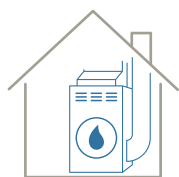


Types of green buildings

How a highly energy efficient building can use and produce energy

Less



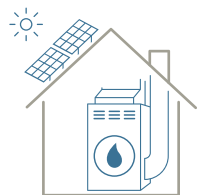
Net Zero Energy Ready

- May use fossil fuels or electricity for heating
- Could become “net zero energy” with the addition of solar panels or other renewables

Limitations

- Still emits carbon pollution if using gas on site
- Carbon pollution from electricity use will decrease over time as coal and natural gas are replaced by renewables

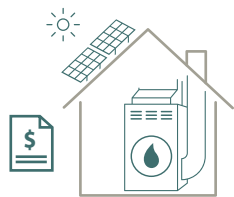
Certainty on emissions reductions



Net Zero Energy¹

- May use fossil fuels or electricity for heating
- Generates as much energy on site or nearby as it uses on an annual basis

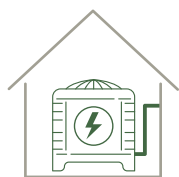
- Still emits carbon pollution if using gas on site
- Not all buildings have solar potential
- Generation may not match demand; fossil fuel burning power plants may still be needed during peak hours, leading to higher electricity rates



Net Zero Carbon²

- May use fossil fuels or electricity for heating
- Fossil fuel use (on-site or on the grid) is offset with the purchase or generation of low-carbon energy

- Still emits carbon pollution if using gas on site
- Carbon offsets are achieved only if purchased clean energy displaces high-emissions energy
- There are multiple definitions of when carbon balance is achieved

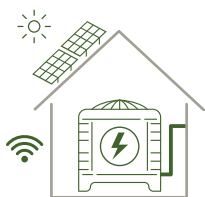


Zero Carbon

- No fossil fuel burned on site
- Only uses clean electricity or low-carbon fuels

- Increased demand on clean electricity grids
- Biofuels still emit carbon pollution and can only be considered carbon neutral if feedstocks are sustainably managed and fugitive emissions are addressed

More



Zero Carbon + Grid Interactive

- No fossil fuel burned on site
- Generation and load are optimized to meet the needs of the grid
- Provides energy storage and/or load management to relieve grid demands

1. Net-zero energy labelling and certification bodies include the [Canadian Home Builders' Association](#) and [International Living Futures Institute](#)

2. Examples of net-zero carbon standards include the Canada Green Building Council's [Zero Carbon Building Standard](#) and [Architecture 2030's ZERO Code](#)