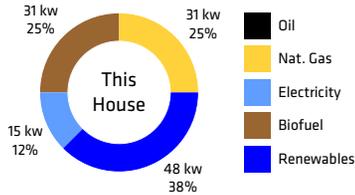


one kilowatt hour/m² = a toaster running all year for every square meter of your home.

TEUI RATING



CO2e FOOTPRINT = 2MT

Canadian Average 6.35MT CO₂e
Canadian 2030 Target 1.00 MT CO₂e
Canadian 2050 Target 0.00 MT CO₂e

Area & Utility Data collected: **February 21, 2019**
Evaluation Period: **Jan 1 2018-Jan 1, 2019**
Project No. **GBAB 662** Gross Area: **300m²**
Evaluated by: **Example Architect, Inc.**



visit <https://teui.ca>



THE TEUI PROJECT

Canada committed to meet the Paris climate targets, but most individuals (even architects) are in the dark about the performance of their own house. As the TEUI rating is just starting to gain traction in the AEC parlance, we have aimed to make this data visually obvious with simple input from a year's worth of your energy bills – first step is to see, only then to act. This handy calculator that lets you determine the energy performance of your home or building in the units of the most widely used Building Energy energy metric, the TEUI or Total Energy Use Intensity. The units are the amount of all energy sources in Kilowatt Hours (kWh) required as a function of building area in square metres (m²) per year: kWh/m²/yr. Simply fill in the fields to the best of your knowledge below and the calculator converts all of the units for you. Conversion references are provided in the footnotes below. Happy crunching!
This project was initiated by the SBEC of the OAA, Summer 2019. Please feel free to leave comments and feedback in the field below. Beta testing of this site to begin May 15th, 2019.

1. Your email:

2. Your ID:

3. Project Number:

4. What is the total conditioned area of your building? ft² m²

5. How many occupants?

6. Enter your monthly Electricity use here (kWh): kWh Total/yr

7. Enter your monthly Gas/Propane use here (m³): m³ Total/yr m³ converted to kWh

8. Enter any Heating Oil Used here (litres): litres Total/yr litres oil conv to kWh

9. Enter any Biofuel/Wood Used here (m³): m³ Total/yr m³ converted to kWh

10. Enter On-Site Renewable Contributions Here (Solar/Wind): kWh/yr

11. Enter Evaluation Period
From: To:

12. Are you using off-site renewable energy?
Renewable Electricity: Green Natural Gas:

Sources:

PRINT FORM **EMAIL FORM**

Toggles closed

THE TEUI PROJECT

Canada committed to meet the Paris climate targets, but most individuals (even architects) are in the dark about the performance of their own house. As the TEUI rating is just starting to gain traction in the AEC parlance, we have aimed to make this data visually obvious with simple input from a year's worth of your energy bills – first step is to see, only then to act. This handy calculator that lets you determine the energy performance of your home or building in the units of the most widely used Building Energy energy metric, the TEUI or Total Energy Use Intensity. The units are the amount of all energy sources in Kilowatt Hours (kWh) required as a function of building area in square metres (m²) per year: kWh/m²/yr. Simply fill in the fields to the best of your knowledge below and the calculator converts all of the units for you. Conversion references are provided in the footnotes below. Happy crunching!
This project was initiated by the SBEC of the OAA, Summer 2019. Please feel free to leave comments and feedback in the field below. Beta testing of this site to begin May 15th, 2019.

1. Your email:

2. Your ID:

3. Project Number:

4. What is the total conditioned area of your building? ft² m²

5. How many occupants?

6. Enter your monthly Electricity use here (kWh): kWh Total/yr

7. Enter your monthly Gas/Propane use here (m³): m³ Total/yr m³ converted to kWh

8. Enter any Heating Oil Used here (litres): litres Total/yr litres oil conv to kWh

9. Enter any Biofuel/Wood Used here (m³): m³ Total/yr m³ converted to kWh

10. Enter On-Site Renewable Contributions Here (Solar/Wind): kWh/yr

11. Enter Evaluation Period
From: To:

12. Are you using off-site renewable energy?
Renewable Electricity: Green Natural Gas:

Sources:

PRINT FORM **EMAIL FORM**

Toggles opened

Tooltips

- Your email: (suggested values over-written in black font)
- Your ID: (this will be to allow/deny access later on, as input eventually will need to be completed by qualified professionals)
- Project Number: (this can be an address, nickname, anything) - (a time/datestamp can resolve duplicates of any of the above)
- This is Gross Building Area, included all inhabited spaces and to exterior-most portions of walls & roofs (convert m² to sf)
- This will be used to determine CO₂e per person
- From your energy bills - users can ignore monthly entry and enter annual totals if they have these

Sources: Conversion of Natural Gas to Gigajoules (m³ to GJ) multiply m³ by 0.0373 (source: <http://www.nrcan.gc.ca/energy/natural-gas/>)
Conversion of Gigajoules to kWh (GJ to kWh) multiply GJ by 277 (source: <https://www.nrcan.gc.ca/energy/natural-gas/544#conversion>)
Conversion of Square Feet to Square Metres: Multiply ft² by 0.0929
Conversion Factor for MTCO₂ from m³ of natural Gas (Bioheat) Multiply m³ by 0.00263 (Source: Environment Canada, Emission Factors from Canada's GHG Inventory, Available at: <http://www.ec.gc.ca/epm/ghg/>)
Calculate your Carbon Footprint from Electricity (Ontario only) Multiply kWh by 0.00004 (Source: <https://calculator.carbonfootprint.com/calculator.aspx?tab=2>)
Wood heat conversion factor: 1.0008/Wh/m³ (Source: <http://nrcan.gc.ca/energy/natural-gas/544#conversion>)
Convert CO₂carbon to CO₂ppm Atmospheric: 1ppm = 7.81028CO₂ and 1ppmCO₂ = 2.1302 unburned carbon. (Source: <https://www.skepticalscience.com/ppm-to-ppb/>)
279Gt of Carbon then equates to 310.2ppmCO₂ (business as usual) case scenario per IPCC RCP8.5, 2018)
279Gt is the worst case 121% scenario for °C of warming per CIP RCP8.5, and 10% of 279Gt is 49.2Gt CO₂ (the percentage attributable globally to buildings). This by the way is an endgame scenario - and would lead to runaway warming, so if everyone lived like me, we'd fit that ceiling in the number of years indicated above. Fortunately for all of us, development does not happen so fast, especially due to climate change itself.
Canada Residential Sector Energy Use: <http://www.nrcan.gc.ca/energy/natural-gas/544#conversion>
type=CPISector-res3ipm-cabin-15page-0