

## 11. CO2 emissions

### 11.1. Calculation of CO2 from heating and electricity consumption in households

The energy performance of a building (energy consumption per year) has an ecological equivalent of carbon dioxide (CO2) emissions, which is determined by the formula:

$$E_{cP} = \left( \sum_{i=1}^m Q_i f_i \right) \cdot 10^{-6}$$

Where:

- EcP is the amount of CO2 emissions (tonnes);
- Qi - the amount of energy resource / energy in annual energy consumption (kWh);
- fi - coefficient of ecological equivalent of the type of energy resource / energy (g / kWh), according to the same ordinance:

Type of energy source	Transformation coefficient	Ecological equivalence factor fi
	–	g CO <sub>2</sub> /kWh
Natural Gas	1.1	194
LPG	1.1	249
Biogas	0.1	25
Crude oil	1.1	266
Coal	1.1	291
Anthracite	1.1	317
Smoke-less fuel	1.2	392
Double Fuel (mineral and wood)	1.1	187
Biomass	0.1	25
Electricity from the Grid	2.7	794
Heat from waste	0.05	18
Kerosene	1.1	258
Electricity	2.7	794

