Greening the OR

Introduction

Between 20 and 30% of a hospital's waste stream may be generated in just one department-- Surgical Services. Greening the OR™ is a Practice Greenhealth program focused on providing concentrated sustainability support and assistance to a department that generates a significant portion of the hospital's environmental footprint. The Greening the OR™ program aims to improve worker and patient safety, increase efficiency, and reduce cost while concurrently reducing waste, energy and environmental impact. Practice Greenhealth is looking forward to learning about your programs in this important department.

Several questions have been included to try and better understand the impact of the COVID-19 pandemic on the **operating room** environment.

1.*   Does your facility have **operating rooms**/procedure rooms or perform a significant amount of surgery?

○ Yes
◉ Not Applicable

This page intends to gather information on facilities performing surgical procedures. If your facility only performs minor procedures on rare occurrences, then please select "Not Applicable" and provide a brief explanation.

1.a*   Please explain why questions about **operating rooms** are not applicable to your facility:

> [ ]

If your facility does not have **operating rooms**/does not perform surgical procedures, please move on to the next page (leaving the rest of this page blank).

2.*   Did the facility **cancel or postpone elective surgeries** for any period of time (either by organizational decision or mandate) during the past year due to COVID-19?

◉ Yes
○ No

2.a*   Please indicate the **length of time** elective surgeries were not performed:

○ 0-2 weeks
○ 2-4 weeks
○ 4-6 weeks
◉ Longer than 6 weeks total

2.a.a*   Please indicate how many weeks the OR was **unavailable/shutdown** for elective surgeries:

> [ ]

2.b*   Please indicate the number of elective surgeries cancelled or postponed (if known):

> [ ]

3.*   Were there any changes made to **operating room protocol** as a result of the COVID-19 pandemic?

◉ Yes
○ No

3.a*   Please briefly describe:

> [ ]

4.*   Does your facility have a sustainability champion in the OR?

◉ Yes
○ No

This question is asked "new" each year, as champions come and go. Practice Greenhealth wants to understand who was leading or influencing the OR work over the course of the past year.

Contact Information:

<u>**4.a***</u>

Name of sustainability champion or leader in the OR:

<u>**4.b***</u>

Title of sustainability champion or leader in the OR:

<u>**4.c***</u>

Email of sustainability champion or leader in the OR:

Waste Segregation & Management

Proper waste management is critical to any successful environmental stewardship program, but it is especially important within the <u>**operating room**</u>. **The OR can account for 30% of a facility's overall waste and more than half of its** <u>regulated medical waste</u>. There are strategies to reduce the amount of waste generated by the OR, but it's also important for facilities to ensure that the waste is being properly segregated to maximize <u>**recycling**</u> and reduce cost. Please use this section to highlight the waste segregation strategies implemented by the surgical department.

You may leave a requested data point blank, but please **do not enter zeros. Enter savings as a positive number.**

5. Please select which processes the facility has in place to reduce and divert waste in the <u>**operating room**</u>:

☑ Diverts **pre-incision (prior to case)** waste from **regulated medical waste stream** into solid waste or recycling stream
☑ Segregates non-infectious solid waste from the regulated medical waste stream **during the procedure**
☑ Segregates non-infectious solid waste from the regulated medical waste stream **after the procedure**
☑ Recycles clinical/medical plastics in the OR

Note: If the organization is not focusing on waste segregation education, please leave this question blank.

5.a Please select all clinical/<u>**medical plastics**</u> being **recycled in the** <u>**operating room**</u>:

☐ Basins, pitchers, bowls and medicine cups
☐ Blister packs/shrink wrap
☐ Blue wrap
☐ Corrugated respiratory tubing
☐ Disposable clean suction canisters
☐ Irrigation bottles (Sterile saline and water bottles)
☐ IV bags, tubing and outer plastic wrap
☐ Light handle covers
☐ Medication vials and caps
☐ Overwraps
☐ Oxygen tubing
☐ Peel pouches
☐ Perfusion tubing
☐ Respiratory face masks
☐ Rigid inserts
☐ Skin prep solution bottles
☐ Syringe casings
☐ Trays
☐ Tyvek
☐ Urinals/bedpans
☑ Other

5.a.a Please describe **other** plastics being recycled in the OR in 2020:

5.b Is the facility **tracking** the weight of <u>**medical plastics**</u> recycled specifically from the OR?

