Partner for Change - 2016: Energy

Introduction

The generation of energy from fossil fuels emits a range of different pollutants, in addition to being the largest contributor to greenhouse gas emissions. Air pollutants from energy sources can cause asthma, respiratory disease and other ailments in the community. Please use this section of the application to enter your energy data and report on energy conservation successes. This section of the application is tied to the Climate section, due to energy's contribution to an organization's carbon footprint.

Energy Use Demographics

1. Please enter the facility's **Baseline Year** for Energy data:

Baseline Year is the year the facility began actively tracking energy and utility use or initiated a water conservation program. If you provide this historic data, it is worth additional points—so PGH can get a better sense of the facility's organizational progress over time and assess performance metrics.

PGH uses Energy Star Portfolio Manager's definition of **Gross Floor Area**. If the facility uses Portfolio Manager, you can cut and paste the value for **Gross Floor Area** into the application.

Please enter the facility's **Gross Floor Area in Square Feet** below:

Baseline Year Sq Ft	Previous Year Sq Ft	Current Year Sq Ft
2.	**3.**	**4.**
Enter same value for all three **Gross Floor Area** questions if the facility's **Gross Floor Area** has remained unchanged. These values will be pre-populated to the Water page.		

Energy Usage

New in 2016 All energy data must be provided for a 12-month **CALENDAR YEAR**, meaning we are seeking data from January 1, 2015 through December 31, 2015 only for Current Year. Baseline and Previous Year data will also need to be updated. The reason for this transition is that in order to appropriately compare energy performance, Practice Greenhealth has to utilize weather normalization. To use weather normalization appropriately, it

has to be the **same 12-month period** (e.g. we need to see energy use in an especially cold February for all sites for an accurate comparison--not just those who typically utilize a calendar year for reporting.)

Please provide details on energy usage at your facility.

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5. Do you have an **onsite laundry?**

   ○ Yes

   ○ No

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6. Please indicate the number of **MRI machines** at your facility:

Please indicate the facility's energy use in **Table A** below. Every applicant is required to complete the CURRENT YEAR USAGE (2015) column, even if this is first year completing an application.

We also need the facility's baseline and previous year (2014) data. If this is your first year of tracking energy data, you should enter your 2015 data in both the baseline and current year columns and leave previous year blank. If last year (2014) was the facility's baseline year, enter it for both previous year and baseline year below. **If you do not use a particular energy type, please leave it blank. Do not enter zeros.**

PGH would like your facility to properly identify **energy used to power parking lots/structures** (lighting, HVAC, etc) and **remove this data** from your entries for energy use in Table A below. The first row of data in Table A should not include parking kWh.

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7. Do you **submeter** your **parking** lots/structures?

   ◉ Yes

   ○ No

   7.a Are you therefore able to separate out (and subtract) parking lot/parking structure energy use from energy use totals?

      ○ Yes

      ◉ No

      7.a.a What is the amount of energy, in kilowatt hours (kWh) used for your parking structures annually?

NEW IN 2016 Facilities must use **<u>calendar year data</u>** for energy use (January 1st- December 31st).

Table A. Fossil Fuel-Based Energy Use Please check that the data for any given fuel type (electricity, natural gas, etc) is the same order of magnitude for all three years and check the units for each energy type for each year. It is best to include any given fuel type for all three years if appropriate.

Energy Categories	Baseline Year Usage	Units (baseline)	Previous Year Usage	Units (previous)	Current Year Usage	Units (current)
Electricity (fossil fuel)	**8.**	**9.** kWh ▼	**10.**	**11.** Select an option ... ▼	**12.**	**13.** Select an option ... ▼

Natural Gas	**14.**	**15.** Select an option … ▾	**16.**	**17.** Select an option … ▾	**18.**	**19.** Select an option … ▾
Fuel Oil (#2)	**20.**	**21.** Select an option … ▾	**22.**	**23.** Select an option … ▾	**24.**	**25.** Select an option … ▾
Steam	**26.**	**27.** Select an option … ▾	**28.**	**29.** Select an option … ▾	**30.**	**31.** Select an option … ▾
Chilled Water	**32.**	**33.** Select an option … ▾	**34.**	**35.** Select an option … ▾	**36.**	**37.** Select an option … ▾
Purchased Hot Water	**38.**	**39.** Select an option … ▾	**40.**	**41.** Select an option … ▾	**42.**	**43.** Select an option … ▾
Diesel	**44.**	**45.** Select an option … ▾	**46.**	**47.** Select an option … ▾	**48.**	**49.** Select an option … ▾
50. Enter Other fossil fuel type	**51.**	**52.**	**53.**	**54.**	**55.**	**56.**
57. Enter Other fossil fuel type	**58.**	**59.**	**60.**	**61.**	**62.**	**63.**

64. Did you ensure energy data was entered for calendar year (Jan 1, 2015-Dec 31, 2015) only?

⦿ Yes
◯ No

64.a Did you ensure baseline and previous year data was updated to calendar year as well?

