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TEST PRACTICE GREENHEALTH - HEALTHCARE FACILITY  
WITH BEDS AND ORS — no.1681969

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## Partner Recognition - 2016: Greening the OR

### Introduction

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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 initiative 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 Initiative aims to improve worker and patient safety, increase efficiency, and reduce cost while concurrently reducing waste, energy and environmental impact. Because an increasing number of facilities have begun to zero in on environmental innovations in this space, Practice Greenhealth wants to recognize the great work happening in **operating rooms** around the country.

**New in 2016** Practice Greenhealth is introducing a stand-alone **Greening the OR Recognition Award** that recognizes a baseline set of achievements in reducing the environmental impact of the surgical department. Any Practice Greenhealth member health care facility with **operating rooms** – whether acute inpatient hospital or ambulatory surgery center – is eligible for and encouraged to apply for this award by [completing the Greening the OR application](#).

Practice Greenhealth will continue to recognize the [\(one\) outstanding performer](#) in Greening the **Operating Room** with its **Greening the OR Leadership Award** and the [top 10 performers](#) through its **Greening the OR Circle of Excellence**.

**The Greening the OR page of the Partner Recognition application does not qualify a hospital for the Greening the OR Award. You must fill out a separate application to be considered. To apply, go to your [Dashboard](#) and start a new Greening the OR application.**

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**1.** Does your facility have a sustainability champion or leader in the OR?

- ☒ Yes  
☐ No

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**1.a** Name:

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**1.b** Title:

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**1.c** Email:

## Waste Segregation & Management

Proper waste management is critical to any successful environmental stewardship program, but it is especially important within the **operating room**. **The OR can account for 30% of a facility's overall waste and more than half of its regulated medical waste**. 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 **recycling** 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.

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- 2.** Does the facility have a process to **divert pre-incision (prior to the case)** (non-pharmaceutical waste) from the **regulated medical waste stream** into the **solid waste** stream for non-infectious waste disposal?

- ☒ Yes  
☐ No

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- 3.** Does the facility have a process to **segregate** non-infectious **solid waste** from the **regulated medical waste** stream **during and after the procedure**?

- ☒ Yes  
☐ No

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- 4.** Does the facility **utilize a fluid management system** that empties directly into the sanitary sewer as a means to reduce exposure to bloodborne pathogens and reduce waste?

- ☒ Yes  
☐ No

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- 4.a** Does the facility utilize a **reusable canister fluid management system**?

- ☐ Yes  
☐ No

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The following questions on **recycling clinical plastics** are also asked on the **Waste** page. Please denote here if you are **recycling** clinical plastics within the **operating room**.

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- 5.** Does the facility **recycle clinical/medical plastics** in the OR?

- ☒ Yes  
☐ No

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- 5.a** Please select all clinical/**medical plastics** being recycled in the OR:

- ☐ Irrigation bottles  
☐ Skin prep solution bottles  
☐ Trays  
☐ Overwraps  
☐ Rigid inserts  
☐ Blue wrap  
☐ Tyvek  
☐ Basins

- ☒ Urinals/Bedpans  
☒ Other

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

## Single-Use Device Reprocessing

Reprocessing of single-use medical devices (SUDs) goes beyond the **operating room** and includes many other patient care areas. To simplify, Practice Greenhealth is asking all questions pertaining to SUD reprocessing on the Greening the OR page in 2016. Please enter all SUD reprocessing data below.

**6.** Has your facility implemented a single-use device reprocessing program by an FDA-approved third party reprocessor?

- ☒ Yes  
☐ No

Please indicate which **department(s)** your facility has implemented a reprocessing program in by selecting Yes or No below.

