%	79%	83%	100%	100%
Of the 268 facilities working to reduce food waste:					
Have a food waste reduction plan or policy that is implemented and tracked	54%	50%	58%	76%	90%

Food waste diversion from landfill	All	Small	Large	Top 25	Circle
Undertaken any efforts to divert food waste from the landfill or incinerator	52%	41%	62%	88%	100%
Of the 172 facilities that have undertaken efforts to divert food waste from the landfill and	incinerator, the following activit	ies were utilized:			
Composting	57%	51%	60%	64%	70%
Digestion	14%	9%	18%	27%	20%
Donation	36%	31%	37%	32%	50%
Animal feed	9%	13%	6%	14%	10%
Other	17%	21%	13%	23%	30%
Of the 60 facilities engaging in food donation to divert food waste:	'				
Had a food waste donation policy/plan that is implemented and tracked	50%	48%	47%	86%	60%
Food waste diversion metrics	All	Small	Large	Top 25	Circle
Of the 135 facilities providing any data for food waste diversion:					
Median food waste diverted from landfill (tons)	20.7	6.7	40.2	54.1	99.2
Of the 89 facilities providing data for composting:			1		
Median food waste compost (tons)	26.9	6.8	50	56.3	83.3
Of the 21 facilities providing data for digestion:					
Median food waste digested (tons)	24.8	12.3	42.3	53.3	51.3
Of the 47 facilities providing data for food donation tons:					
Median food donated (tons)	2.6	1.1	2.8	2.8	1.5
Of the 33 facilities providing tons data for food donation value:					
Median dollar (\$) value of food donated	\$10,000	\$5,500	\$14,226	\$12,058	\$12,435
Of the 14 facilities providing data for food animal feed:					
Median food diverted for animal feed (tons)	5	1.5	75.7	15.3	108.5

Waste segregation, management and recycling in the OR	All	Small	Large	Top 25	Circle
Processes in place to reduce and divert waste in the operating room:					
Diverted pre-incision (prior to case) waste from regulated medical waste stream into solid waste or recycling stream	77%	73%	82%	100%	100%
Segregated non-infectious solid waste from the regulated medical waste stream during the procedure	75%	77%	74%	92%	100%
Segregated non-infectious solid waste from the regulated medical waste stream after the procedure	59%	58%	60%	80%	67%
Recycled clinical/medical plastics in the OR	43%	43%	44%	80%	89%
Fluid management	All	Small	Large	Top 25	Circle
Utilized a fluid management system that does not use disposable suction canisters as a means of collecting and disposing fluid medical waste (i.e., mobile cart, reusable canister systems, or direct-to-drain system)	69%	67%	71%	92%	100%
Of the 230 facilities that utilized a reusable canister fluid management system:					
Being utilized for fluid management in more than 75% of ORs	89%	90%	87%	96%	89%
Avoided annual waste and cost Savings from reusable canister fluid management systems	All	Per facility (median)	Per OR (median)	Per facility (average)	Per OR (average)
Avoided waste (tonnage)	7,419	12	1	98	4
Avoided waste disposal fees from disposable canisters	\$2,726,641	\$13,860	\$1,221	\$38,952	\$2,608
Avoided purchase cost of disposable canisters	\$2,414,326	\$20,961	\$1,855	\$36,035	\$2,088
Avoided purchase cost of chemical solidifiers (if applicable)	\$1,331,802	\$11,700	\$887	\$35,995	\$1,821
Total cost savings from fluid management system	\$6,472,769	\$33,560	\$3,389	\$84,062	\$5,063



Clinical plastics recycling	All	Small	Large	Top 25	Circle
Recycled clinical/medical plastics in the OR	43%	43%	44%	80%	89%
Of the 143 facilities that recycled clinical plastics in the OR:					
Tracked the weight of clinical/medical plastics recycled in the OR	26%	23%	29%	55%	75%
Of the facilities that recycled clinical plastics in the OR, the following types of plastics are recycled:					
Irrigation bottles	92%	90%	93%	100%	100%
Trays	65%	72%	59%	90%	88%
Basins	61%	55%	66%	85%	88%
Rigid inserts	55%	59%	52%	80%	75%
Blue wrap	47%	35%	58%	55%	75%
Skin prep solution bottles	42%	38%	46%	75%	63%
Overwraps	27%	21%	32%	20%	63%
Blister packs/shrink wrap	25%	27%	23%	20%	50%
Peel pouches	24%	21%	28%	20%	50%
Other	21%	24%	17%	25%	38%
Medication vials and caps	20%	18%	21%	25%	25%
IV bags, tubing and outer plastic wrap	20%	20%	20%	20%	25%
Urinals/bedpans	15%	18%	13%	30%	0%
Syringe casings	15%	11%	18%	30%	25%
Tyvek	14%	13%	15%	15%	25%
Light handle covers	13%	11%	14%	10%	25%
Oxygen tubing	7%	7%	7%	0%	0%
Corrugated respiratory tubing	7%	6%	8%	5%	0%
Perfusion tubing	4%	6%	3%	0%	0%
Respiratory face masks	3%	4%	3%	0%	0%
Medical device reprocessing	All	Small	Large	Top 25	Circle
Implemented a medical device reprocessing program with an FDA-approved third party reprocessor	73%	70%	76%	68%	89%

Medical device reprocessing aggregate data	Total
Total weight of devices collected (lbs.)	1,584,857
Total weight of devices collected (tons)	792
Total avoided waste disposal costs	\$433,591
Total dollars spent on purchase of reprocessed devices	\$37,940,723
Total dollars saved annually through medical device reprocessing purchasing program	\$38,168,090
Total dollars saved through SUD reprocessing including both avoided waste disposal costs and reduced purchasing cost	\$38,601,681

Medical device reprocessing medians	All
Pounds of reprocessed devices collected per OR procedure (lbs.)	0.64
Pounds of reprocessed devices collected per OR (lbs.) per year	422

Annual cost-savings from medical device reprocessing	Per facility	Per OR
Median cost-savings from medical device reprocessing program	\$102,702	\$7,120
Median cost-savings from avoided waste disposal costs from devices collected for reprocessing	\$1,932	\$128
Median cost-savings on reprocessed devices from both purchasing reprocessed devices and avoided waste disposal	\$80,910	\$6,206



Reprocessed devices: rate of collecting and purchasing	Collect only	Purchase only	Collect and purchase
Pneumatic tourniquet cuffs	19%	0%	62%
Pulse oximetry probes and sensors	30%	1%	47%
Bits/burs/blades	39%	3%	43%
DVT sleeves/Sequential compression	39%	1%	40%
Ultrasonic scalpels	36%	1%	40%
Arthroscopic wands and shavers	42%	2%	39%
Trocars	42%	1%	36%
Laparoscopic scissors/scissor tips	31%	2%	35%
Ligasure sealers/dividers	48%	0%	34%
Lateral transfer device (Hovermatt)	14%	1%	33%
EP catheters	5%	2%	32%
Laparoscopic needle drivers/suture passers	37%	2%	31%
Laparoscopic dissectors	33%	2%	29%
Laparoscopic graspers	26%	1%	29%
ECG leads and cables	21%	2%	23%
EKG cables and lead wires	14%	3%	23%
EP cables	9%	1%	21%
EP diagnostic catheters	11%	2%	21%
Reamers	18%	2%	16%
Ultrasound catheters	11%	1%	15%
Catheter introducer sheaths	18%	1%	11%
External fixation devices	27%	2%	9%
ICE catheter	4%	1%	8%
Multiclip appliers	30%	1%	7%
Chisels	13%	1%	3%
Fall alarms	16%	2%	3%
Cold biopsy forceps	16%	1%	2%
Hot biopsy forceps	10%	2%	2%
Note: This table is sorted by the percent of facilities that both collected and purchased different devices for r	eprocessing.		

