**Green Buildings Priority Stream**

**Entry Pathway #2:**

**National Building Code – 2023 Alberta Edition / NBC 2023 (AE)**

1. Available to all buildings designed to exceed the minimum performance standards identified in Section 9.36 of NBC 2023 (AE) 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:
   * consume at least **40% less energy** (GJ/y) than the Reference Building (Tier 4); and
   * emit **70% 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](https://www.calgary.ca/content/dam/www/uep/esm/documents/green-buildings/Emissions-Calculator-Pathway2.xlsx) emissions calculator form for Part 9 buildings.
6. Development projects that cannot achieve a 70% 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” –10 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** | **720** | **417** | **42%** | **100** | **317** | **60.6** | **17** | **71%** |

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

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

3 [National Building Code of Canada – 2023 (Alberta Edition)](https://nrc.canada.ca/en/certifications-evaluations-standards/codes-canada/codes-canada-publications/national-building-code-2023-alberta-edition)