◉ Yes
○ No

5.b.a What is the weight of <u>**medical plastics**</u> (in tons) recycled in 2020 in the OR?

6. Does the facility utilize 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)?

◉ Yes
○ No

6.a Please briefly describe the fluid medical waste disposal system being utilized:

6.b Is this system being utilized for fluid management in more than 75% of ORs or for a majority of cases?

○ Yes
○ No

Please share any associated **cost savings** in 2020 in **Table A**:

Table A. Fluid Management Avoided Waste and Cost Savings

Avoided waste (tonnage)	**6.c**
Avoided waste disposal fees from disposable canisters	**6.d**
Avoided purchase cost of disposable canisters	**6.e**
Avoided purchase cost of chemical solidifiers (if applicable)	**6.f**
Other Benefits: (ie. staff safety, unnecessary purchase of PPE, red bags, labels, etc)	**6.g**
Total Cost Savings:	**6.h** 0

Medical Device Reprocessing

Reprocessing of medical devices goes beyond the **operating room** and includes many other patient care areas. To simplify, Practice Greenhealth is asking all questions pertaining to single-use device (**SUD**) reprocessing on the Greening the OR page. Please enter all **SUD** reprocessing data below.

7.* Has the facility implemented a **medical device reprocessing** program with an FDA-approved third party reprocessor?

[Yes ▾]

Please indicate which elements of a **medical device reprocessing** program your facility engages in (Table B below):

Table B1. Collection/Purchase of Reprocessed Devices

Device Type	Please indicate if the facility collects and/or purchases the reprocessed medical devices below:
Arthroscopic wands and shavers	**7.a** Select an option... ▾
Bits/burs/blades	**7.b** Select an option... ▾
Catheter introducer sheaths	**7.c** Select an option... ▾
Chisels	**7.d** Select an option... ▾

Cold biopsy forceps	**7.e**
	Select an option... ⌄
DVT sleeves/Sequential compression	**7.f**
	Select an option... ⌄
ECG leads and cables	**7.g**
	Select an option... ⌄
EKG cables and lead wires	**7.h**
	Select an option... ⌄
EP cables	**7.i**
	Select an option... ⌄
EP catheters	**7.j**
	Select an option... ⌄
EP diagnostic catheters	**7.k**
	Select an option... ⌄
External fixation devices	**7.l**
	Select an option... ⌄
Fall alarms	**7.m**
	Select an option... ⌄
Hot biopsy forceps	**7.n**
	Select an option... ⌄
ICE catheter	**7.o**
	Select an option... ⌄
Lateral transfer device (Hovermatt)	**7.p**
	Select an option... ⌄
Laparoscopic dissectors	**7.q**
	Select an option... ⌄
Laparoscopic graspers	**7.r**
	Select an option... ⌄
Laparoscopic needle drivers/suture passers	**7.s**
	Select an option... ⌄
Laparoscopic scissors/scissor tips	**7.t**
	Select an option... ⌄
Ligasure sealers/dividers	**7.u**
	Select an option... ⌄
Multiclip appliers	**7.v**
	Select an option... ⌄
Pneumatic tourniquet cuffs	**7.w**
	Select an option... ⌄
Pulse oximetry probes and sensors	**7.x**

	Select an option... ⌄
Reamers	**7.y** Select an option... ⌄
Trocars	**7.z** Select an option... ⌄
Ultrasonic scalpels	**7.aa** Select an option... ⌄
Ultrasound catheters	**7.ab** Select an option... ⌄

Total reprocessed device types out of 28	
7.ac 0	Device types collected only
7.ad 0	Device types purchased only
7.ae 0	Device types collected & purchased

Practice Greenhealth would like to capture the purchasing power of the health care sector through the dollars spent on reprocessed devices. In the table below, please enter the **total avoided waste** in pounds (Lbs) and the total dollars **spent** on purchasing FDA-approved reprocessed medical devices in 2020.