OR kit reformulation	All	Small	Large	Top 25	Circle
Reformulated custom procedure packsremoving supplies not typically usedto reduce purchase and disposal fees for excess supplies, and decrease the environmental impact of manufacture and disposal of those supplies	85%	86%	83%	96%	100%
Had a process in place to regularly compare, review and update surgeon preference cards for the same type of procedure	87%	89%	85%	96%	100%
Of the 185 facilities that indicated they reformulated OR kits and provided data:					
Median percent of kits reformulated*	100%	100%	100%	100%	100%
Note: A median of 100% for OR kit reformulation is an indication that hospitals that chose to reformulate kits tended to reformulate all of them					

Annual cost-savings from OR kit reformulation	Per facility	Per OR
Median avoided purchase costs	\$3,600	\$1,208
Median avoided waste disposal costs	\$63,457	\$188
Aggregate annual cost-savings from OR kit reformulation (for all facilities providing data)	\$2,315,661	



Reusable items	All	Small	Large	Top 25	Circle
Purchased and used reusable surgical items where environmentally and clinically preferable	87%	86%	89%	96%	100%
Of the 289 facilities that use reusable surgical items, the following items are indicated as being used	d more that 75% of the	e time:			
Patient positioning devices	71%	71%	71%	92%	89%
Patient linens (gowns, sheets, bath blankets, pillow cases)	68%	69%	68%	75%	100%
Safety belts	47%	51%	44%	71%	89%
Laryngoscope blades/handles	36%	29%	44%	67%	67%
Blood pressure cuffs	34%	31%	38%	58%	44%
Surgical basins, pitchers and medicine cups	32%	33%	30%	58%	89%
Pulse oximetry sensors	31%	28%	34%	38%	44%
Surgical towels	29%	28%	30%	71%	78%
Pneumatic compression tourniquets	24%	24%	25%	38%	44%
Light handles	23%	22%	23%	25%	44%
Velcro straps	23%	25%	22%	42%	78%
Trocars	21%	20%	22%	25%	22%
Other	18%	17%	19%	38%	56%
Surgical gowns	18%	18%	18%	38%	44%
Cautery handles and cords	16%	13%	19%	21%	22%
Patient warming devices	15%	16%	15%	38%	11%
Grounding pads	14%	16%	13%	17%	33%
Laryngeal mask airways (LMA)	11%	8%	15%	33%	33%
Isolation gowns	10%	9%	12%	33%	44%
Sterilization wrap	9%	9%	10%	13%	11%
Surgical drapes	9%	7%	11%	33%	33%
Back table covers	7%	7%	7%	21%	22%
Anesthesia circuits	6%	4%	8%	8%	0%
Visitor jump suits	6%	4%	7%	4%	11%
Mayo stand covers	4%	4%	4%	4%	0%
Endotracheal tubes (ETT)	1%	1%	2%	4%	0%



Annual cost-savings from reusable surgical supplies	
Median cost-savings from reusable surgical supplies per facility	\$9,000
Median cost-savings from reusable surgical supplies per OR	\$2,411
Aggregate cost-savings from reusable surgical supplies (for all facilities reporting data)	\$772,013

All	Small	Large	Top 25	Circle		
85%	86%	84%	100%	100%		
Of the 180 facilities using reusable rigid sterilization containers who provided data:						
70%	70%	70%	72%	63%		

Annual cost-savings from rigid sterilization containersAllMedian cost-savings for avoided disposable bluewrap purchase per facility\$18,398Median cost-savings for avoided waste disposal fees per facility\$858Median cost-savings from rigid sterilization containers per facility\$18,398Median cost-savings from rigid sterilization containers per OR\$1,742

Aggregate cost-savings from rigid sterilization containers (for all facilities reporting savings)

Energy management in the OR	All	Small	Large	Top 25	Circle
Programmed the HVAC system to reduce air changes per hour (HVAC setback) when the ORs are unoccupied to reduce energy consumption	46%	41%	50%	64%	78%
Of the 151 facilities that utilized HVAC setback, these mechanisms were used:					
Building automation system	77%	74%	79%	94%	100%
Occupancy sensors	43%	35%	49%	75%	57%
Scheduling system	38%	31%	44%	56%	43%
Mushroom button	9%	7%	9%	6%	14%
Other	8%	6%	10%	13%	14%
Utilized LED surgical lighting	80%	77%	84%	88%	89%
Set back or turned down ambient lighting to reduce energy consumption when the OR is unoccupied and not in use	79%	86%	73%	88%	89%

\$3,382,185

Energy metrics in the OR	All	Small	Large	Top 25	Circle
Median percent of ORs with HVAC setback for those facilities that use HVAC setback	100%	100%	90%	100%	70%
Percentage of ORs in the dataset that have HVAC setback in place	34%	32%	35%	56%	40%
Median percent of ORs with LED surgical lighting for those facilities that use LED surgical lighting	100%	100%	100%	100%	100%
Percentage of ORs in the dataset with LED surgical lighting	67%	62%	68%	89%	62%

Note: A median of 100% for HVAC setback and LED surgical lighting means that if facilities utilized these technologies they tended to use them for 100% of their ORs. That said, Practice Greenhealth suspects the HVAC setback numbers may be overreported—as many hospitals tend to keep 1-2 emergency ORs online and ventilated at full air changes for emergency cases at night.