⦿ Yes
◯ No

Otherwise the facility **will not get credit for the energy reduction metric**--as it needs baseline and previous year data to be in same 12 month period as current year.

65. Does the facility generate or purchase **renewable energy**?

Yes ▾

Please enter the facility's **renewable energy** use into Table B (including onsite generation or **renewable energy** purchases/RECs). If you do not purchase/have **renewable energy** sources, please leave blank. Do not enter zeros.

Table B. Renewable Energy Use (generated onsite or purchased)

Renewable Energy	Baseline Year Usage	Units (baseline)	Previous Year Usage	Units (previous)	Current Year Usage	Units (current)
65.a Type 1: Generated **On-site** Select an option...		Select an option...		Select an option...		Select an option...
65.h Type 2: Generated **Off-site** Select an option...		Select an option...		Select an option...		Select an option...
65.o Type 3: Generated **Off-site** Select an option...		Select an option...		Select an option...		Select an option...
65.v Purchased **Renewable Energy**/**Renewable Energy** Credits Select an option...		Select an option...		Select an option...		Select an option...

66. Has the facility put a **combined heat and power/cogeneration project** into place in the last 5 years?

⦿ Yes

○ No

66.a Please describe project:

Please share estimated annual energy and cost savings:

66.b Energy Savings:

66.c Cost Savings ($):

66.d Description or details:

Current Energy Costs

Type	Total Cost ($) Current
Conventional Energy Categories	
Electricity (fossil fuel)	**67.**
Natural Gas	**68.**
Fuel Oil	**69.**
Steam	**70.**
Chilled Water	**71.**
Purchased Hot Water	**72.**
Diesel	**73.**
Renewable Energy Categories	
74. Type 1: Generated On-Site Select an option... ▾	**75.**
76. Type 2: Generated Off-Site Select an option... ▾	**77.**
78. Type 3: Generated Off-Site Select an option... ▾	**79.**
80. Type 4: Purchased **Renewable Energy**/ **Renewable Energy** Credits Select an option... ▾	**81.**
Total Energy Costs	**82.** 0

This table **auto-calculates the facility's Energy Use Portfolio** (percent energy usage and cost by energy type) and is based on values entered in Table A (and Table B if applicable).

Table C. Current Energy Use Portfolio

Category	kBtus (Baseline)	kBtus (Previous)	kBtus (Current)	Percent of Total Usage (Current)	Percent of Total Cost (Current)
Conventional Electricity (Fossil Fuel or Nuclear)	83. 0	93. 0	103. 0	104. 0	123. 0
Natural Gas	84. 0	94. 0	105. 0	106. 0	124. 0
Fuel Oil	85. 0	95. 0	107. 0	108. 0	125. 0
Steam	86. 0	96. 0	109. 0	110. 0	126. 0
Chilled Water	87. 0	97. 0	111. 0	112. 0	127. 0
Purchased Hot Water	88. 0	98. 0	113. 0	114. 0	128. 0
Diesel	89. 0	99. 0	115. 0	116. 0	129. 0
Onsite Renewable Energy	90. 0	100. 0	117. 0	118. 0	130. 0
Offsite Renewable Energy	91. 0	101. 0	119. 0	120. 0	131. 0
Total	92. 0	102. 0	121. 0	122. 0	132. 0

133. Based on this data, the below % of your facility's energy portfolio is from renewable sources.

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Energy Performance Metrics : Energy Use Intensity (EUI)

Table D auto-calculates and summarizes your **energy performance metrics** based on values entered in **Table A** above. If your EUI (kBtus/sq ft) is **less than 75 or greater than 480**, please review your energy data and **gross floor area** for errors. The median data from 2015 award winners was **237 kBtus/sq ft.**

Table D. Energy Use Intensity (EUI) Note: EUI values should be the same order of magnitude for all three years. Percent change from baseline should usually fall between 30-150%. Percent change from previous year will generally fall in the range of 20-120%. If this is not true of your data in Table D, please review your energy data in Table A and **gross floor area** above).

Current Year kBtus	Baseline Year kBtus	Previous Year kBtus	% Change from Baseline kBtus	% Change from Previous kBtus

134.	135.	136.	137.	138.
0	0	0	0	0
Current Year EUI	Baseline Year EUI	Previous Year EUI	% Change from Baseline EUI	% Change from Previous EUI
139.	140.	141.	142.	143.
0	0	0	0	0

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144. Is your facility participating in the Healthier Hospitals Leaner Energy Challenge?

◉ Yes
○ No

144.a Please indicate which challenge level your organization is striving for?

○ 3% reduction
○ 5% reduction
○ 10% reduction

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145. Does the facility have an energy manager?

◉ Yes
○ No

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146. Does the facility use **Energy Star Portfolio Manager**?

◉ Yes
○ No

146.a Has your facility benchmarked your hospital using **EnergyStar's Portfolio Manager**?

◉ Yes
○ No

146.a.a Please indicate most recent Energy Star score:

146.a.b Please indicate the facility's **Site EUI** for 2015 according to Portfolio Manager:

146.a.c Please indicate the facility's **Weather-Normalized Site EUI** for 2015 according to Portfolio Manager:

147. Has the facility **shared access to its energy data through Portfolio Manager** with Practice Greenhealth (through the Healthier Hospitals program)?

◉ Yes
○ No

148. Does the facility have a **written plan to reduce energy use** over time with timelines and goals?

◉ Yes
○ No

148.a Please describe:

148.b Please attach:

Plan must be attached to get points for this item.

148.c Please indicate who is accountable for the plan:

148.d Name:

148.e Title:

148.f Email:

148.g Phone:

149. Has the facility developed a **Strategic Energy Master Plan (SEMP)**?

◉ Yes
○ No

149.a What is the name of the firm hired to develop the plan?

149.b What date was the plan launched?

150. Has the facility conducted a **baseline energy audit** for the institution in the past five years?

◉ Yes
○ No

150.a ASHRAE Level I performed?

◉ Yes
○ No

150.a.a Name of Firm:

150.a.b Date audit was completed:

150.b ASHRAE Level II

◉ Yes
○ No

150.b.a Name of Firm:

150.b.b Date audit was completed:

150.c ASHRAE Level III

◉ Yes
○ No

150.c.a Name of Firm:

150.c.b Date audit was completed:

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151. Has the facility engaged a **retrocommissioning firm** to **optimize building performance**?

⦿ Yes
○ No

151.a Name of firm engaged?

151.b Date of contract?

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152. Does the facility **utilize submeters** to better monitor energy efficiency opportunities?

⦿ Yes
○ No

152.a Please indicate which **areas** have been submetered (e.g. by department, certain pieces of equipment etc.).

152.b Is the hospital submetering specific **technologies** (such as MRI)?

⦿ Yes
○ No

152.b.a List the technologies that are being submetered (e.g., MRI, other)

152.c What has your facility found to be the **biggest benefits of submetering?**

153. Has the facility **collaborated** with the **Information Technology (IT) Department** to integrate energy efficiency measures?

⦿ Yes
○ No

153.a Please describe this work:

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154. Does the facility have an **onsite data center** that requires a constant power load of **75 kW** or more?

⦿ Yes
○ No

EPEAT

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155. Does the facility **purchase energy-efficient equipment** that is **EnergyStar labeled?**

Yes ▼

Provide the Top 3 **Energy Star product purchases** by dollars spent last year (note: larger projects are requested in the "Energy Efficiency Projects" section below).

155.a Product 1:

155.b Product 2:

155.c Product 3:

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156. When an **EnergyStar** label is not available for a given technology, does the hospital consider **energy performance** as a part of cost of operation for the product?

⦿ Yes
○ No

156.a Please provide example and description:

Energy Efficiency Project Data

Please list the biggest **energy-saving projects** implemented in 2015 in Table E.

Table E. Energy Efficiency Project Data

Project Description	Project Category	Energy Saved/Year	Units	kBtus Saved	Dollar Savings
157.	**158.** Select an option... ▼	**159.**	**160.** Select an option... ▼	**161.** 0	**162.**
163.	**164.** Select an option... ▼	**165.**	**166.** Select an option... ▼	**167.** 0	**168.**
169.	**170.** Select an option... ▼	**171.**	**172.** Select an option... ▼	**173.** 0	**174.**
175.	**176.** Select an option... ▼	**177.**	**178.** Select an option... ▼	**179.** 0	**180.**
181.	**182.** Select an option... ▼	**183.**	**184.** Select an option... ▼	**185.** 0	**186.**
Totals				**187.** 0	**188.** 0

Please describe any other successes or innovations in the energy program or projects at your facility that you would like to share in the space provided below. Please feel free to provide commentary and/or attach a file.

189. Success 1: Please describe

190. Please attach any additional documentation (optional):

191. Success 2: Please describe

192. Please attach any additional documentation (optional):

193. Success 3: Please describe

194. Please attach any additional documentation (optional):