

Probo.CI



CEC_CHCS — no.3531287

Partner for Change (No Beds) - 2018: 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 use and reduction.

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
3. <input type="text"/>	4. <input type="text"/>	5. <input type="text"/>

Enter the same value for all three years if the facility's **Gross Floor Area** has not changed. These values will populate on both the Water and Energy pages.

Energy Usage

All energy data **MUST** be provided for a 12-month **CALENDAR YEAR**, meaning we are seeking data from January 1st through December 31 for Current Year. **Baseline and Previous Year data** will also need to be tracked by calendar year.

The reason for this requirement is that in order to appropriately compare energy performance, Practice Greenhealth has to utilize weather normalization. To use weather normalization appropriately, there is a need for data from the **same 12-month period** (e.g. we need to see energy use in an especially cold February (or extreme heat waves in the summer) 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.

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

- ☐ Yes
- ☐ No

6. Please indicate the number of **MRI machines** at your facility:
7. Did the facility have any activities in 2017 that might have significantly **increased** its energy use (for example: the introduction of new major medical equipment, mobile equipment or plugs, equipment failure mitigation; or major renovation/construction load)?"

Please indicate the facility's CALENDAR YEAR energy use in **Table A** below. Every applicant is required to complete the CURRENT YEAR USAGE (2017) column, even if this is the facility's first year completing an application. To receive maximum points on this page, please enter the facility's baseline and previous year (2016) data as well. This data may have been imported for you if you are a repeat applicant.

If this is your first year of tracking energy data, you should enter your 2017 data in BOTH the baseline and current year columns and leave previous year blank. If last year (2016) 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.**

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

- ☒ Yes
- ☐ No

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

- ☐ Yes
- ☐ No

Facilities must provide **CALENDAR YEAR data** 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 years, and check the units for each energy type for each year. Please provide data for any given FUEL TYPE (Electricity, natural gas) for ALL 3 YEARS, if appropriate (Baseline, Previous and Current).

Please only include **building energy use**--DO NOT INCLUDE energy use for fleet vehicles, such as diesel or fuel oil for vehicles. If you cannot separate building and vehicle use for a certain fuel type, please check with Awards Technical Assistance for guidance.

Energy Categories	Baseline Year Usage	Units (baseline)	Previous Year Usage	Units (previous)	Current Year Usage	Units (current)
Electricity (fossil fuel)	9. <input type="text"/>	10. Select an opti ▼	11. <input type="text"/>	12. Select an opti ▼	13. <input type="text"/>	14. Select an opti ▼
Natural Gas	15. <input type="text"/>	16. Select an opti ▼	17. <input type="text"/>	18. Select an opti ▼	19. <input type="text"/>	20. Select an opti ▼
Fuel Oil (#2)	21. <input type="text"/>	22. Select an opti ▼	23. <input type="text"/>	24. Select an opti ▼	25. <input type="text"/>	26. Select an opti ▼

Steam	<u>27.</u> <input type="text"/>	<u>28.</u> Select an opti ▼	<u>29.</u> <input type="text"/>	<u>30.</u> Select an opti ▼	<u>31.</u> <input type="text"/>	<u>32.</u> Select an opti ▼
Chilled Water	<u>33.</u> <input type="text"/>	<u>34.</u> Select an opti ▼	<u>35.</u> <input type="text"/>	<u>36.</u> Select an opti ▼	<u>37.</u> <input type="text"/>	<u>38.</u> Select an opti ▼
Purchased Hot Water	<u>39.</u> <input type="text"/>	<u>40.</u> Select an opti ▼	<u>41.</u> <input type="text"/>	<u>42.</u> Select an opti ▼	<u>43.</u> <input type="text"/>	<u>44.</u> Select an opti ▼
Diesel	<u>45.</u> <input type="text"/>	<u>46.</u> Select an opti ▼	<u>47.</u> <input type="text"/>	<u>48.</u> Select an opti ▼	<u>49.</u> <input type="text"/>	<u>50.</u> Select an opti ▼
Propane	<u>51.</u> <input type="text"/>	<u>52.</u> Select an opti ▼	<u>53.</u> <input type="text"/>	<u>54.</u> Select an opti ▼	<u>55.</u> <input type="text"/>	<u>56.</u> Select an opti ▼
57. Enter Other fossil fuel type <input type="text"/>	<u>58.</u> <input type="text"/>	<u>59.</u> <input type="text"/>	<u>60.</u> <input type="text"/>	<u>61.</u> <input type="text"/>	<u>62.</u> <input type="text"/>	<u>63.</u> <input type="text"/>

64. Did you enter data for calendar year (Jan 1, 2017-Dec 31, 2017)?

- ☒ Yes
☐ No

64.a Did you ensure 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.

