

$$F_S(j)_{k \rightarrow l} = \frac{\int_{t=k-j}^{l-j} a_{CO_2} * C_{CO_2}(t) dt}{\int_{t=0}^{100} a_{CO_2} * C_{CO_2}(t) dt}$$

Where:

$F_S(j)_{k \rightarrow l}$ = Radiative effect of the sequestration of one tonne of CO₂ on radiative forcing during a reporting period from k to l (k→l) as a fraction of the radiative effect of the same quantity of CO₂ over 100 years;

a_{CO_2} = Instantaneous radiative forcing by unit mass of a CO₂ flow present in the atmosphere, the value of variable a_{CO_2} being 5.35 W m⁻² kg⁻¹;

$C_{CO_2}(t)$ = Atmospheric mass loading of a GHG CO₂-type or residual fraction of a type x GHG flow as a function of period t;

j = Year of carbon sequestration—by default the year begins at 0 with the planting of seedlings or sowing of seeds;

k = Start of reporting period;

l = End of reporting period;

t = Period of time from the start of the GHG flow to the end of the reporting period (sequestration) or 100 years (emission).