Annual cost-savings for energy reduction in OR	All
Median energy cost-savings from HVAC setback per OR	\$3,240
Median energy cost-savings from HVAC setback per facility	\$33,894
Median energy cost-savings from LED surgical lighting per OR	\$166
Median energy cost-savings from LED surgical lighting per facility	\$1,662
Aggregate cost-savings for energy reduction in OR (HVAC+LED) (for all facilities reporting cost-savings)	\$20,873,245

Inhaled anesthetic use	All	Small	Large	Top 25	Circle
Purchased or had in-house pharmacy prepare pre-filled syringes (not including boxed bristojets) to minimize waste of unneeded pharmaceuticals	80%	75%	86%	92%	89%
Of the 262 facilities that utilize pre-filled syringes, the following types are purchased:					
Atropine	63%	60%	66%	74%	88%
Calcium chloride	61%	61%	61%	65%	75%
Ephedrine	60%	59%	62%	78%	75%
Epinephrine	68%	67%	68%	74%	75%
Ketamine	37%	35%	40%	39%	25%
Lidocaine	65%	63%	66%	61%	88%
Phenylephrine	53%	45%	60%	78%	75%
Succinylcholine	40%	36%	44%	61%	63%
Propofol	12%	8%	15%	26%	13%
Other	58%	58%	57%	74%	88%
Purchased the smallest pharmaceutical vials possible to minimize pharmaceutical wastage	81%	79%	84%	100%	100%



Reduction strategies for anesthetic gases	All	Small	Large	Top 25	Circle
Provided or held anesthesia staff education on environmental impacts of inhaled anesthetics and reduction strategies for clinicians	70%	68%	73%	92%	100%
Removed desflurane from its formulary	22%	24%	20%	32%	33%
Of those 71 facilities that did not remove desflurane from the formulary:					
Removed desflurane vaporizers from the operating room to minimize use	32%	25%	38%	47%	50%

Capture systems for waste anesthetic gases	All	Small	Large	Top 25	Circle
Utilized a supplemental waste anesthetic gas capture system to prevent waste anesthetic gases from venting to the outside air	23%	21%	24%	24%	22%

Greenhouse gas emissions (GHGs) from inhaled anesthetics	Total	Median Per OR		
Volume of inhaled anesthetic agents purchased (mL)				
Sevoflurane	52,031,301	10667		
Isoflurane	7,954,900	720		
Desflurane	13,362,732	2345		
Nitrous oxide (pounds)	530,687	111		
Total GHG emissions from inhaled anesthetics in metric tons of carbon dioxide equivalent (MTCO2e)				
GHGs from sevoflurane in MTCO2e	10,278	2.1		
GHGs from isoflurane in MTCO2e	6,069	0.5		
GHGs from desflurane in MTCO2e	49,724	8.7		
GHGs from nitrous oxide in MTCO2e	71,735	15.0		
Total GHG emissions from all inhaled anesthetics in MTCO2e	137,806	31.0		
Of the 90 facilities that achieved a reduction in GHGs from inhaled anesthetics:				
Median % reduction in GHGs from inhaled anesthetics from baseline year 33%				

Median cost-savings for key Greening the OR programs	Per OR	Per Facility
Collection and purchase of reprocessed medical devices (SUDs)	\$6,206	\$80,910
Reusable canister fluid management systems	\$3,389	\$33,560
OR kit reformulation	\$1,098	\$8,684
Reusable sterilization containers	\$1,742	\$18,398
HVAC setback	\$2,500	\$33,894
Reusable surgical supplies	\$2,411	\$9,000
LED surgical lighting	\$121	\$1,662

Total annual cost-savings from Greening the OR initiatives (for all facilities reporting cost-savings))	\$53,381,887
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Infrastructure for EPP	All	Small	Large	Top 25	Circle
Engaged with supply chain leadership on environmentally preferable purchasing activities	85%	86%	84%	96%	100%
Of the 280 facilities that engaged with supply chain leadership on EPP, the following is the level of engage	jement:				
Health system-level	86%	87%	85%	83%	98%
Facility-level	83%	84%	82%	92%	100%
Group purchasing organization(GPO)	70%	66%	73%	88%	98%
Made the evaluation of purchases based on environmental criteria a responsibility or deliverable within an existing job role	64%	65%	62%	84%	77%
Trained supply chain, procurement staff and/or those responsible for purchasing on sustainable procurement	71%	73%	69%	100%	100%
Wrote any internal or external articles or documentation describing EPP successes (such as EPP case studies)	21%	19%	22%	52%	91%
Had an EPP or sustainable procurement policy that identified specific environmental attributes of concern to be considered when making purchasing decisions	69%	73%	64%	100%	100%
Of the 263 facilities that have an EPP or sustainable procurement policy, the following are attributes of co	oncern indicated i	n the policy:			
Energy efficiency	93%	93%	93%	96%	98%
Water efficiency	92%	93%	91%	92%	98%
Excessive packaging	82%	78%	85%	92%	100%
Recycled content of product	93%	90%	97%	96%	100%
Recyclability	91%	88%	93%	92%	100%
Avoiding chemicals of concern	95%	93%	96%	100%	100%
Reusable (vs. single-use) products	81%	78%	85%	92%	98%
Waste minimization	93%	92%	95%	100%	98%
Whether the product becomes or generates hazardous waste	80%	79%	81%	80%	94%
End of life product management (e.g., take back)	84%	82%	85%	92%	100%
Green building products	79%	79%	79%	92%	62%

Contracting for environmentally preferable products	All	Small	Large	Top 25	Circle
Set any organizational EPP goals	69%	71%	67%	100%	100%
Created a formal process to review upcoming contracts for sustainable procurement opportunities	53%	52%	55%	88%	43%
Sustainability champion represented on contracts/procurement/value analysis review teams	60%	57%	64%	92%	45%
Contract team included scoring and weighting of sustainability criteria in at least one contract	51%	49%	54%	72%	87%
Assessed the total cost of ownership or life cycle costing to identify cost savings and award a contract	47%	46%	48%	76%	45%
Included environmental criteria in the sourcing process (such as through the RFI/RFPs, value analysis, or data provided by your GPO)	86%	84%	88%	100%	100%

Incorporating environmental criteria into the sourcing process	All	Small	Large	Top 25	Circle	
Of the 281 facilities that indicated they are including environmental criteria in the sourcing process, these were the methods utilized:						
With product evaluation/value analysis team	73%	74%	74%	96%	100%	
In one or more RFIs/RFPs in 2019	70%	72%	69%	76%	98%	
In organization's product standards	47%	47%	48%	64%	89%	
Ensured inclusion in a GPO contract or other contract in 2019	59%	63%	56%	72%	96%	
In final contract language with identified goals and metrics	46%	50%	43%	48%	87%	
In business review meetings to evaluate vendor's progress meeting EPP goals	57%	57%	57%	84%	100%	

GPO purchasing	All	Small	Large	Top 25	Circle
Had a representative on a GPO Advisory Board or committee that makes contracting decisions (with an external GPO or your own GPO)	65%	64%	69%	84%	96%
Provided its GPO comments or regular feedback about its EPP needs (through a sustainability committee or other forum)	52%	51%	53%	92%	100%
Of the 170 facilities that provided their GPO comments or regular feedback:					
Feedback to its GPO resulted in any improved/additional EPP products or services offered	66%	61%	70%	96%	49%

at least 30% post-consumer recycled content?