64.b Did you ensure baseline year data was updated to calendar year as well?

- ☐ Yes
☐ No

65. Please describe any barriers or challenges to providing data in calendar year format. Please be specific:

66. Is the hospital using **hydropower** as its primary source of electricity?

- ☒ Yes
☐ No

66.a Does the hydropower being used for electricity meet the definition of "low-impact" hydropower, as defined by the **Low-Impact Hydropower Institute (LIHI)**?

- ☐ Yes
☒ No

In order to be considered "low-impact" hydropower (and qualify as **renewable energy**), the utility must be **certified by LIHI** or meet the **criteria for certification** by LIHI. Please contact **Iqbal Mian, Member Engagement Manager** if you have questions about whether your utility qualifies.

Please enter the amount of electricity generated using high-impact (or non-certified/non-certifiable by LIHI) hydropower in **Table A1. Electricity from High-Impact Hydropower Electricity** below.

In order to be considered "low-impact" hydropower (and qualify as **renewable energy**), the utility must be **certified by LIHI** or meet the **criteria for certification** by LIHI. Please contact **Iqbal Mian, Member Engagement Manager** if you have questions about whether your utility qualifies.

Table A1. High-Impact Hydropower Electricity

Energy Category	Baseline Year Usage	Units (baseline)	Previous Year Usage	Units (previous)	Current Year Usage	Units (current)
High-Impact Hydropower Electricity	66.a.a <input type="text"/>	66.a.b Select an c ▼	66.a.c <input type="text"/>	66.a.d Select an c ▼	66.a.e <input type="text"/>	66.a.f Select an o ▼

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

Yes ▼

67.a Please describe the organization's work around adding renewables to its energy portfolio.

Please enter the facility's **renewable energy** use into **Table B. Renewable Energy Use** (including onsite generation or **renewable energy** purchases/RECs).

If the hospital is purchasing **renewable energy** credits (RECs) through its utility, be sure not to double count this energy use. If your utility bill shows one value for electricity and RECs are a **subset** of that total kWh, then ensure the amount of electricity entered in **Table A. Fossil Fuel-Based Energy Use** is the total electricity minus the RECs value, where the RECs are then entered in **Table B.** below. (E.g., conventional electricity+RECs=total electricity, with conventional kWhs entered in Table A. while purchased RECs are entered in Table B.)

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)
67.c Type 1: Generated On-site Select an op ▼	67.d <input type="text"/>	67.e Select an op ▼	67.f <input type="text"/>	67.g Select an op ▼	67.h <input type="text"/>	67.i Select an op ▼
67.j Type 2: Generated Off-site Select an op ▼	67.k <input type="text"/>	67.l Select an op ▼	67.m <input type="text"/>	67.n Select an op ▼	67.o <input type="text"/>	67.p Select an op ▼
67.q Type 3: Generated Off-site Select an op ▼	67.r <input type="text"/>	67.s Select an op ▼	67.t <input type="text"/>	67.u Select an op ▼	67.v <input type="text"/>	67.w Select an op ▼
67.x Purchased Renewable Energy/ Renewable Energy Credits Select an op ▼	67.y <input type="text"/>	67.z Select an op ▼	67.aa <input type="text"/>	67.ab Select an op ▼	67.ac <input type="text"/>	67.ad Select an op ▼

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

- ☒ Yes
☐ No

68.a Please describe the cogen project:

Please share estimated annual energy and cost savings from cogen project:

68.b Energy Savings from cogen project:

68.c Energy units (kWh, kbtu, etc)

68.d Cost Savings (\$) from cogen project:

68.e Description or details of cogen project:

