

# Energy Conservation and Demand Management 2016 Annual Scorecard

## STRATEGIC PRIORITIES

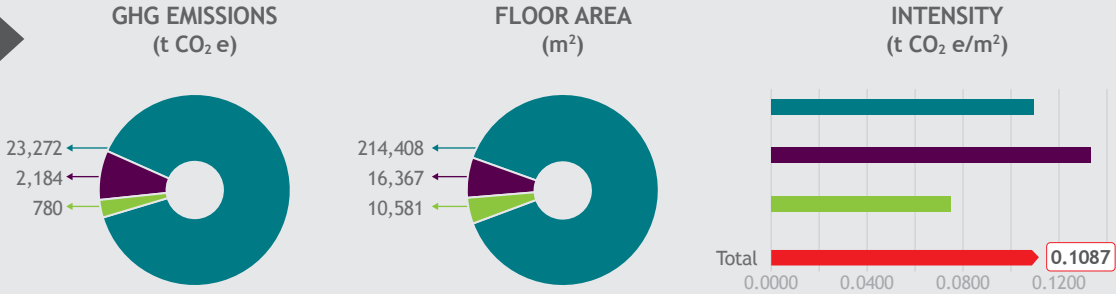
Brock University’s Integrated Strategic Plan, which has been endorsed by both the Board and the Senate, sets out the University’s Integrated Strategic Priorities. In developing this ECDM, wherever possible, these strategic priorities were used as a lens through which decisions were made and priorities were set. The full Integrated Strategic Plan can be viewed at [brocku.ca/webfm\\_send/18651](http://brocku.ca/webfm_send/18651).

$$\begin{array}{l}
 \text{Greenhouse Gas Emissions (t CO}_2\text{ e)} \\
 \text{Total tonnes of CO}_2\text{ produced by Brock University Operations} \\
 \text{including Natural Gas, Electricity and Fleet}
 \end{array}
 \div
 \begin{array}{l}
 \text{Floor Area (m}^2\text{)} \\
 \text{Total size of Brock} \\
 \text{building portfolio}
 \end{array}
 =
 \begin{array}{l}
 \text{Carbon Intensity (t CO}_2\text{ e/m}^2\text{)} \\
 \text{Total GHG Emissions per} \\
 \text{square metre of building space}
 \end{array}$$

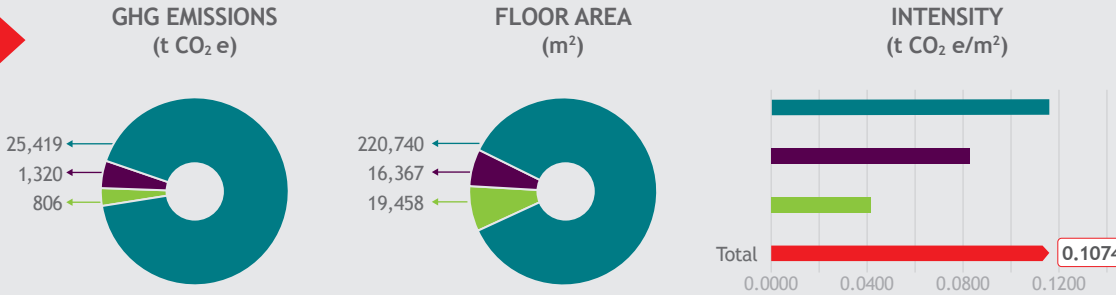
■ Main Campus     
 ■ CFHBRC     
 ■ Satellite Sites

### 2013

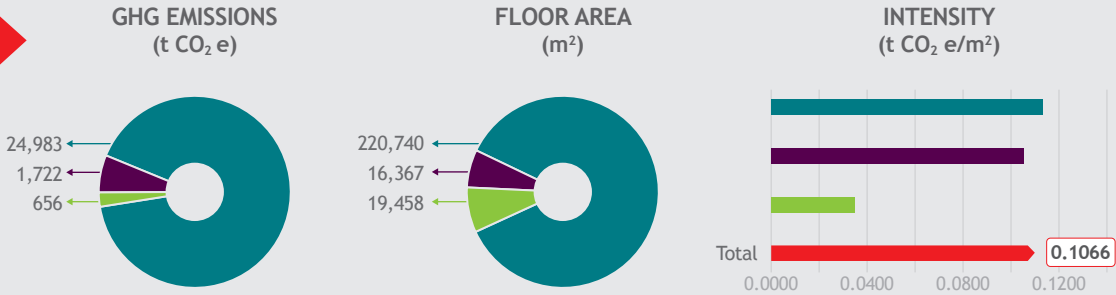
BASELINE  
INFORMATION



### 2016

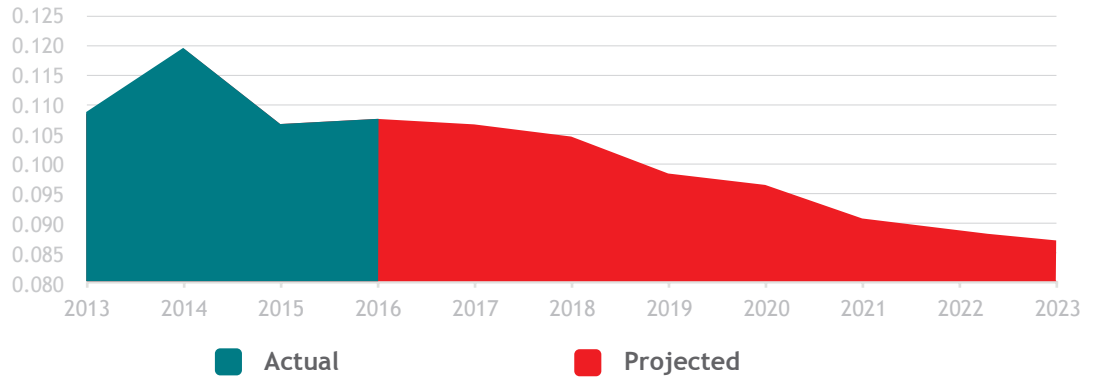


### 2015



TRENDS

BROCK UNIVERSITY CARBON INTENSITY PROGRESS AGAINST GOAL



MAJOR INITIATIVES

Based on the proposed energy and GHG reduction initiatives, Brock University plans to pursue a GHG emissions density reduction target of 20% below 2013 baseline levels by the year 2023. The following provides details of some of the key initiatives currently underway.



- 1 Generation**

**Improving the Efficiency and Diversity of On-Site Energy Generation**  
 The District Energy Efficiency Project (DEEP) is underway, which consists of major equipment retrofit with significant GHG saving. Additionally, continuing to study solar and wind power options on Brock campuses.
- 2 Operations**

**Smart and Efficient Building Operations and Renewal**  
 Optimizing campus energy loop to utilize excess heating and cooling provided by Co-Generation Plant and CFHBRC.
- 3 Procurement**

**Leveraging Strategic and Collaborative Procurement of Energy and Carbon Offsets**  
 On-going involvement with OEM, OAPPA and the Niagara Sustainability Initiative to develop collaborative policies and strategies to reduce GHG emissions collectively with our industry and local peers with a primary focus on managing the impacts of Ontario’s new Cap & Trade System.
- 4 Communication**

**Energy Awareness & Communication**  
 Completed major overhaul of the Energy Conservation and Demand Management Plan as well as implementing an annual scorecard to demonstrate our progress against our goal.
- 5 Buildings**

**Energy Efficient Design, Construction and Renovation of Buildings**  
 Designing a retrofit strategy for the Schmon Tower with the goal of addressing major deferred maintenance requirements as well as significantly increasing energy efficiency.