Energy Benchmarking Data Snapshot for Senior/Residential Care Buildings

QUICK FACTS

- **350** senior/residential care buildings
- **4.0 million** m² floor area
- **1.1** GJ/m² median **site** energy use intensity (EUI)
- **1.7** GJ/m² median **source** EUI

ENERGY STAR® Portfolio Manager® is a tool used to track the energy use of 24,000 buildings in Canada. Energy benchmarking can help identify opportunities to save on energy costs and reduce environmental impact. This document provides a snapshot of the Canadian data for senior/residential care (Senior Care Community and Residential Care Facility) buildings entered into Portfolio Manager as of December 2019.

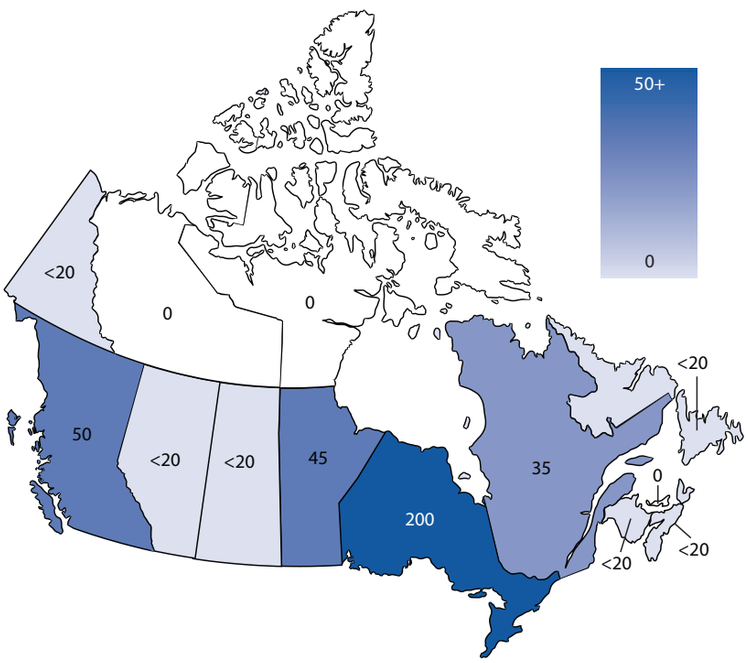
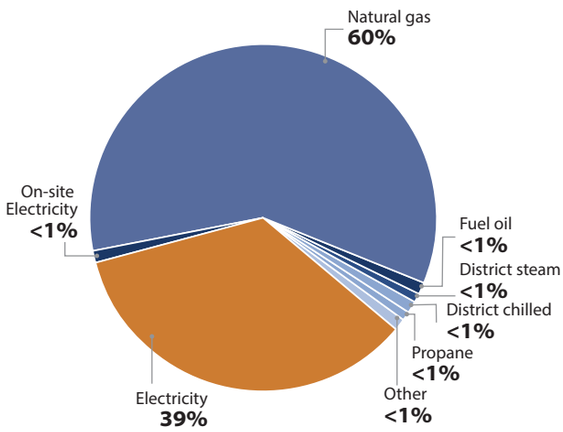


Figure 1. Total energy use breakdown



Fuel mix breakdown for senior/residential care buildings in Portfolio Manager

Table 1. Benchmarking by province and territory

Province or territory	Buildings	Floor area (m²)
Alberta	<20	<100,000
British Columbia	50	500,000
Manitoba	45	150,000
New Brunswick	<20	<100,000
Newfoundland and Labrador	<20	<100,000
Northwest Territories	0	0
Nova Scotia	<20	<100,000
Nunavut	0	0
Ontario	200	2,750,000
Prince Edward Island	0	0
Quebec	35	500,000
Saskatchewan	<20	<100,000
Yukon	<20	<100,000
Total	**350**	**4,000,000**

For privacy reasons, data are not provided for provinces and territories with fewer than 20 registered buildings and/or 100,000 m² of gross floor areas.Numbers may not sum to the total indicated because of rounding.Variations from previous snapshots are possible because of changes in user entry, improved filtering, and data cleaning.

Figure 2. Source EUI distribution

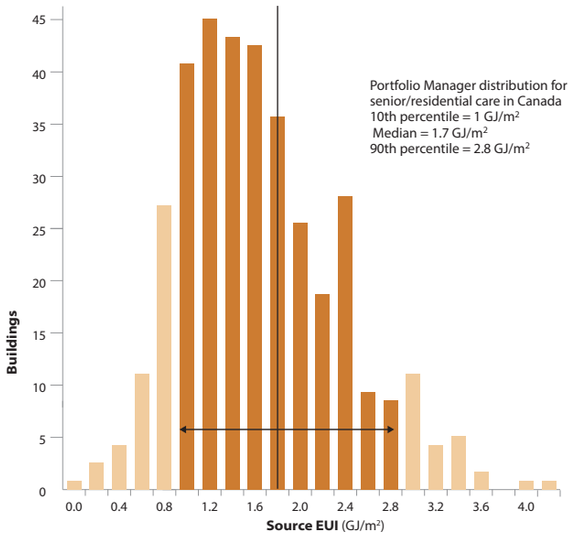


Table 2. Characteristics of senior/residential care buildings – range of values

Building characteristics	10th percentile	Median	90th percentile
Gross floor area (m^2)	1,935	10,245	19,540
Heating degree days	3,270	4,005	5,895
Cooling degree days	60	300	480
Workers on main shift per 100 m^2	0.2	1.0	1.0
Licensed beds per 100 m^2	1.1	1.7	1.7