Table B2. SUD Reprocessing Collection Data

SUD Reprocessing Collection Savings	Total
Weight of devices collected (in pounds, Lbs)	**7.af***
Weight of devices collected, converted to tonnage	**7.ag*** 0
Avoided waste disposal costs	**7.ah***
Total $ spent on purchase of reprocessed devices in 2020	**7.ai***
Total $ saved through medical device reprocessing program in 2020.	**7.aj***

Table B3. Medical Device Reprocessing Metrics

Pounds of reprocessed devices collected per OR procedure:	**7.ak*** 0
Pounds of reprocessed devices collected per OR:	**7.al*** 0
Dollars saved on reprocessed devices per OR procedure	**7.am*** 0

Dollars saved on reprocessed devices per OR	**7.an*** 0

7.ao   Please attach any related **reprocessing policies** in place at the facility or system level.

Waste Reduction in the OR

Identifying opportunities to eliminate unnecessary waste from the **operating room** waste stream can help facilities reduce upfront purchasing costs as well as avoid waste disposal costs, and reduces the amount of waste requiring disinfection/treatment. Please highlight any strategies or projects the facility has utilized to reduce the amount of waste leaving the OR, including reducing unnecessary supplies, better inventory tracking, using reusable or reprocessable equipment, and more.

8.* Does the facility **reformulate custom procedure packs**--removing supplies not typically used--to reduce purchase and disposal fees for excess supplies, and decrease the environmental impact of manufacture and disposal of those supplies?

🔘 Yes
⚪ No

Please fill in **Table C.** Please enter the number of **types** of kits the facility uses (e.g., 32 different types of custom kits, of which, 28 types were reviewed).

Table C. OR Kit/Custom OR Procedure Pack Reformulation Waste and Supply Savings

Total number of custom OR procedure pack types	**8.a***
Number of pack types reviewed	**8.b***
Percent of OR custom pack types reviewed	**8.c*** 0
Optional:	
Avoided purchase cost of unnecessary supplies	**8.d***
Avoided waste disposal savings ($)	**8.e***
Other savings	**8.f***
Total savings	**8.g*** 0

9.   Does the organization have a process in place to regularly compare, review, and **update surgeon preference cards** for the same type of procedure?

🔘 Yes
⚪ No

9.a   Please describe the process in place to regularly compare, review and update surgeon preference cards for the same type of procedure:

10.* Does the facility purchase and use **reusable surgical items** where environmentally and clinically preferable?

Yes ⌄

10.a* Please indicate any reusable surgical items utilized in the OR a **majority (or >75%) of the time**.

--*Note: **Do not** include <u>single-use</u> reprocessed devices for this question - only items specifically labeled by the FDA as 'reusable' medical devices.

☐ Anesthesia circuits
☐ Back table covers
☐ Blood pressure cuffs
☐ Cautery handles and cords
☐ Corner protectors
☐ Cubicle curtains
☐ Isolation gowns
☐ Endotracheal Tubes (ETT)
☐ Grounding pads
☐ Laryngeal Mask Airways (LMA)
☐ Laryngoscope blades/handles
☐ Light handles
☐ Mayo stand covers
☐ Patient belonging bags
☐ Patient linens (gowns, sheets, bath blankets, pillow cases)
☐ Patient positioning devices
☐ Patient transfer devices
☐ Patient warming devices
☐ Pneumatic compression tourniquets
☐ Pulse oximetry sensors
☐ Sterilization wrap
☐ Surgical staplers
☐ Suction canisters
☐ Surgical drapes
☐ Surgical gowns
☐ Surgical towels
☐ Safety belts
☐ Surgical basins, pitchers and medicine cups
☐ Trocars
☐ Velcro straps
☐ Visitor jump suits
☑ Other