Direct purchasing	All	Small	Large	Top 25	Circle
Engaged suppliers in its EPP work	76%	75%	77%	96%	100%
Purchased any environmentally preferable products or services	80%	79%	81%	96%	100%
Of the 260 facilities that indicated what type of environmentally preferable products or services, the follows:	owing categories v	were purchased:			
Building furnishings	27%	24%	29%	38%	83%
Building, facilities, maintenance	22%	21%	22%	42%	30%
Cleaners	29%	26%	33%	42%	49%
Computers, Telecom, IT equipment	35%	37%	33%	79%	72%
Dental	0%	0%	1%	0%	0%
Fleet	8%	7%	9%	13%	4%
Food	24%	21%	27%	58%	91%
Food service equipment and supplies	17%	18%	15%	8%	53%
Laboratory	3%	2%	5%	13%	6%
Landscape	5%	4%	5%	0%	0%
Medical supplies	27%	26%	28%	17%	0%
Office supplies and equipment	32%	33%	32%	33%	72%
Personal care	5%	5%	6%	4%	0%
Pharmaceuticals	5%	8%	2%	13%	0%
Sterile processing, sterilization, high-level disinfection	6%	6%	6%	17%	4%
Surgical/operating room	11%	9%	14%	17%	9%
Other	7%	7%	8%	8%	2%
Measuring performance	All	Small	Large	Top 25	Circle
Tracked and reported metrics regarding green spend (what is spent on environmentally preferable products)	76%	78%	74%	96%	100%
Worked with suppliers to reduce the environmental impact of supply transport and deliveries	68%	70%	67%	96%	100%
Paper purchasing	All	Small	Large	Top 25	Circle
Purchased copy paper made with post-consumer recycled content	78%	80%	75%	100%	100%
Limited options within its purchasing system/catalog to ensure that all white copy paper purchased contains	50%	57%	41%	64%	77%

Paper spend	All	Small	Large	Top 25	90 <sup>th</sup> percentile
Percent green spend on office paper	100%	100%	98%	100%	100%
Percent green spend on office paper >=30% recycled*	99%	100%	97%	100%	100%
Note: Paper with less than 30% post-consumer recycled content is not considered a sustainable product. Only facilities with greater than zero percent green spend are included.					

Electronics purchasing	All	Small	Large	Top 25	Circle
Purchased EPEAT-registered products in alignment with Practice Greenhealth's Greener Electronics Goal	78%	77%	78%	100%	100%
Of the 258 facilities purchasing EPEAT-registered products, the following types of products were purchased	sed:				
EPEAT-registered computers, monitors, and laptops	95%	96%	94%	96%	100%
EPEAT-registered imaging equipment (copiers, printers, fax, MFD, scanners, digital duplicators, mailing machines)	88%	90%	87%	84%	100%
EPEAT-registered televisions	62%	66%	59%	48%	60%
EPEAT-registered mobile phones	34%	33%	36%	56%	53%

EPEAT spend metrics	All
Median percent green spend on EPEAT-registered computers, monitors and laptops	100%
Median percent green spend on EPEAT-registered imaging equipment (copiers, printers, fax, MFD, scanners, digital duplicators, mailing machines)	100%
Median percent green spend on EPEAT-registered televisions	100%
Median percent green spend on EPEAT-registered mobile phones	100%
Median percent green spend on all EPEAT-registered product categories	100%
Note: A median of 100% indicates that if the facility is purchasing EPEAT-registeredelectronics; they tend to be purchasing all EPEA products in a particular category.	T-registered

Dollars spent on EPEAT-registered electronics	All
Dollars spent on EPEAT-registered computers, monitors and laptops	\$166,796,695
Dollars spent on EPEAT-registered imaging equipment	\$23,761,538
Dollars spent on EPEAT-registered televisions	\$892,823
Dollars spent on EPEAT-registered cell phones	\$3,174,772
Total EPEAT spend by all facilities in 2019	\$194,625,828

Transport and deliveries	All	Small	Large	Top 25	Circle	
Work with suppliers to reduce the environmental impact of supply transport and deliveries	68%	70%	67%	96%	100%	
Of the 223 facilities that work with suppliers, these strategies were used to reduce the environmental impact of supply deliveries:						
Request vendors become an EPA SmartWay Shipper Partner	24%	26%	22%	42%	66%	
Use alternative-fueled vehicles for supply delivery	23%	19%	27%	50%	15%	
Use low emitting or fuel efficient vehicles for supply delivery	29%	28%	30%	54%	21%	
Reduced days of delivery (e.g., no deliveries on Monday)	54%	57%	53%	63%	89%	
Implemented a no idling policy	45%	50%	42%	71%	53%	
Minimizing packaging for transportation efficiencies	50%	50%	51%	58%	32%	
Other	21%	24%	16%	21%	6%	

Summary of EPP activities	All	Small	Large	Top 25	Circle
Implemented a reusable sharps container program	72%	63%	82%	76%	96%
Established a contract with a certified electronics waste/recycling vendor that is certified to e-Stewards (or subcontractors that use e-Stewards certified vendors) for legal and environmentally responsible electronics (or e-waste) management and recycling	63%	56%	68%	68%	87%
Have chemical or purchasing policies that identify and avoid specific chemicals of concern contained in products that may be hazardous to human health and the environment	83%	86%	80%	100%	100%
Utilize any Green Seal or UL ECOLOGO-certified cleaning products	91%	91%	91%	100%	100%
Eliminated DEHP and PVC from at least two product lines	63%	58%	68%	96%	57%
Actively working to purchase furnishings and furniture that eliminate the use of all of the following target chemicals: flame retardants, formaldehyde, perfluorinated compounds, PVC (vinyl), and antimicrobials, in alignment with Practice Greenhealth's Healthy Interiors Goal	58%	56%	60%	100%	100%
Implemented a single-use device (SUD) reprocessing program by an FDA-approved third party reprocessor	73%	70%	76%	68%	94%
Purchased reusable surgical items where environmentally and clinically preferable	87%	86%	89%	96%	98%
Preferentially purchased sustainably-produced meat and poultry	66%	61%	70%	96%	98%
Purchased locally grown and produced foods and beverages	82%	77%	88%	100%	96%
Purchased sustainably grown and produced foods and beverages	75%	67%	83%	100%	100%
Purchased certified commercially compostable food serviceware (such as certified by Biodegradable Products Institute (BPI)) where single-use/disposable items are necessary	60%	55%	63%	64%	85%
Generated or purchased renewable energy	36%	30%	40%	60%	28%
Purchased energy-efficient equipment that is ENERGY STAR labeled	68%	66%	71%	88%	96%
Purchased green vehicles for transportation purposes	40%	39%	42%	80%	21%
Integrated any green/sustainable aspects into Master Specifications for all new buildings/renovations	76%	79%	73%	100%	100%
Required its designers, builders and contractors to have experience with LEED or other green building rating systems	63%	64%	63%	96%	94%
Added language to contract specifications that building contractors will follow LEED or GGHC requirements and provide documentation	62%	64%	60%	88%	85%
Consciously selected flooring, wall coverings, paints, materials, finishes, furniture or exterior materials that avoid chemicals of concern	68%	62%	73%	100%	98%