**Table A1. Reprocessing by Department**

Department	Collect Reprocessed Devices	Purchase Reprocessed Devices
OR	<b>6.a</b> <input type="radio"/> Yes <input type="radio"/> No	<b>6.b</b> <input type="radio"/> Yes <input type="radio"/> No
EP/Cath	<b>6.c</b> <input type="radio"/> Yes <input type="radio"/> No	<b>6.d</b> <input type="radio"/> Yes <input type="radio"/> No
Patient Care	<b>6.e</b> <input type="radio"/> Yes <input type="radio"/> No	<b>6.f</b> <input type="radio"/> Yes <input type="radio"/> No
Other	<b>6.g</b> <input type="radio"/> Yes <input type="radio"/> No	<b>6.h</b> <input type="radio"/> Yes <input type="radio"/> No

Please indicate which **device type(s)** your facility is reprocessing by selecting **Yes or No** below. Select **No** if your facility did not collect/purchase reprocessed devices in that category in 2015.

**Table A2. Reprocessing by Device Type**

Device Category	Collect Reprocessed Devices	Purchase Reprocessed Devices
Non-Invasive	<b>6.i</b> <input type="radio"/> Yes <input type="radio"/> No	<b>6.j</b> <input type="radio"/> Yes <input type="radio"/> No
Invasive	<b>6.k</b> <input type="radio"/> Yes <input type="radio"/> No	<b>6.l</b> <input type="radio"/> Yes <input type="radio"/> No

\*Vendor reports differ, but generally devices are categorized as Non-Invasive and Invasive. Some vendors may break out Invasive by department or add a third category (cardiac). For the award application purposes, enter all non-invasive information in the Non-Invasive category and include the rest as Invasive. For additional information and step-by-step help, please click [here](#).

Please enter the **total** avoided waste **in pounds (Lbs)** in 2015 as a result of your facility's reprocessing collection program below.

**Table A3. SUD Reprocessing Collection Data**

SUD Reprocessing Collection Savings	Total
Weight of devices collected (in pounds)	<input type="text"/>
Weight of devices collected, converted to tonnage	0
Avoided waste disposal costs	<u>6.0</u> <input type="text"/>

New this year, Practice Greenhealth would like to capture the reprocessing purchasing power of the health care sector through the dollars spent on reprocessed devices. In the table below, please enter the total dollars **spent** on purchasing reprocessed devices.

**Table A4. Dollars (\$) Spent on Reprocessed Devices**

Category	2015
Non-Invasive	<input type="text"/>
Invasive	<input type="text"/>
Total	0 <input type="text"/>

Please enter **total dollars saved on purchased reprocessed devices** in Table A5 below.

**Table A5. Reprocessing Purchase Savings**

Reprocessing Program Savings	2015
Non-Invasive Devices	<input type="text"/>
Invasive Devices	<input type="text"/>
Total	0 <input type="text"/>

In the table below, please enter the **compliance** or **variance** or **purchase efficiency** data. This information provides some insight into how well your facility's reprocessing program is doing on the contracting and purchasing side by comparing the number of devices collected and available to buy back to the number of devices the facility actually buys back.

\*Vendor terminology differs. The two terms that may be found on reports are "**Variance**" or "**Purchase Efficiency**". This data is tracking the number of devices the facility collected for reprocessing that were then available to buy-back, and the percentage of those devices available to buy-back that the facility purchased. For some vendors, a number above 100% is possible if your facility is buying more reprocessed devices made available than what was actually collected at that facility. Please ask your vendor for assistance on this section. For additional information and step-by-step help, please click [here](#).

**Table A6. Reprocessing Purchase Efficiency**

Category	Variance/Compliance/Efficiency
Total %	<u>6.v</u> <div></div>

This number is a measured metric for the Partner Recognition application. If you have trouble finding this number, please review the PGH Resource on Greening the OR or contact Kaeleigh Sheehan, GOR Program Manager for assistance. **Please do not enter % or \$ signs in table above or it will give you a validation error message.**

- 7.** Please attach any related **reprocessing policies** in place at the facility or system level. You may describe the policy as part of your answer in the box provided above for successes, in Question 8 if you desire.

- 8.** Is your facility participating in the **Reprocessing Goal** of the **Smarter Purchasing Challenge** of the Healthier Hospitals program?