10.a.a   Please describe other reusable devices:

10.b*   Out of 32 possible product categories, the facility reuses items in this many categories:

1

10.c   Provide any additional commentary on reusables in the OR:

Table D. Savings from Reusable Linens in the OR

If tracked, please indicate **tonnage of <u>reusable linens</u>** used in the OR:	**10.d***
If tracked, please indicate any **cost savings from <u>reusable linens</u>** in the OR:	**10.e***
This is the facility's tons of **<u>reusable linens</u>** per OR:	**10.f*** 0

11.*   Does the facility utilize **reusable sterilization containers** for surgical instrumentation and reduction of disposable sterile wrap?

⦿ Yes
◯ No

Please fill in Table E. (E.g., the facility used 6250 total instrument trays in 2020; of those, 4688 instrument trays were sterilized in reusable containers for a total of 75% trays in reusable sterilization containers)

Table E. Savings from Reusable Sterilization Containers in the OR

Total number of instrument trays used	**11.a***
Number of instrument trays used in reusable sterilization containers	**11.b***
Percent of instrument trays utilizing reusable sterilization containers	**11.c*** 0
Total ($) <u>spent</u> on bluewrap in 2020	**11.d***
Optional:	
Avoided purchase cost ($ saved) of bluewrap	**11.e***
Avoided waste disposal (tonnage)	**11.f***
Avoided waste disposal fees	**11.g***
Other comments or savings	**11.h***
Total savings	**11.i*** 0

12.* Please describe any other innovative source reduction, reuse, or procurement strategies that reduce the environmental impact of the OR.

Energy Management

The **operating room** is a significant user of energy, with high demand from life-saving medical equipment, high air change per hour requirements, lighting, and more. As a result, strategies to reduce energy consumption in the **operating room** can derive considerable cost and energy savings. Please highlight any energy efficiency projects or strategies in the **operating room** in the section below.

ASHRAE 170 requires a certain number of air changes per hour to ensure patient safety and reduce the risk of surgical site infections in the OR. Some facilities assume that more air exchanges (exceeding code) equals better patient safety despite little clinical evidence to support it.

For more information on HVAC Setback Programs for the **Operating Room**, please see the American Society for Healthcare Engineering's **OR HVAC Setback Monograph**.

13.* Has the facility **programmed the HVAC system to reduce air changes per hour** (HVAC setback) when the ORs are **unoccupied** to reduce energy consumption?

🔘 Yes
⚪ No

13.a What mechanism(s) does the facility use to control HVAC setback?

☐ Occupancy sensors
☐ Mushroom button
☐ Scheduling system
☐ Building Automation System
☑ Other

13.a.a   Please describe other mechanisms used for control of HVAC setback:

Table F1. HVAC Setback in the OR

How many ORs have implemented an HVAC setback program?	**13.b***
Operating Rooms (ORs):	**13.c*** From your Facility Profile.
Your facility utilizes HVAC setback in this percent of your ORs, based on above information:	**13.d*** 0
What is the rate of air exchanges per hour (ACH) during normal hours/when the OR is **occupied?**	**13.e***
What is the rate of air exchanges per hour (ACH) during **unoccupied/setback mode**?	**13.f*** Note: This number should be less than the ACH during occupied mode (above).
Percent reduction in air exchange rate (occupied to unoccupied)	**13.g*** 0

13.h   Has the facility **tracked** associated energy reduction and cost savings from the HVAC setback program?

◉ Yes
◯ No

Please indicate energy and cost savings in Table F2.

Table F2. HVAC Setback in the OR Savings

Energy Savings (kWh)	**13.h.a**
Energy Cost Savings ($)	**13.h.b**
Other Benefits (i.e., durable medical equipment life, maintenance, etc.)	**13.h.c**

14.   Does the facility utilize **LED surgical lighting**?

◉ Yes
◯ No

Table G1. LED Surgical Lighting in the OR

How many ORs are equipped with LED surgical lighting?	**14.a**
Operating Rooms (ORs):	**14.b**
Your facility utilizes LED surgical lighting in this percent of your ORs, based on above information:	**14.c** 0

14.d   Has the facility tracked **avoided energy use, avoided supply cost, or avoided labor costs** associated with unnecessary bulb changes?