Used other software to benchmark the facility's energy performance

Energy demographics	All	Small	Large	Top 25	Circle
Generated or purchased renewable energy	36%	30%	40%	60%	80%
Put a combined heat and power/cogeneration project into place in the last five years	7%	5%	9%	16%	40%
Had an onsite laundry	18%	17%	19%	28%	40%
Had an onsite data center that requires a constant power load of 75 kW or more	40%	30%	52%	48%	70%
Energy efficiency and planning strategy	All	Small	Large	Top 25	Circle
Actively worked to reduce energy use, in alignment with Practice Greenhealth's Leaner Energy Goal	69%	68%	69%	96%	100%
Had a dedicated energy manager role	79%	80%	77%	96%	90%
Had a written plan to reduce energy use over time with timelines and goals	68%	70%	65%	100%	100%
Developed a strategic energy master plan	35%	33%	36%	64%	90%
Conducted a baseline energy audit for the institution in the past five years	65%	64%	66%	92%	90%
Engaged a retrocommissioning firm to optimize building performance	53%	52%	53%	80%	90%
Conducted continuous commissioning	51%	54%	48%	84%	90%
Purchased energy-efficient equipment in 2019 that is ENERGY STAR-labeled	68%	66%	71%	88%	100%
Utilized submeters to better monitor energy efficiency opportunities	44%	37%	52%	76%	90%
When an ENERGY STAR label is not available for a given technology, considered energy performance as a part of cost of operation for the product	82%	82%	82%	100%	100%
ENERGY STAR-labeled product purchases	All	Small	Large	Top 25	Circle
Total spend on top 3 categories of ENERGY STAR-labeled products	\$78,251,901	\$5,604,882	\$66,041,987	\$16,264,471	\$11,377,091
Median spend on top 3 categories of ENERGY STAR-labeled products	\$120,566	\$60,000	\$407,894	\$322,453	\$223,290
Energy tracking and monitoring	All	Small	Large	Top 25	Circle
Used ENERGY STAR Portfolio Manager	80%	74%	87%	100%	100%
Of the 264 applicants that indicated they use ENERGY STAR Portfolio Manager:					
Benchmarked using ENERGY STAR's Portfolio Manager	81%	86%	77%	92%	100%
Of those 63 applicants indicated they did NOT use ENERGY STAR Portfolio Manager:			,		

62%

71%

37%

N/A

N/A

Median energy metrics	All	Small	Large	Top 25	Circle
Energy use intensity (EUI) in kBtus per sq foot	217	207	222	227	205
ENERGY STAR Portfolio Manager EUI	226	221	232	227	221
Weather-normalized EUI (from ENERGY STAR Portfolio Manager)	230	226	233	245	218
ENERGY STAR score	58	52	67	52	85
Percent reduction in energy use intensity from baseline year (of those that reduced)	9%	9%	10%	10%	19%
Percent reduction in energy use intensity from previous year (of those that reduced)	4%	4%	3%	4%	6%

Practice Greenhealth compared to 2012 CBECS climate zones data	Very cold/ Cold/Subarctic	Mixed-humid	Hot-dry/ Mixed-dry/ Hot-humid	Marine
CBECs number of hospitals reporting	118	110	100	15
Practice Greenhealth number of hospitals reporting	74	46	26	19
CBECs median energy use intensity (in kBtus/sq ft)	240	236	215	209
Practice Greenhealth median energy use intensity (in kBtus/sq ft)	223	228	189	196

Normalized energy use	All	Small	Large	Top 25	Circle
Total kBtus per square foot (EUI)	217	207	222	227	205
Total kBtus per adjusted patient day (APD)	1,460	1,840	1,280	1,340	1,270
Total kBtus per onsite FTE*	74,100	79,000	70,900	66,500	72,300
Total kBtus per operating room (OR)	15,400,000	15,700,000	15,200,000	16,200,000	13,300,000
Total kBtus per patient day	3,710	5,890	2,720	3,000	2,540
Total kBtus per licensed bed	732,000	948,000	636,000	747,000	713,000
Total kBtus per OR procedure	25,000	28,700	23,700	21,800	26,400
Total kBtus per staffed bed	885,000	1,221,000	727,000	861,000	730,000
Note: Total on-site full-time equivalents (FTEs) is the sum of FTEs, FTE physicians, FTE medical students, and contracted FTEs					

Energy reduction projects	All	Small	Large	Top 25	Circle
Percent of facilities reporting any energy efficiency projects	39%	34%	44%	88%	100%
Median energy savings per facility (in kBtus)	426,625				
Median energy cost savings per facility (in \$)	\$40,093				
Total energy efficiency savings in kbtus (70 facilities)	127,539,014				
Total energy savings in \$ (83 facilities)	\$9,992,414				



Energy project category	Median energy savings Median cost-savings per per project per project		Number of projects reported with \$ savings
Heating	1,420,800	\$16,184	42
Cooling	4,569,908	\$24,745	45
Water heating	445,397	\$14,149	5
Lighting	285,696	\$7,778	64
Information technology	94,788	\$8,917	8
Other	246,139	\$16,812	36

Renewable energy	All	Small	Large	Top 25	Circle
Percent of facilities reporting any generation or purchase of renewable energy	36%	30%	40%	60%	80%
Median percent of energy portfolio from renewable sources (65 facilities with sufficient data)	2.9%	5.0%	1.9%	9.2%	9.5%
Median percent of onsite renewable energy (45 facilities with sufficient data)	0.6%	1.7%	0.2%	0.1%	0.6%
Median percent of offsite renewable energy (29 facilities with sufficient data)	9.2%	9.2%	7.7%	11.1%	10.0%
Total avoided greenhouse gas emissions from use of renewable energy sources (in MTCO2e)	150 620				

Type of renewable energy	Number of reporting facilities with onsite renewable energy	Number of reporting facilities with offsite renewable energy or RECs
Solar or photo-voltaic	46	11
Geothermal heating and electric	3	0
Biomass	1	3
Wind	0	29
Bio-gas	2	1



Median energy-related greenhouse gas emissions by fuel type (in metric tons of carbon dioxide equivalent-MTCO2e)	Baseline year GHG emissions by energy type	Previous year GHG emissions by energy type	Current Year GHG emissions by energy type
Electricity (location-based)	7,952	8,058	8,010
Natural gas	3,329	3,723	3,906
Fuel oil (#2)	54	64	69
District steam	5,934	6,266	6,958
District hot water	349	92	108
District chilled water-electric driven chiller	6,580	4,901	5,521
District chilled water-absorption chiller using natural gas	19,867	16,013	15,193
District chilled water-engine-driven chiller natural gas	N/A	N/A	N/A
Diesel	17	28	27
Propane	63	72	29
Scope 1 (direct) energy-related GHG emissions total	3,351	3,754	3,884
Scope 2 (indirect) energy-related GHG emissions total	8,540	8,378	8,802

Total energy-related greenhouse gas emissions from fuel type (aggregate for all facilities reporting in MTCO2e)	Baseline year GHG emissions by energy type	Previous year GHG emissions by energy type	Current year GHG emissions by energy type
Electricity (location-based)	1,758,467	1,855,417	2,102,410
Natural gas	924,805	1,054,831	1,130,202
Fuel oil (#2)	46,518	26,933	26,294
District steam	435,376	353,313	364,122
District hot water	13,249	13,718	12,375
District chilled water-electric driven chiller	91,056	96,774	95,700
District chilled water-absorption chiller using natural gas	19,867	16,013	15,193
District chilled water-engine-driven chiller natural gas	0	0	0
Diesel	6,122	7,929	5,958
Propane	1,660	2,636	2,775
Scope 1 (direct) energy-related GHG emissions total	979,086	1,092,331	1,165,229
Scope 2 (indirect) energy-related GHG emissions total	2,318,015	2,335,235	2,589,800