- ☒ Yes  
☐ No

- 8.a** Please describe any progress toward this goal:

## Waste Reduction in the OR

Identifying opportunities to eliminate unnecessary waste from the **operating room** waste stream can help facilities reduce upfront purchase 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 reprocessible equipment, and more.

- 9.** Does the facility **reformulate OR kits**--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 B. 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 B. OR Kit Reformulation**

Total number of OR Kit Types	<div></div>
Number of Kit Types Reviewed	<div></div>
Percent of Kit Types Reviewed	0

**10.** Is your facility participating in the **OR Kit Review Goal** of the **Smarter Purchasing Challenge** of the Healthier Hospitals program?

☒ Yes

☐ No

**10.a** Please describe any progress toward this goal:

**11.** Does the facility utilize **reusable surgical items** where environmentally and clinically preferable?

☒ Yes

☐ No

**11.a** Please describe which reusable devices or reusable surgical linen types are being utilized more than 75% of the time in the OR:

**12.** Does the facility utilize **reusable hard cases** for sterilization of surgical instrumentation and reduction of disposable sterile wrap?

☒ Yes

☐ No

Please fill in Table C.

**Table C. Rigid Sterilization Containers in the OR**

Total number of OR Kit Types	<b>12.a</b>
	<div></div>
Number of Kit Types Reviewed	<div></div>
Percent of Kit Types Reviewed	<div>0</div>

**13.** Does the facility utilize **microfiber mops** in the OR as a means to reduce water usage, ergonomic stress, and waste?

☒ Yes

☐ No

## Energy Reduction in the OR

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**.

- 14.** 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. Does the facility meet **but not exceed** air changes per hour per **ASHRAE 170** (20 ACH) as a mechanism to minimize energy consumption in the OR while still ensuring patient safety?
- ☒ Yes  
☐ No

- 15.** 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

**15.a** What mechanism does the facility use to control HVAC setback?

- ☒ Occupancy sensors  
☐ Mushroom button  
☐ Scheduling system  
☐ Building Automation System  
☒ Other

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

How many **ORs** have implemented an HVAC setback program?

**Operating Rooms (ORs):**

0

From your Facility Profile.

Your facility utilizes HVAC setback in this percent of your **ORs**, based on above information:

0

For more information on HVAC Setback Programs for the **Operating Room**, please see the American Society for Healthcare Engineering **OR HVAC Setback Monograph** available [here](#).

- 16.** Does the facility utilize **LED surgical lighting**?

- ☒ Yes  
☐ No

**16.a** How many **ORs** are equipped with LED surgical lighting?

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**Operating Rooms (ORs):**

0

From your Facility Profile.

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Your facility utilizes LED surgical lighting in this percent of your **ORs**, based on above information:

0

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**17.** Does the facility utilize **occupancy sensors for lighting** to reduce energy consumption when the OR is unoccupied and not in use?

- ☒ Yes  
☐ No

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**17.a** How many **ORs** are equipped with occupancy sensors?

## Anesthesia

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Although very new to the hospital sustainability spectrum, leading hospitals are re-evaluating the anesthesia care regime for environmental stewardship opportunities that align with patient safety and/or cost reduction. Choice and management of anesthetic gases is important to the facility's overall greenhouse gas (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.

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The NHS England and England Public Health Sustainable Development Unit also offers assistance calculating the carbon footprint of anesthetic gas usage, available here: [\*\*SDU Anesthetic Gas Calculator\*\*](#)

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The American Society of Anesthesiologists provides guidance on Greening the OR for anesthesiologists in [\*\*Greening the Operating Room: Reduce, Reuse, Recycle and Redesign\*\*](#).

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

- ☒ Yes  
☐ No

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**19.** Please share any additional comments or clarification around **anesthesia** data or sustainability strategies:

## Greening the OR Successes



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Please describe any other innovative Greening the OR programs or successes at the facility in 2015 that you would like to share in the spaces below. Please feel free to provide commentary and/or attach a file.

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**20.** Success 1: Please describe

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**21.** Please attach any additional documentation (optional):

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**22.** Success 2: Please describe

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**23.** Please attach any additional documentation (optional):

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