**Green Buildings Priority Stream**

**Entry Pathway #1:**

**National Energy Code of Canada for Buildings 2020 (NECB 2020)**

1. Available to all buildings designed to exceed the minimum performance standards of NECB 2020 in keeping with the requirements detailed in paragraphs B or C below.
2. Eligible projects must provide the following information when submitting a Development Permit application:
3. A list of renewable energy systems and/or key anticipated energy conservation measures.
4. A **preliminary energy model**, prepared by a qualified Energy Advisor, demonstrating that the proposed development is being designed to:
   * Achieve Energy Performance Tier 2 or higher, consuming at least **25% less energy** (GJ/y) than the Reference Building; and
   * emit **50% less emissions** (tCO2e/y) than the Reference Building, through a combination of building performance improvements and renewable energy generation.
5. A completed ​xlsx icon [GHG Emissions Calculator](https://www.calgary.ca/content/dam/www/uep/esm/documents/green-buildings/Emissions-Calculator-Pathway1.xlsx) form for Part 3 buildings.
6. Development projects that cannot achieve a 50% emissions reduction due to siting, building and other limitations may be considered if they meet a net zero ready standard1

Building Performance Example

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Modelled Energy Consumption and GHG Emission Savings**  **Project “X” – 1 Building – 21 units** | | | | | | | | |
|  | Energy Consumption | | | Renewable Energy  &  Net Energy Consumption | | GHG Emissions2 | | |
|  | Reference Building (GJ/y) | Proposed  Building  (GJ/y) | Better Than Reference3 | Renewable Energy Gain (GJ/y) | Net Energy Consumption  (GJ/y) | GHG Reference Building  (tCO2e/y) | GHG  Proposed  Building  (tCO2e/y) | GHG Avoided |
| Building  (789m2) | 950 | 671 | 29% | 284 | 387 | 125 | 61 | 51% |

1 A net zero ready building is one designed and built to a high-level of performance and could achieve a net zero standard with the addition of solar panels or other renewable energy technologies.

2 [Emissions Factors](https://www.calgary.ca/content/dam/www/uep/esm/documents/green-buildings/Emissions-Factors.xlsx)

3 [National Energy Code of Canada for Buildings 2020](https://nrc-publications.canada.ca/eng/view/ft/?id=af36747e-3eee-4024-a1b4-73833555c7fa)