Water planning and reduction strategy	All	Small	Large	Top 25	Circle
Submetered any departments and/or individual pieces of equipment	37%	37%	37%	76%	100%
Actively worked to reduce water use, in alignment with Practice Greenhealth's Less Water Goal	56%	57%	54%	100%	100%
Set measurable goals for the reduction of water use	46%	47%	43%	72%	100%
Had a written plan to reduce water use over time	40%	42%	38%	76%	100%
Conducted a water audit	41%	38%	43%	76%	60%
Benchmarked water usage	65%	65%	64%	88%	100%
Implemented any of the following strategies or technologies for the reuse of non-potable water:	·	`	<u> </u>	`	<u> </u>
Boiler blow-down collection for reuse	14%	13%	14%	20%	10%
Condensate collection for reuse	37%	32%	43%	68%	40%
Gray water reuse system	2%	2%	3%	12%	10%
Rainwater harvesting system	9%	8%	11%	24%	10%
Use of non-potable water for laundry	4%	4%	3%	8%	10%
Other	6%	5%	7%	16%	10%
Purchased any of the following US EPA WaterSense-labeled devices and equipment:	·	`	<u> </u>	`	<u> </u>
Bathroom sink faucets/accessories	53%	52%	55%	80%	70%
Flushing urinals	38%	36%	41%	64%	50%
Flushometer valve toilets	35%	34%	36%	68%	70%
Irrigation controllers	15%	11%	20%	24%	20%
Pre-rinse spray valves	5%	4%	6%	16%	20%
Showerheads	34%	35%	34%	64%	60%
Spray sprinkler bodies	6%	4%	8%	20%	20%
Toilets	37%	37%	39%	64%	60%
Median water use and savings	All	Small	Large	Top 25	Circle
Median water use intensity (gallons per square foot)	42.0	39.3	42.8	42.6	26.4
Cost of water per 1,000 gallons (kgal)	\$6.69	\$5.76	\$7.50	\$7.04	\$8.97



Normalized water consumption	All	Small	Large	Top 25	Circle
Gallons per cleanable square foot	50.8	48.4	54.0	46.7	31.8
Gallons per gross square foot	42.0	39.3	42.8	42.6	26.4
Gallons per total onsite FTEs	14,469	15,435	13,291	12,260	8,991
Million gallons per operating room (OR)	2.8	2.7	3.0	3.0	2.7
Gallons per adjusted patient day (APD)	270	291	265	265	249
Gallons per patient day	640	842	531	545	502
Gallons per staffed bed	153,346	182,552	133,169	159,780	139,789
Gallons per OR procedure	3,842	3,982	3,792	3,774	4,060

Indoor water consumption	All	Small	Large	Top 25	Circle
Median indoor gallons per square foot	40.9	40.5	41.5	41.0	24.8
Median indoor gallons per cleanable square foot	49.2	48.7	50.3	44.8	30.3
Median indoor gallons per FTE	13,609	15,051	12,237	12,125	9,017
Note: Indoor water use could only be calculated accurately for those who either had no irrigation or for those who facilities that irrigated and also provided irrigation data (actual or estimated).					

Irrigated landscapes	All	Small	Large	Top 25	Circle		
Irrigated some landscaped areas	64%	57%	71%	80%	70%		
Used any alternative landscaping methods that reduce the need for irrigation	48%	48%	47%	68%	90%		
Of the 48 facilities that provided data on water savings from alternative landscaping methods:							
Median water savings (gallons) from alternative irrigation	25,000	30,500	13,989	25,000	25,000		
Total gallons of water saved through alternative landscaping (all facilities)	22,122,068	9,468,250	10,653,818	12,502,043	4,307,390		

Water use compared to other industry cohorts	All
Median water use intensity (gal/sq ft) for Practice Greenhealth hospitals (2018)	44.4 gal/sq ft
Median water use intensity (gal/sq ft) for CBECS inpatient health care facilities (2012)	46.3 gal/sq ft
Median water use intensity (gal/sq ft) for Grumman/Butkus health care facilities (2017)	48.1 gal/sq ft

Note: CBECS is the Commercial Building Energy Consumption Survey which is administered by the federal government in 2017. Practice Greenhealth would like to thank Grumman Butkus Associates (GBA) for sharing their data. GBA is an engineering consultancy that has administered an annual energy benchmarking survey in the Midwest since 1995. Water costs and usage were added in 2006.



Water reduction metrics	All	Small	Large	Top 25	Circle	
Percent reduction in water use intensity from baseline year:	23%	33%	20%	27%	45%	
Percent reduction in water use intensity from previous year:	13%	13%	11%	14%	12%	
Note: Percent reduction calculated using current year gallons per gross square foot compared to baseline or previous year gallons per gross square foot. This includes only facilities that reduced their water use intensity.						

Water reduction projects	All	Small	Large	Top 25	Circle
Percent of facilities reporting any water reduction projects with gallons saved	17%	13%	20%	68%	60%
Median water cost-savings per facility from water reduction projects	\$3,503	\$1,763	\$5,082	\$1,534	\$3,459
Median gallons of water saved per facility through water reduction projects	210,000	71,500	236,582	209,427	470,576
Total gallons saved through water reduction projects (55 facilities)	121,082,314	15,619,575	102,462,739	30,598,284	19,882,037
Total cost-savings through water reduction projects (35 facilities)	\$833,944	\$106,627	\$706,317	\$354,344	\$248,138



Green design and construction	All	Small	Large	Top 25	Circle
Designed and built any projects (>1000 sq ft) in the last five (5) years	58%	54%	63%	92%	100%
Integrated any green/sustainable aspects into Master Specifications for all new buildings/renovations	77%	80%	73%	100%	100%
Implemented a facility policy or commitment to design and construct all new buildings and/or major renovations to LEED (or another green building) design standard	72%	73%	71%	96%	100%
Required to build to a certain minimum LEED standard (certifiable) due to municipal, state, region or federal legislative requirements	37%	40%	35%	52%	25%
Required its designers, builders and contractors to have experience with LEED or other green building rating systems	63%	64%	62%	96%	88%
Used an integrated design process for all new building and major renovation projects	66%	66%	66%	88%	100%
Added language to contract specifications that building contractors will follow LEED or GGHC requirements and provide documentation	62%	64%	60%	88%	100%
Tracked loss days/productivity within green buildings	13%	15%	12%	44%	25%

Number of Leadership in Energy and Environmental Design (LEED)-certified projects completed	2019	Completed in past 5 years
LEED Platinum	2	8
LEED Gold	2	18
LEED Silver	4	31
LEED Certified	1	8
Total LEED projects	9	65

Count of green building projects using these rating systems	2019	Completed in past 5 years
Designed to LEED but not certified	31	113
Followed GGHC	1	4
Green Globes	3	8
WELL Certified	0	0
Followed other rating system	14	56



