

$$GHG_i = \sum_{j=1}^n [N_j \times EF_j \times t_j] \times C_i \times \rho_i \times 0.001$$

Where:

GHG_i = Annual greenhouse gas i , for each source of fugitive emissions, in metric tons;

n = Total number of component types, for each source of fugitive emissions;

j = Component type;

N_j = Total number of components of type j determined in accordance with QC.29.4.8;

EF_j = Emission factor for component type j , determined in accordance with QC.29.4.8, in cubic metres per hour at standard conditions;

t_j = Time during which component type j , associated with fugitive emissions, was operational, in hours;

C_i = Concentration in natural gas of greenhouse gas i ,

- determined in accordance with paragraph 4 of QC.29.4.8;

- for natural gas compression for onshore transmission, underground storage of natural gas, natural gas transmission pipelines and natural gas distribution: of 0.011 for CO_2 and 0.975 for CH_4 ;

- for storage of liquefied natural gas and imports and exports of LNG: of 0 for CO_2 and 1 for CH_4 ;

- for natural gas distribution: of 0.011 for CO_2 and 1 for CH_4 ;

ρ_i = Density of greenhouse gas i , of 1.893 kg per cubic metre for CO_2 and 0.690 kg per cubic metre for CH_4 at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

i = CO_2 or CH_4 ;