

# Green Hospital Scorecard

2017 Guidance on Interpretation of Green Hospital Scorecard



# 1. Energy Use (reported units)

This section reports on the data submitted to the Green Hospital Scorecard (GHS) survey for each fuel source and its conversion to gigajoules (GJ).

This section also reports on the hospital GHG emissions and the number of acres of mature trees that would sequester the emitted  $CO_2e$  per year. The sequestration of  $CO_2$  by mature trees is determined using the Canadian Council of Forest Ministers <u>Fact Sheet: Canada's Forests:  $CO_2$  Sink or Source?</u>

Energy (fuel) use emission factors are referenced and align with <u>Environment Canada's National</u> <u>Inventory Submissions</u> and <u>Ontario Regulation 397/11</u>, <u>Energy Conservation and Demand Management</u> <u>Plans</u>. For district heating, natural gas emission factor from Environment Canada's National Inventory Submission of 50,661.51 g CO<sub>2</sub>e/GJ was applied. For district cooling, a factor of 6.3983 kg CO<sub>2</sub>e/GJ from <u>Ontario Regulation 397/11</u>, <u>Energy Conservation and Demand Management Plans</u> was utilized.

# 2. Hospital Recognition Level and Performance Gauge

This section displays your hospital's overall score relative to the recognition levels of Bronze, Silver and Gold. The chart shows the distribution of participating hospitals' scores. Your hospital's score is displayed in red and its position, relative to the recognition levels, identified by the red line.

## 3. Hospital Performance Change from Last Year

This section is populated with your hospital's improvements year over year.

Green Text indicates a performance improvement.

(Red Text encased in brackets) indicates a decline in performance. The brackets have been included so that a decrease in performance can be distinguished should the scorecard be printed in black and white.

Black text indicates no change in performance.

"-" indicates that there was no data from previous years to determine performance change.

For Leadership, the presence of green initiatives and organization-wide staff engagement and outreach programming are compared from the previous to the current reporting year.

For policy, the presence of policies, targets and action plans are compared from the previous to the current reporting year.



For energy and water, the hospital's energy use and water use intensities are compared from the previous to the current reporting year.

For waste, waste intensity normalized for beds is compared from the previous to the current reporting year.

For recycling, the recycling rate is compared from the previous to the current reporting year.

For GHG, the total GHG emissions (tonnes of  $CO_2e$ ) are compared from the previous to the current reporting year.

# 4. Energy Use

Energy use is the annual total of the electricity, natural gas, propane, fuel oil, district heat and district cooling used, in gigajoules (GJ).

# 5. Energy Use Intensity

Energy Use Intensity (EUI) captures a building's annual energy use as a function of its size, in terms of "conditioned floor space" in square meters (m<sup>2</sup>). The hospital's EUI is also compared to all participating hospitals that are in the same climate zone as determined by ASHRAE (The American Society of Heating, Refrigerating and Air-Conditioning Engineers). For example, in Ontario the climate zones include zones 5, 6 and 7. For more information on ASHRAE climatic zones please see <u>ASHRAE Climatic Zones</u>. We encourage all facilities to explore weather-normalization for their energy data analysis, and participate in the Portfolio Manager program. Visit the <u>Portfolio Manager website</u>.

## 6. Waste Generation

Waste generation is the hospital's annual generation of general/non-hazardous, biomedical and diverted wastes, in tonnes. The waste generation and recycling rate KPI definitions have changed in 2013 reporting year. The changes consist of expanding the number of waste streams that are included in the waste generation and recycling rate definitions, please see Table 1: Waste Generation and Table 2: Recycling Rate for the definitions.

Reporting Year	Legend	Definition
2012	Waste 1	General/Non-Hazardous + Blue Bin + Green Bin + Cardboard
2013, 2014	Waste	<ul> <li>General/Non-Hazardous + Blue Bin + Green Bin + Cardboard + Shredded Paper</li> <li>Biomedical waste (reported separately in the chart)</li> </ul>

## Table 1: Waste Generation



# 7. Waste Intensity

Waste Intensity is a measure of the hospital's overall waste management performance, and takes into account the net effect of all waste generating, waste prevention, and waste minimization programs.

This indicator is a measure of how much waste is generated in a facility relative to the hospital size and activity which is measured in beds, outpatient visits, inpatient days and the "conditioned floor space" in square meter (m<sup>2</sup>). Waste intensity normalized for beds is reported in tonnes/bed, inpatient days in tonnes/inpatient day, outpatient visits in tonnes/outpatient visit and conditioned floor space in tonnes/m<sup>2</sup>.

The definitions for waste generation and recycling rate KPIs changed in the 2013 reporting year. These changes have impacted the waste intensity KPI, and consist of expanding the number of waste streams that are included in the waste generation and recycling rate definitions, please see *Table 1: Waste Generation* for the definitions.

Waste intensity normalized for the conditioned floor space in square meters (m<sup>2</sup>) was used to determine the hospital's overall GHS score. The hospitals' floor space was found to have similar statistical relationship (through regression analysis) to the generated waste as the number of beds, outpatient visits and inpatient days. The floor space can also be normalized across all hospitals.

# 8. Recycling Rate

Recycling Rate is a measure of a hospital's success in diverting the waste that was generated. The definitions for waste generation and recycling rate KPI reported in GHS changed in the 2013 and 2017 reporting years. The changes consist of expanding the number of waste streams that are included in the waste generation and recycling rate definitions, please see *Table 2: Recycling Rate* for the definitions.

<b>Reporting Year</b>	Graph Legend	Definition	
2012	🔸 You 1	Blue Bin + Cardboard	
	PG (Ave) 1		
	All (Ave) 1		
2013, 2014	<ul> <li>You</li> </ul>	Blue Bin + Green Bin + Cardboard + Shredded Paper	
	PG (Ave)		
	<ul> <li>All (Ave)</li> </ul>		
2017	<ul> <li>You</li> </ul>	Blue Bin + Green Bin + Cardboard + Shredded Paper + E-Waste +	
	PG (Ave)	Any weights listed in "other" categories	
	<ul> <li>All (Ave)</li> </ul>		

## Table 2: Recycling Rate



## 9. Waste Distribution

Waste Distribution is a measure of hospital waste composition as a percentage of each waste stream weight compared to the total weight of hospital waste. For this measure, the total weight of hospital waste is the sum of all the waste stream categories in the GHS survey, from General/Non-Hazardous to Other.

#### 10. Water Use

Water Use is the annual volume of water used by the hospital in cubic meters (m<sup>3</sup>).

#### 11. Water Use Intensity

Water Use Intensity expresses a building's annual water use as a function of its size, in terms of "conditioned floor space" in square meters (m<sup>2</sup>).

#### 12. Leadership

Leadership is a measure of corporate commitment to environmental sustainability as gauged by the presence of formalized organization-wide commitments as well as support and outreach with respect to energy, waste, water and special events. The score is based on the presence of commitments, support and outreach.

#### **Policy and Planning**

This is a measure of a hospital's progress in environmental planning and target-setting in six areas: environmentally preferred purchasing, toxics reduction, construction, energy, waste and water. The score is based on the presence of a governing policy, a defined target, and an action plan.