Innovative green building elements	All	Small	Large	Top 25	Circle	
Educated occupants on the benefits of its green building elements	50%	45%	55%	100%	100%	
Installed any garden and green spaces for patients, visitors and staff	67%	60%	74%	96%	100%	
Of the facilities that indicated yes, these areas were created:						
Green or living roof	24%	17%	30%	33%	50%	
Green or living wall	11%	6%	13%	21%	38%	
Healing garden	85%	86%	83%	92%	63%	
Food-producing garden	35%	38%	34%	67%	50%	
Other	27%	24%	29%	46%	50%	

Avoiding chemicals of concern	All	Small	Large	Top 25	Circle
Consciously selected flooring, wall coverings, paints, materials, finishes, furniture, or exterior materials that avoid target chemicals of concern	68%	62%	73%	100%	100%
Of the 220 facilities that indicated which product categories were addressed to avoid chemicals of concern:	Avoided chemicals of concern		rn Included in specs		
Wall coverings	44%		41%		
Paints	70%		6:	3%	
Materials	62%		2% 56%		
Finishes	48%		% 43%		
Furniture	6:	3%	50	6%	
Exterior materials	2	7%	24%		

Energy and water-saving elements	All	Small	Large	Top 25	Circle
Implemented a building and renovation strategy that maximizes daylighting for patients, employees, visitors	69%	65%	72%	96%	88%
Installed water saving measures that will substantially reduce potable water use or reuse non-potable water	59%	58%	61%	92%	88%
Integrated design elements that will reduce or reuse process water	42%	40%	44%	68%	75%
Instituted other innovative green design and construction elements	41%	37%	46%	92%	100%
Installed energy systems that exceed ANSI/ASHRAE/IESNA Standard 90.1-2013	40%	36%	45%	64%	75%
Of the 131 facilities indicating yes to installing systems that exceed ANSI/ASHRAE/IESNA standard 90.1-20	013:				
<10%	24%	19%	28%	25%	0%
10-25%	33%	31%	34%	50%	50%
>25%	31%	36%	28%	25%	50%



Construction & demolition debris	All	Small	Large	Top 25	Circle
Recycled construction & demolition debris (C&D)	68%	61%	75%	96%	100%
Of the 225 facilities that provided valid recycling numbers:					
Achieved a minimum 80% construction and demolition debris recycling rate	15%	14%	16%	29%	25%



Demonstrating climate leadership	All	Small	Large	Top 25	Circle
Made a formal external commitment to climate change or a signed a commitment	61%	60%	61%	96%	100%
Of the 203 facilities indicating the formal external commitment to climate change, the commitments were	e:	,			
Climate Registry	12%	8%	13%	0%	0%
Divestment from or frozen future investments in fossil fuels	17%	18%	17%	13%	18%
Health Care Climate Challenge	46%	44%	47%	46%	55%
Health Care Climate Council	49%	46%	52%	50%	55%
Local/state/regional commitment	30%	20%	41%	54%	82%
The Presidents' Climate Leadership Commitment	16%	15%	17%	21%	18%
We Are Still In	31%	27%	35%	42%	45%
Other	48%	46%	52%	54%	45%
Advocated for or promoted policies or regulations that protect public health from the causes of climate change (e.g. testifying or submitting comments at public hearings, OpEds, sign-on letters/statements, meeting with public officials to educate or lobby)	44%	42%	45%	80%	91%
Of the 146 facilities that have promoted policies or regulations that protect public health from the causes	of climate change	e, the following le	vels of policies we	ere indicated:	
At the local level	72%	71%	74%	95%	80%
At the state level	66%	61%	71%	90%	80%
At the federal level	79%	80%	78%	75%	70%
Provided education on the connection between climate and health to its staff, patients, clinicians and/or the community	61%	61%	60%	96%	100%
Of the 202 facilities that provide education on the connection between climate and health to its staff,pati	ients, clinicians ar	nd/or the commun	ity, the following	groups were enga	ged:
Staff	95%	96%	94%	96%	100%
Patients	40%	37%	42%	63%	36%
Community	70%	68%	73%	67%	64%
Physicians	78%	75%	83%	79%	82%
Nurses	80%	79%	81%	88%	91%
Other health professionals	67%	67%	69%	83%	73%



Demonstrating climate leadership	All	Small	Large	Top 25	Circle			
Facilities provided the following green employee benefits to support climate change solutions for their employees at home indicated the following strategies:								
Employee home solar discounts	16%	18%	14%	4%	0%			
Electric bicycle discounts	4%	4%	4%	4%	9%			
CSAs	18%	15%	21%	32%	45%			
Fossil fuel-free retirement options	7%	7%	7%	4%	18%			
Alternative transportation discounts/stipends	52%	45%	58%	72%	100%			
Other	28%	26%	30%	64%	64%			
Incorporated climate change language or a connection to climate change in activities of the Community Health Needs Assessment (CHNA) process for community benefit	26%	26%	26%	56%	64%			
CEO or Board of Directors identified climate change as a business risk by requiring regular reporting on climate change mitigation and preparedness	24%	24%	23%	56%	27%			

Climate mitigation	All	Small	Large	Top 25	Circle
Generated or purchased renewable energy	36%	30%	40%	60%	82%
Median percent of energy from renewable sources	2.9%	5.0%	1.9%	9.2%	9.5%
Set either a GHG reduction or renewable energy goal	35%	32%	37%	64%	64%

Goal type	All
Of the 116 facilities reporting a goal, the following have set this goal type:	
Carbon net positive	4%
Carbon neutral	13%
Greenhouse gas reduction	40%
Renewable energy	51%
Aggressive energy reduction	20%
Other	5%

Scopes 1 & 2 energy and fuel-related greenhouse gas emissions	All
Median metric tons of CO2e per facility	13,684
Median lbs of CO2e per square foot	37
Median lbs of CO2e per adjusted patient day (APD)	316



Current year emission reduction projects	All
Percent of facilities reporting any GHG reduction project	33%
Sum of all MTCO2e savings from GHG emission reduction projects for all hospitals	177,735
Sum of cost-savings from GHG emission reduction projects for all hospitals	\$15,423,088

Percent reduction in emissions from anesthetic gases from baseline year	All	Small	Large	Top 25	Circle
Percent change from baseline year	23%	32%	16%	14%	7%

Climate resilience activities for all applicants	Yes	Started but not completed	Percent of facilities reporting any progress
Analyzed local disaster risks due to climate change and its role in addressing them.	44%	23%	67%
Reviewed the evidence of health risks from climate change (from local public health epidemiology/ vulnerability assessments: e.g. migration of vector borne diseases, extreme heat, etc.) that may impact its community.	47%	27%	74%
Participated in city, regional, or state climate resilience planning efforts.	24%	2%	26%
Engaged in long term activities that restore and improve functioning ecosystem services in order to foster more resilient communities (e.g. working to preserve or restore ecosystem services - forests, coastal zones, wetlands, river basins, fisheries).	21%	27%	48%
Developed a plan and included climate risks in both facility and regional emergency preparedness planning and implementation for addressing key health care service delivery needs during or following extreme weather events such as cold or heat waves, hurricanes, droughts, wildfires.	52%	8%	60%
Completed an assessment tool (such as the Building Health Care Sector Resilience Toolkit), and developed an action plan to address climate change-related building and infrastructure vulnerabilities.	14%	38%	52%