◉ Yes
◯ No

Please fill in Table G2.

Table G2. LED Surgical Lighting Savings in the OR

Type of Savings	Savings
Energy Savings (kWh)	**14.d.a**
Energy Savings ($)	**14.d.b**
Other Considerations	**14.d.c**

15.   Does the facility set back or turn down ambient lighting to reduce energy consumption when the OR is unoccupied and not in use?

◉ Yes
◯ No

15.a   What mechanism(s) does the facility use to control ambient lighting setback?

☐ Staff behavior
☐ Occupancy sensors
☐ Scheduling system
☐ Building Automation System
☑ Other

15.a.a   Please describe other ambient lighting setback control:

16.   Has the facility implemented any other initiatives to reduce energy use in the OR?

◉ Yes
◯ No

16.a   Please describe any other energy-savings strategies implemented in the surgical department.

17.   Has the facility implemented a **surgical smoke evacuation system** to reduce staff and patient exposure to surgical smoke aerosols, gases and particulate matter during surgery?

◉ Yes
◯ No

For more information on Surgical Smoke Evacuation in the **Operating Room**, please see the Association for periOperative Registered Nurses' (AORN) **Management of Surgical Smoke** resource.

17.a   Please describe surgical smoke evacuation system:

18.   Has the facility implemented any other strategies to reduce exposure to **chemicals of concern** in the OR?

◉ Yes
◯ No

18.a   Please describe strategies to reduce exposure to **chemicals of concern**:

Anesthesia Use

Leading hospitals are re-evaluating the anesthesia care regime for environmental stewardship opportunities that align with patient safety and/or cost reduction. As a **Scope 1** **greenhouse gas** (**GHG**), choice and management of anesthetic gases is important to the facility's overall **GHG** emissions and climate impact. The volatile anesthetic agents used for patient care in an **operating room** or procedural setting are often vented directly into outside air. Even intravenous anesthetic agents, which don't generate greenhouse gases, have an impact on the environment and must be incinerated rather than contaminate land and water supply. And with severe drug shortages, it is even more critical to be sure the facility is carefully managing their use. Tracking and evaluating the use of the different anesthetic agents that are both clinically effective and environmentally preferable is indicative of culture change within the clinical practice.

19.   Has the facility provided or held education on the **environmental impacts of inhaled anesthetics** and reduction strategies for surgical staff?

🔘 Yes
⚪ No

*Please note: this question is asking about education specific to environmental impacts and global warming potentials of anesthetic gases and not required annual environmental safety education compliance.

19.a   Please describe anesthesia education efforts.

19.b   Or please attach example(s) of anesthesia education efforts.

20.   Does the facility purchase or does in-house pharmacy prepare **pre-filled syringes** (not including boxed bristojets) to minimize waste of unneeded pharmaceuticals?

🔘 Yes
⚪ No

20.a   Please select all **pre-filled syringe types** purchased or prepared:

☐ Atropine
☐ Calcium chloride
☐ Ephedrine
☐ Epinephrine
☐ Ketamine
☐ Lidocaine
☐ Phenylephrine
☐ Succinylcholine
☐ Propofol
☑ Other

20.a.a   Please describe any other **pre-filled anesthetic syringes** being used:

21.   Does the facility purchase the **smallest pharmaceutical vials possible** to minimize pharmaceutical wastage?

🔘 Yes
⚪ No

21.a   Please describe how the facility minimizes pharmaceutical wastage in the OR:

22.   Does the facility utilize a **supplemental waste anesthetic gas capture system** to prevent waste anesthetic gases from venting to the outside air?