Figure 3. Distribution of floor area and buildings

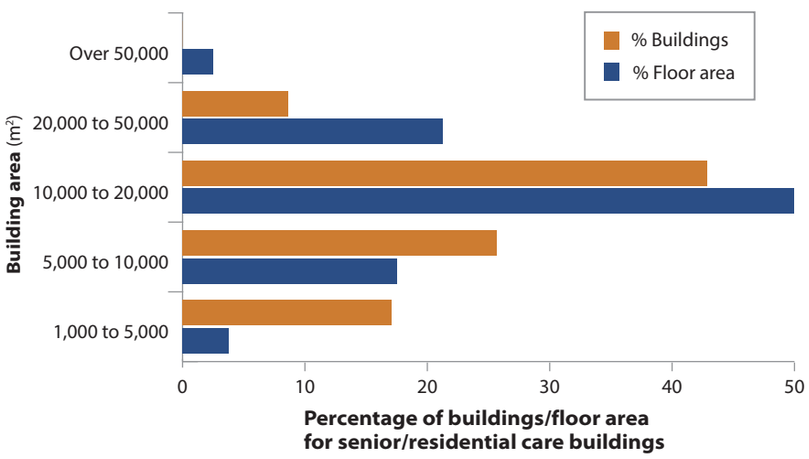
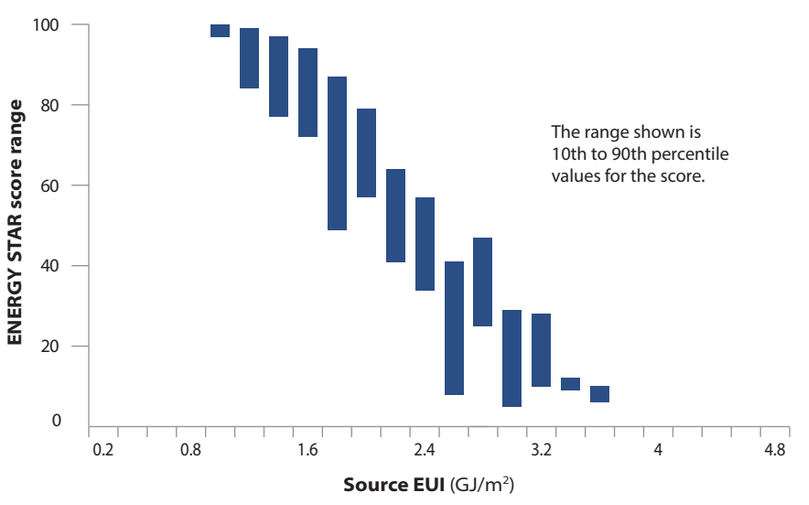


Figure 4. ENERGY STAR score range – senior/residential care buildings



Source EUI distribution

The median source EUI for senior/residential care buildings in ENERGY STAR Portfolio Manager is 1.7 GJ/m^2.

Characteristics

The buildings in Table 2 represent just over 1% of the floor area and about 2% of all buildings registered in Portfolio Manager in Canada.

Distribution of floor area and buildings

Figure 3 shows that the majority of Senior Care Facilities and Residential Care Communities benchmarked in Portfolio Manager are between 10,000 m^2 and 20,000 m^2. The average gross floor area is 11,000m^2 and the median is 10,245 m^2.

ENERGY STAR score ranges

Figure 4 shows the range (10th to 90th percentile) of ENERGY STAR scores given per source EUI range.

METRICS AND ACRONYMS

ENERGY USE INTENSITY (EUI)

EUI is the energy use per square metre at a property. EUI enables you to compare different size buildings.

SITE ENERGY VERSUS SOURCE ENERGY

There are two ways of measuring energy: at the site and at the source.

SITE ENERGY is the simplest way to measure energy because it accounts only for the energy your property itself uses, as measured by your energy meters. The usage that appears on your utility bills is a site energy measurement.

SOURCE ENERGY not only measures the energy used by your property, but also accounts for energy losses incurred during the production, transmission and delivery of energy to your property, source energy is a more accurate measurement of the energy actually required to run your building.

ENERGY STAR Portfolio Manager uses **source energy**. This is the most equitable unit of evaluation, which enables a complete assessment of building-level energy efficiency.

For more information, see the **ENERGY STAR Portfolio Manager *Technical Reference: Source Energy.***

The data is self-reported and has been filtered to exclude outliers, buildings with less than a full year of consumption data, cases that are used for testing purposes, and an additional filter was applied. Variations from previous snapshots are possible because of changes in user entry, improved filtering, and data cleaning. Buildings registered in Portfolio Manager do not represent a randomly selected sample and are not the basis for the ENERGY STAR score.

For more information on ENERGY STAR Portfolio Manager, contact Natural Resources Canada at **nrcan.buildings-batiments.rncan@canada.ca**.

Aussi disponible en français sous le titre : Aperçus de l'analyse comparative des données en matière d'énergie pour les soins aux aînés/en établissement
Cat. No. M141-31E-PDF (Online)
ISSN 2563-2035

Canada