Transportation and alternative fuels	All	Small	Large	Top 25	Circle
Purchased green vehicles for fleet use	40%	39%	42%	80%	64%
Had fleet vehicles with at least one environmental criteria					
Actively worked to reduce the impact of transportation on the environment and the local community, in alignment with Practice Greenhealth's Transportation Goals	47%	43%	50%	100%	100%
Conducted an annual survey to collect mode of transportation by employees commuting to work	18%	10%	25%	40%	73%



Alternative and conventional fuel use	All	Small	Large	Top 25	Circle
Percent of facilities indicating a particular fuel type used for fleet vehicles:					
Biodiesel (B20)	7%	6%	8%	21%	10%
Biodiesel (B100)	1%	0%	1%	0%	0%
Diesel	51%	50%	53%	50%	50%
Electricity	20%	14%	28%	25%	40%
E85 ethanol	34%	35%	32%	38%	30%
Gasoline	77%	79%	75%	83%	90%
Natural gas (CNG)	4%	3%	3%	0%	10%
Propane	1%	0%	1%	4%	10%
Other	9%	14%	5%	13%	10%

Transportation strategies	All	Small	Large	Top 25	Circle
Participates in or implemented any of the following:					
Monitor air quality and notify vulnerable patient populations	12%	9%	14%	24%	0%
Participate in regional transportation planning and/or maintain membership in a transportation management association	25%	13%	37%	60%	82%
Provide vouchers or subsidies for public transit, ride- and bike-sharing services	39%	30%	48%	56%	82%
Provide preferred parking for carpool participants and low-emission, fuel-efficient vehicles (hybrids, smart cars)	39%	34%	43%	68%	73%
Provide bike racks, bike paths, walkways, and shower facilities for alternative commuters	66%	60%	71%	100%	100%
Install electric vehicle charging stations	36%	22%	49%	60%	91%
Provide or outsource shuttle/vanpool, carpool or ride-sharing services	40%	31%	48%	72%	73%
Pay employees daily/monthly stipend for using alternative transit modes	16%	13%	19%	28%	45%
Offer telework, compressed work schedules to reduce employee commuting	53%	46%	59%	84%	91%
Adopt engine idling reduction practices and policies	40%	41%	40%	84%	73%
Encouraged or required suppliers to become an EPA SmartWay Shipper Partner to drive down Scope 3 GHGs from freight transportation	16%	18%	13%	32%	36%
Other	5%	4%	6%	12%	27%



CATEGORY	METRIC	Median Value
	Recycling as a percent of total waste	39%
	RMW as a percent of total waste	1.10%
	RMW pounds per staffed bed/day	65.4
	Total pounds of waste per staffed bed	3.1
	% spend on 5 target green cleaners	46%
	% spend healthy interiors	91%
	% spend safer hand hygiene	100%
	% change in meat use (by weight)	12.20%
	% sustainably produced meat (by weight)	12%
W(e)	% of spend on sustainable	15%
	% of spend on local	10%
	% of spend on healthier beverages	61%
	Pounds of compost per meal	0.1 lbs.
	Energy use intensity (EUI)	179
	% change in EUI from baseline year	9%
<b>(</b> -€=)	ENERGY STAR score	93
	% onsite renewable energy*	2.2%
	% offsite renewable energy*	3.6%
	Total gallons per sq ft	35
	% change in water use	32%
	Indoor gallons per sq ft	36
	Gallons per FTE	15330
	% renewable energy*	5.60%
	% change in tracked GHG emissions	14%
	% construction and demolition waste recycled	46%

Note: Only seven facilities (with overnight beds but no operating rooms) had any renewable energy.

CATEGORY	METRIC	Non-academic medical centers median	Academic medical centers with no on-site research median	Academic medical centers with on-site research median	All applicants	
	Recycling as a percent of total waste	27%	29%	28%	27%	
	RMW as a percent of total waste	5.9%	6.6%	7.7%	6.0%	
	RMW pounds per staffed bed/day	1.60	1.88	2.57	1.86	
	Total pounds waste/patient day	44	43	47	45	
	Total tons waste/OR	81	89	121	96	
	% spend on 5 target green cleaners	43%	47%	41%	42%	
	% spend healthy interiors	84%	79%	85%	84%	
	% spend safer hand hygiene*	100%	100%	100%	100%	
	Note: A median of 100% on safer hand hygiene chemicals means that if facilities choose to purchase hand hygiene products made without triclosan or triclocarban, they tend to buy all hand hygiene products of that type.					
<b>4</b>	% of OR kits reviewed*	100%	100%	100%	100%	
	Pounds SUDs collected per OR procedure	0.75	0.52	0.61	0.64	
	% of kits in reusable sterilization containers	70%	53%	74%	70%	
	% of ORs with HVAC setback*	100%	89%	100%	100%	
	"Note: A median of 100% for OR kit reformulation is an indication that hospitals that chose to reformulate kits tended to reformulate all of them. A median of 100% for HVAC setback means that if facilities utilized these technologies they tended to use them for 100% of their ORs. That said, Practice Greenhealth suspects the HVAC setback numbers may be overreported—as many hospitals tend to keep 1-2 emergency ORs online and ventilated at full air changes for emergency cases at night.					
	% change in meat use (by weight)	17%	14%	9%	14%	
TI	% change in GHG emissions from meat (from baseline year)*	15%	14%	15%	14.0%	
	% of spend on healthier beverages	54%	54%	64%	58%	
	% of spend on local	3%	9%	8%	6%	
	% of spend on sustainable	8%	12%	15%	12%	
	% sustainably produced meat (by weight)	19%	34%	20%	23%	
	Note: A negative percent change for GHG emissions from meat indicates that GHGs have increased rather than decreased since previous year.					

CATEGORY	METRIC	Non-academic medical centers median	Academic medical centers with no on-site research median	Academic medical centers with on-site research median	All applicants
<b>(</b>	Energy use intensity (EUI) (in kBtus/sq ft)	217	215	224	217
	% change in EUI from baseline year	8%	9%	10%	9%
	ENERGY STAR score	52	57	68	58
	% onsite renewable energy	0.7%	0.7%	0.4%	0.6%
	% offsite renewable energy	8%	9%	7%	9%
•	Total gallons per sq ft	39.9	44.2	41.7	42.0
	% change in water use	25%	28%	20%	23%
	Indoor gallons per sq ft	41.4	41.5	40.8	40.9
	Gallons per FTE	16,082	15,518	12,745	14,469
	% renewable energy	No facilities	30.3%	8.9%	9.2%
	% of construction and demolition debris recycled	67%	71%	60%	61%



For more information please visit:

PracticeGreenhealth.org or call 888-688-3332

