

## **Section 9.37. Greenhouse Gas Emissions**

### **9.37.1. General**

#### **9.37.1.1. Application**

- 1)** Notwithstanding Sentence (2), the requirements of this Section apply only to *buildings* that
- a) are a house with or without a *secondary suite* including their common spaces,
  - b) contain only houses and common spaces whose total *floor area* does not exceed 20% of the total *floor area* of the *building*, and
  - c) are designed to one of the following
    - i) Step 3, 4 or 5 in Tables 9.36.6.3.-A to 9.36.6.3.-H, or
    - ii) Tables 9.36.2.6.-C, 9.36.2.7.-D, and 9.36.2.8.-C.
- 2)** Where a *building* contains more than one house, with or without a *secondary suite*, the requirements of this Subsection shall apply to the greenhouse gas emissions of the *building* and not to the individual house. (See Note A-9.36.6.2.(2).)

#### **9.37.1.2. Definitions and Abbreviations**

- 1)** Notwithstanding Sentence 9.37.1.1.(2), for the purposes of this Section, the term “house” shall mean all houses, with or without a *secondary suite*, that
- a) have HVAC systems that serve only the house, only the *secondary suite*, or both the house and the *secondary suite* including their common spaces,
  - b) have service water heating systems that serve only the house, only the *secondary suite*, or both the house and the *secondary suite* including their common spaces, and
  - c) except for common spaces in the house with the *secondary suite*, do not share common spaces intended for occupancy with other *dwelling units* or houses.
- (See Note A-9.36.6.2.(2).)
- 2)** For the purposes of this Section, the term “greenhouse gas”, expressed with the abbreviation “GHG”, shall have the same meaning as defined in the Climate Change Accountability Act.
- 3)** For the purposes of this Section, the term “greenhouse gas intensity”, expressed with the abbreviation “GHGI”, shall mean the total greenhouse gas emissions, expressed as kgCO<sub>2e</sub> per square metre of floor area of *conditioned space* per year, associated with the energy used by the *building's* systems.
- 4)** For the purposes of this Section, the symbol “CO<sub>2e</sub>” shall mean carbon dioxide or carbon dioxide equivalent, with carbon dioxide equivalent meaning one or more greenhouse gases with a global warming potential equivalent to carbon dioxide.
- 5)** For the purposes of this Section, the term “Emissions Level” shall mean an Emissions Level referred to in Table 9.37.1.3.
- 6)** For the purposes of this Section, the term “total greenhouse gases” shall mean the total greenhouse gas emissions, expressed as kgCO<sub>2e</sub>/year, associated with the energy used by the *building's* systems.

7) For the purposes of this Section, the term “measure only” shall mean that the GHGI and the total greenhouse gases are calculated, as applicable, and the values reported in accordance with Subsection 2.2.8. of Division C.

**9.37.1.3. Compliance Requirements**

1) Buildings conforming to the requirements of any of GHG Emission Levels EL-1 to EL- 4 shall be designed and constructed to conform to one of the GHG emission compliance options in Table 9.37.1.3.

**Table 9.37.1.3.  
Greenhouse Gas Emissions**  
Forming part of Sentence 9.37.1.3.(1)

GHG Emission Level	GHG Emission Compliance Options				
	Maximum GHG Emissions by House, Expressed in kg CO <sub>2e</sub> /year	or	Maximum GHG Emissions by House <sup>1</sup>		Reduction of GHG Emissions by Energy Source of Building Systems <sup>2</sup>
			Maximum GHGI of the House, Expressed in kgCO <sub>2e</sub> /m <sup>2</sup> /year	Maximum GHG Emissions by House, Expressed in kgCO <sub>2e</sub> /year	
EL-1	measure only		measure only		N/A
EL-2	1050	or	6.0	2400	Energy sources supplying heating systems have an emissions factor ≤ 0.011 kgCO <sub>2e</sub> /kWh
EL-3	440		2.5	800	Energy sources supplying heating and service water heating systems have an emissions factor ≤ 0.011 kgCO <sub>2e</sub> /kWh
EL-4	265		1.5	500	Energy sources supplying all building systems, including equipment and appliances, have an emissions factor ≤ 0.011 kgCO <sub>2e</sub> /kWh

**Notes to Table 9.37.1.3.:**

(1) Compliance for this option is demonstrated by meeting both the GHGI and the GHG emission requirements for each house.

(2) Redundant or back-up equipment for the systems and equipment listed in Sentence 9.36.5.4.(1), is permitted to be excluded, provided it is equipped with controls and is not required to meet the space-conditioning load of the house.

2) The emissions factors associated with the use of energy utilities consumed by the building’s systems shall be

- a) 0.011 kg CO<sub>2e</sub>/kWh for electricity, and
- b) 0.180 kg CO<sub>2e</sub>/kWh for natural gas.

**9.37.1.4. Greenhouse Gas Emissions Compliance Calculations**

1) Calculations for greenhouse gas emissions compliance shall include:

- a) the energy sources for building systems described in Sentence 9.36.6.2.(1) using the emissions factors established in Sentence 9.37.1.3.(2), and
- b) modeled in accordance with Article 9.36.6.4.