

Multi-Unit Residential Buildings Statement of Energy Performance

Report Date: 2020/01

| Building Information | _ | |
|----------------------|---|--|
| | Sample Building | 5 |
| | Address: 1234 University Avenue | Weather Normalized Site EUI (kWh/m ²) ⁱ : |
| Insert Photo | Year Built: 2010 | |
| | Gross Floor Area (m ²): 7,390 | 144 |
| | REAP Version ⁱⁱ : N/A | |
| | REAP Level ⁱⁱⁱ : N/A | GHG Emission Intensity (kgCO2e/m²) ^{iv} : 14.8 |

Energy Performance (2016-2018)



Weather Normalized EUI





Campus + Community Planning

| Metrics and Data (2014-2018) ^v | | | | | | | | |
|---|----------------------|---------------------|----------------|----------------------|---|--|--|--|
| Year | Electricity (kWh) | Natural Gas (GJ) | GHG (tCO2e) | Site EUI (kWh/m²) | Weather Normalized EUI (kWh/m²) ^{vi} | | | |
| 2014 | 518,521 | 2,104 | 110 | 153 | 159 | | | |
| 2015 | 489,296 | 2,032 | 106 | 146 | 160 | | | |
| 2016 | 504,798 | 2,071 | 109 | 144 | 153 | | | |
| 2017 | 521,474 | 2,396 | 125 | 158 | 161 | | | |
| 2018 | 456,519 | 2,035 | 107 | 142 | 155 | | | |
| | | | | | | | | |

| Estimated Cost of Energy | | | | | | | |
|--------------------------|--|--|--------------------|------------------------|--------------------|--|--|
| Year | Cost of Electricity (\$/kWh) ^{vii} | Cost of Natural Gas (\$/GJ) ^{viii} | Total Cost (\$) | Cost/Unit (\$/unit) | Cost/m² (\$/m²) | | |
| 2018 | 0.1292 | 6.38 | 42,365 | 631 | 5.92 | | |

ⁱ The weather normalized Site EUI (Energy Use Intensity) is the energy your property would have consumed during a year with 30year average weather conditions divided by the property size.

^v Energy performance metrics were determined using <u>Energy Star Portfolio Manager</u> by UBC Sustainability + Engineering. Units: kWh = kilowatt hour; GJ = gigajoules; tCO₂e is metric tonnes of CO₂ or equivalent.

^{vi} The weather normalized Site EUI (Energy Use Intensity) is the energy your property would have consumed during a year with 30year average weather conditions divided by the property size.

^{vii} The current electricity rate is the BC Hydro rate type 1101.

viii The estimated average natural gas rate is calculated by dividing the total billing amount, including GST, energy levy and carbon tax, by the total billed natural gas consumption during a period of a year.

ⁱⁱ <u>REAP (Residential Environmental Assessment Program)</u> is a comprehensive, UBC-specific green building rating system that is mandatory for residential construction on campus. UBC keeps updating REAP to ensure that residential buildings planned at UBC can outperform construction in the region. The current REAP Version 3.1 was released in September 2018.

ⁱⁱⁱ REAP assesses the performance of buildings based on the number of "points" that are earned by meeting the requirements of credits distributed across seven performance categories. There are four levels of performance (Gold, Gold Plus, Platinum and Platinum Plus) that can be achieved for the current REAP 3.1, with REAP Gold being the minimum standard.

^{iv} The weather normalized GHG (greenhouse gas) emission intensity is the amount of CO_2 or equivalent (CO_2e) emitted during a year with 30-year average weather conditions, divided by the property size.