🔘 Yes
⚪ No
⚪ Don't know

Exposure to waste anesthetic gases (WAGs) can have health and safety impacts on staff. All anesthesia machines are connected to a waste anesthetic gas (WAG) scavenging system to protect employee health, which pulls the exhaled air and WAGs from the patient's breathing circuit, up through the central vacuum system and vents these gases off the hospital roof. This question is referring to **new, supplemental "capture" technologies** that collect these WAGs at the point of generation to reclaim and recycle these gases, preventing the off-gassing of these emissions from the hospital. If uncertain what system your hospital is using, please select **Don't know**.

22.a   Please describe the supplemental waste anesthetic gas capture system and its results:

23.* Has the facility removed desflurane from its formulary?

⦿ Yes
◯ No

23.a   Please describe the strategy used to remove desflurane from the formulary:

24.   Please describe any additional work the facility has done to reduce the environmental impact of anesthesia:

25.*   Please enter the **Baseline Year** the facility began tracking **greenhouse gas** emissions from purchased inhaled anesthetic gases.

*Note: Baseline Year should be the first year the facility is able to enter complete anesthetic gas use data (Table I and Table J). Data entered in Table H should correspond accordingly to Table I and Table J.

Please list the **total number of general anesthesia cases and hours** performed in 2020 at the facility (include all adults, pediatrics, OB/GYN, interventional radiology, ambulatory, off-floor, other) in baseline, previous and current year in Table H. below.

Table H. General Anesthesia

	Baseline year	Previous year	Current year
General anesthesia cases	**26.***	**27.***	**28.***
General anesthesia hours	**29.***	**30.***	**31.***

Please indicate the **volume of volatile anesthetic agents purchased** by the facility in Table I below. Please be sure to match the number of bottles with the appropriate size in mL **purchased** for each agent --the "unit" may vary per facility. The information entered into this table will be used to calculate and populate the Scope I **greenhouse gas** emissions for waste anesthetic gases on the Climate page of this application.

Table I. Purchased Volatile Anesthetic Agents

Volatile Anesthetic Agent	Number of Bottles Baseline Year	Number of Bottles Previous Year	Number of Bottles Current Year	MTCO2E **Baseline**	MTCO2E **Previous**	MTCO2E **Current**
Sevoflurane						
100 mL	**32.***	**33.***	**34.***	**35.*** 0	**36.*** 0	**37.*** 0
250 mL	**38.***	**39.***	**40.***	**41.*** 0	**42.*** 0	**43.*** 0
44.* Other size (in mL)	**45.***	**46.***	**47.***	**48.*** 0	**49.*** 0	**50.*** 0
Total Sevoflurane:				**51.*** 0	**52.*** 0	**53.*** 0
Isoflurane						
100 mL	**54.***	**55.***	**56.***	**57.*** 0	**58.*** 0	**59.*** 0
250 mL	**60.***	**61.***	**62.***	**63.*** 0	**64.*** 0	**65.*** 0
66.* Other size (in mL)	**67.***	**68.***	**69.***	**70.*** 0	**71.*** 0	**72.*** 0

Total Isoflurane:				73.* 0	74.* 0	75.* 0
Desflurane						
240 mL	76.*	77.*	78.*	79.* 0	80.* 0	81.* 0
82.* Other size (in mL)	83.*	84.*	85.*	86.* 0	87.* 0	88.* 0
Total Desflurane:				89.* 0	90.* 0	91.* 0

Please indicate the facility's **nitrous oxide usage** during this award cycle year in the Table I below. Nitrous oxide comes in gaseous form, compressed in a cylinder or tank. Institutions typically have two types of nitrous oxide cylinders: 1. Portable tank - in the US, this is a standard size E-cylinder that is attached to the back of every anesthesia machine. 2. Stationary tank - this is a very large cylinder from which the gas gets piped through the walls of the hospital and into the anesthesia machine. Enlist the help of the clinical engineering department, pharmacy, or the medical gas supplier. Typically, the medical gas supplier/ vendor can report the total pounds of nitrous oxide supplied to the facility annually. Although nitrous oxide can be used in many departments outside the **operating room**, for the purposes of this application, please enter the facility's total usage here. This will be used in addition to the data supplied in Table I. to calculate the facility's Scope I **greenhouse gas** emissions from waste anesthetic gases on the Climate page.

