

## Intesa Sanpaolo Group 2021

### Energy - Emissions conversion factors

		2020	CO <sub>2</sub> equivalent for GHG						2021	2021	2021
		CO <sub>2eq</sub>	CO <sub>2</sub>		CH <sub>4</sub>		N <sub>2</sub> O		CO <sub>2eq</sub> <sup>o</sup>	NO <sub>x</sub>	SO <sub>2</sub>
Area		g/kWh	g/kWh	GWP	g/kWh	GWP	g/kWh	GWP	g/kWh	g/kWh	g/kWh
<b>Electricity (Residual mix)</b>	Italy	487	466	1	0.029	28	0.005	265	468	0.186	0.047
	Central Europe	501	472	1	0.189	28	0.037	265	487	0.698	0.086
	South Mediterranean and Asia	486	503	1	0.011	28	0.002	265	504	0.545	0.613
	South East Europe	487	464	1	0.017	28	0.008	265	467	0.530	0.842
	Central Eastern Europe	422	361	1	0.018	28	0.006	265	363	0.295	0.231
	Other countries	320	326	1	0.037	28	0.005	265	329	0.481	0.344
	Russia	370	370	1	0.010	28	0.004	265	371	0.909	1.464
Area		g/mc	g/mc	GWP	g/mc	GWP	g/mc	GWP	g/mc	g/mc	g/mc
<b>Natural Gas</b>	Italy	1984	1976	1	0.086	28	0.034	265	1988	0.988	0.010
	Central Europe	1926	1922	1	0.171	28	0.003	265	1928	0.032	0.031
	South Mediterranean and Asia	1920	1915	1	0.153	28	0.006	265	1921	0.242	0.080
	South East Europe	1921	1915	1	0.159	28	0.005	265	1921	0.208	0.069
	Central Eastern Europe	1913	1905	1	0.171	28	0.003	265	1911	0.121	0.098
	Other countries	1922	1919	1	0.095	28	0.005	265	1923	3.926	0.199
	Russia	1895	1893	1	0.171	28	0.003	265	1898	7.581	0.162
Area		g/litro	g/litro	GWP	g/litro	GWP	g/litro	GWP	g/litro	g/litro	g/litro
<b>Diesel</b>	Italy	2660	2634	1	0.251	28	0.072	265	2660	1.790	1.678
	Central Europe	2621	2606	1	0.368	28	0.021	265	2622	0.054	0.064
	South Mediterranean and Asia	2457	2447	1	0.279	28	0.016	265	2459	0.519	0.172
	South East Europe	2443	2434	1	0.264	28	0.014	265	2445	0.353	0.117
	Central Eastern Europe	2378	2367	1	0.353	28	0.008	265	2379	0.006	0.003
	Other countries	2582	2572	1	0.193	28	0.019	265	2582	0.950	0.115
	Russia	2268	2265	1	0.182	28	0.004	265	2271	1.440	0.086

Utilized factors are based on:

ABI Energia: Linee guida sull'applicazione in banca degli Standards GRI (Global Reporting Initiative) in materia ambientale - Update 2021

UNFCCC: United Nations Framework Convention on Climate Change

IEA: International Energy Agency

IPCC: Intergovernmental Panel on Climate Change

AIB: Association of Issuing Bodies

EPA: United States Environmental Protection Agency

In 2021 for electricity the residual mix was used as recommended by the ABI Energia Guidelines, if not available the national mix was used

$$^{\circ}\text{CO}_{2\text{eq}} = \text{CO}_2 \cdot \text{GWP} + \text{CH}_4 \cdot \text{GWP} + \text{N}_2\text{O} \cdot \text{GWP}$$