Current Energy Costs

Type	Total Cost (\$) Current
Conventional Energy Categories	
Electricity (fossil fuel)	69. <input type="text"/>
Natural Gas	70. <input type="text"/>
Fuel Oil	71. <input type="text"/>
Steam	72. <input type="text"/>
Chilled Water	73. <input type="text"/>
Purchased Hot Water	74. <input type="text"/>

Diesel	<u>75.</u> <input type="text"/>
Propane	<u>76.</u> <input type="text"/>
Hydroelectric (conventional)	<u>77.</u> <input type="text"/>
Renewable Energy Categories	
<u>78.</u> Type 1: Generated On-Site <input type="text" value="Select an option..."/>	<u>79.</u> <input type="text"/>
<u>80.</u> Type 2: Generated Off-Site <input type="text" value="Select an option..."/>	<u>81.</u> <input type="text"/>
<u>82.</u> Type 3: Generated Off-Site <input type="text" value="Select an option..."/>	<u>83.</u> <input type="text"/>
<u>84.</u> Type 4: Purchased Renewable Energy/ Renewable Energy Credits <input type="text" value="Select an option..."/>	<u>85.</u> <input type="text"/>
Total Energy Costs	<u>86.</u> <input type="text" value="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)	<u>87.</u> <input type="text" value="0"/>	<u>99.</u> <input type="text" value="0"/>	<u>111.</u> <input type="text" value="0"/>	<u>112.</u> <input type="text" value="0"/>	<u>135.</u> <input type="text" value="0"/>
Natural Gas	<u>88.</u> <input type="text" value="0"/>	<u>100.</u> <input type="text" value="0"/>	<u>113.</u> <input type="text" value="0"/>	<u>114.</u> <input type="text" value="0"/>	<u>136.</u> <input type="text" value="0"/>
Fuel Oil	<u>89.</u> <input type="text" value="0"/>	<u>101.</u> <input type="text" value="0"/>	<u>115.</u> <input type="text" value="0"/>	<u>116.</u> <input type="text" value="0"/>	<u>137.</u> <input type="text" value="0"/>
Steam	<u>90.</u> <input type="text" value="0"/>	<u>102.</u> <input type="text" value="0"/>	<u>117.</u> <input type="text" value="0"/>	<u>118.</u> <input type="text" value="0"/>	<u>138.</u> <input type="text" value="0"/>
Chilled Water	<u>91.</u> <input type="text" value="0"/>	<u>103.</u> <input type="text" value="0"/>	<u>119.</u> <input type="text" value="0"/>	<u>120.</u> <input type="text" value="0"/>	<u>139.</u> <input type="text" value="0"/>
Purchased Hot Water	<u>92.</u> <input type="text" value="0"/>	<u>104.</u> <input type="text" value="0"/>	<u>121.</u> <input type="text" value="0"/>	<u>122.</u> <input type="text" value="0"/>	<u>140.</u> <input type="text" value="0"/>
Diesel	<u>93.</u> <input type="text"/>	<u>105.</u> <input type="text"/>	<u>123.</u> <input type="text"/>	<u>126.</u> <input type="text"/>	<u>141.</u> <input type="text"/>

	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Propane	<u>94.</u> <u>0</u>	<u>106.</u> <u>0</u>	<u>124.</u> <u>0</u>	<u>127.</u> <u>0</u>	<u>142.</u> <u>0</u>
Hydroelectric (conventional)	<u>95.</u> <u>0</u>	<u>107.</u> <u>0</u>	<u>125.</u> <u>0</u>	<u>128.</u> <u>0</u>	<u>143.</u> <u>0</u>
Onsite Renewable Energy	<u>96.</u> <u>0</u>	<u>108.</u> <u>0</u>	<u>129.</u> <u>0</u>	<u>130.</u> <u>0</u>	<u>144.</u> <u>0</u>
Offsite Renewable Energy	<u>97.</u> <u>0</u>	<u>109.</u> <u>0</u>	<u>131.</u> <u>0</u>	<u>132.</u> <u>0</u>	<u>145.</u> <u>0</u>
Total	<u>98.</u> <u>0</u>	<u>110.</u> <u>0</u>	<u>133.</u> <u>0</u>	<u>134.</u> <u>0</u>	<u>146.</u> <u>0</u>

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

0

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 100 or greater than 500**, please review your energy data and **gross floor area** for errors. The median data from 2017 hospital award winners was **227 kBtus/sq ft** (and was 142 kBtus/sq ft for Long Term Care facilities in 2016).

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 generally be less than +/- 30%. Percent change from previous year should generally be less than +/- 25%. 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
<u>148.</u> <u>0</u>	<u>149.</u> <u>0</u>	<u>150.</u> <u>0</u>	<u>151.</u> <u>0</u>	<u>152.</u> <u>0</u>
Current Year EUI	Baseline Year EUI	Previous Year EUI	% Change from Baseline EUI	% Change from Previous EUI
<u>153.</u> <u>0</u>	<u>154.</u> <u>0</u>	<u>155.</u> <u>0</u>	<u>156.</u> <u>0</u>	<u>157.</u> <u>0</u>

158. Does the facility have an **energy manager**?

- ☐ Yes
☐ No

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

- ☒ Yes
☐ No

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

- ☒ Yes
☐ No

159.b Has your facility benchmarked your facility using **EnergyStar's Portfolio Manager**?

- ☒ Yes
☐ No

159.b.a Please indicate most recent **Energy Star** score:

159.b.b Please indicate the facility's **Site EUI** for 2017 according to Portfolio Manager:

159.b.c Please indicate the facility's **Weather-Normalized Site EUI** for 2017 according to Portfolio Manager:

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

- ☒ Yes
☐ No

160.a Please describe written plan to reduce energy use, timelines, and goals:

160.b Please attach written plan to reduce energy use:

Plan must be attached to get full credit for this question.

Please indicate who is accountable for the plan to reduce energy use:

160.c Name of person accountable for energy use plan:

160.d Title of person accountable for energy use plan:

160.e Email of person accountable for energy use plan:

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

- ☒ Yes
☐ No

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

161.b What date was the SEMP plan launched?

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

- ☐ Yes
☐ No

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

- ☐ Yes
☐ No

164. Has the facility engaged in other **ongoing energy improvements** such as **continuous commissioning**?

- ☒ Yes
☐ No

164.a Please describe ongoing energy improvements such as continuous commissioning:

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

- ☒ Yes
☐ No

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

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

- ☐ Yes
☐ No

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

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

☐ Yes

☐ No

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

☐ Yes

☐ No

EPEAT

168. 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

168.a Product 1:

168.b Product 2:

168.c Product 3:

169. 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

169.a Please provide example and description of how energy performance is considered as part of the cost of operation for the product:

Energy Efficiency Project Data

Please list the biggest **energy-saving projects** implemented in 2017 in Table E.

Table E. Energy Efficiency Project Data

Project Description	Project Category	Energy Saved/Year	Units	kBtus Saved	Dollar Savings
170. <input type="text"/>	171. Select an option.. ▼	172. <input type="text"/>	173. Select an option.. ▼	174. <input type="text" value="0"/>	175. <input type="text"/>
176. <input type="text"/>	177. Select an option.. ▼	178. <input type="text"/>	179. Select an option.. ▼	180. <input type="text" value="0"/>	181. <input type="text"/>
182. <input type="text"/>	183. Select an option.. ▼	184. <input type="text"/>	185. Select an option.. ▼	186. <input type="text" value="0"/>	187. <input type="text"/>
188. <input type="text"/>	189. Select an option.. ▼	190. <input type="text"/>	191. Select an option.. ▼	192. <input type="text" value="0"/>	193. <input type="text"/>
194. <input type="text"/>	195. Select an option.. ▼	196. <input type="text"/>	197. Select an option.. ▼	198. <input type="text" value="0"/>	199. <input type="text"/>
Totals				200. <input type="text" value="0"/>	201. <input type="text" value="0"/>

Please describe any additional **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.

202. Energy Success 1: Please describe or attach any additional documentation:

203. (optional) Attachment for Energy Success 1:

204. Energy Success 2: Please describe or attach any additional documentation.

205. (optional) Attachment for Energy Success 2:

206. Please describe any energy **lessons learned** that can be shared with other facilities.