Table J. Nitrous Oxide Purchase

	Total pounds of Nitrous Oxide **Baseline Year**	Total pounds of Nitrous Oxide **Previous Year**	Total pounds of Nitrous Oxide **Current Year**	MTCO2e Nitrous Oxide **Baseline Year**	MTCO2e Nitrous Oxide **Previous Year**	MTCO2e Nitrous Oxide **Current Year**
Nitrous Oxide Footprint	92.*	93.*	94.*	95.* 0	96.* 0	97.* 0

98.* Is the total annual purchasing volume for **ALL** anesthetic gases purchased and used by the organization (desflurane, sevoflurane, isoflurane and nitrous oxide) entered in Table I and Table J above? Note: in order to capture and report an accurate **Scope 1 GHG** footprint from anesthetic gases, all gases used by the organization must be entered.)

[No ⌄]

Understanding if a facility's anesthetic gas profile is complete helps ensure accuracy for benchmarking.

98.a* Please explain why entire total annual purchasing volume for all anesthetic gases cannot be entered.

[   ]

Table K. Dollars Spent on Anesthetic Gases Annually

Anesthetic Agent	Dollars Spent **Baseline Year**	Dollars Spent **Previous Year**	Dollars Spent **Current Year**
Sevoflurane	99.	100.	101.
Isoflurane	102.	103.	104.
Desflurane	105.	106.	107.
Nitrous Oxide	108.	109.	110.
Total	111.	112.	113.

	0		0		0

Scope I Greenhouse Gas Emissions from Purchased Anesthetic Gases

Scope 1 GHG Emissions from Purchased Anesthetic Gases	Baseline Year **Total MTCO2e**	Previous Year **Total MTCO2e**	Current Year Total MTCO2e	Percent Reduction MTCO2e **Baseline Year**	Percent Reduction MTCO2e from **Previous Year**
Purchased volatile anesthetic agents	**114.*** 0	**115.*** 0	**116.*** 0	**117.*** 0	**118.*** 0
Purchased nitrous oxide	**119.*** 0	**120.*** 0	**121.*** 0	**122.*** 0	**123.*** 0
Total from all purchased inhaled anesthetics	**124.*** 0	**125.*** 0	**126.*** 0	**127.*** 0	**128.*** 0

Please Note: Totals and percent change in this table will only appear if you have indicated above that the total annual purchasing volume for ALL anesthetic gases purchased and used by the organization (desflurane, sevoflurane, isoflurane and nitrous oxide) are entered in Table I and Table J above. If you only have partial data for a particular year (baseline, previous, or current), the percent change metrics may not calculate.

MTCO2e per OR	MTCO2e per General Anesthesia Cases	MTCO2e per General Anesthesia Hours	MTCO2e per Total Surgical Procedures
129.* 0	**130.*** 0	**131.*** 0	**132.*** 0

Use Practice Greenhealth's **Anesthetic Gas Toolkit** for additional information on calculating the **greenhouse gas** emissions from purchased anesthetics.

The American Society of Anesthesiologists provides guidance on Greening the OR for anesthesiologists in **Greening the Operating Room and Perioperative Arena: Environmental Sustainability for Anesthesia Practice**.

Greening the OR Total Savings

Greening the OR Total Savings

Avoided Waste (tonnage)	Cost Savings ($)	Energy Saved (kWh)
133. 0	**134.** 0	**135.** 0

Other Greening the OR Program Successes

Please describe any other innovative Greening the OR programs or successes at the facility this past year (not mentioned above) that you would like to share in the spaces below. Please feel free to provide commentary and/or attach a file.

136.* **GOR** Success 1: Please describe

137.* Please attach any additional documentation (optional) for **GOR** Success 1:

138.* **GOR** Success 2: Please describe

139.* Please attach any additional documentation (optional) for **GOR** Success 2: