

## Intesa Sanpaolo Group 2022

### Energy - Emissions conversion factors

		2021	CO <sub>2</sub> equivalent for GHG						2022	2022	2022
		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	468	459	1	0.031	27.9	0.005	273	461	0.183	0.038
	Central Europe	487	277	1	0.073	27.9	0.020	273	284	0.386	0.073
	South Mediterranean and Asia	504	383	1	0.008	27.9	0.001	273	383	0.418	0.327
	South East Europe	467	465	1	0.017	27.9	0.007	273	467	0.359	0.266
	Central Eastern Europe	363	342	1	0.020	27.9	0.006	273	345	0.269	0.200
	Other countries	329	320	1	0.033	27.9	0.004	273	322	0.404	0.189
	Russia	371	346	1	0.010	27.9	0.004	273	347	0.848	1.139
Area		g/mc	g/mc	GWP	g/mc	GWP	g/mc	GWP	g/mc	g/mc	g/mc
<b>Natural Gas</b>	Italy	1988	1986	1	0.086	27.9	0.034	273	1998	0.973	0.010
	Central Europe	1928	1932	1	0.171	27.9	0.003	273	1937	0.034	0.030
	South Mediterranean and Asia	1921	1919	1	0.142	27.9	0.006	273	1925	0.267	0.079
	South East Europe	1921	1918	1	0.152	27.9	0.005	273	1924	0.228	0.069
	Central Eastern Europe	1911	1913	1	0.171	27.9	0.003	273	1919	0.126	0.083
	Other countries	1923	1921	1	0.089	27.9	0.005	273	1925	3.934	0.199
	Russia	1898	1889	1	0.103	27.9	0.003	273	1893	5.635	0.186
Area		g/litro	g/litro	GWP	g/litro	GWP	g/litro	GWP	g/litro	g/litro	g/litro
<b>Diesel</b>	Italy	2660	2646	1	0.251	27.9	0.072	273	2673	1.790	1.677
	Central Europe	2622	2608	1	0.366	27.9	0.021	273	2624	0.067	0.071
	South Mediterranean and Asia	2459	2456	1	0.265	27.9	0.016	273	2468	0.445	0.173
	South East Europe	2445	2441	1	0.257	27.9	0.014	273	2452	0.303	0.117
	Central Eastern Europe	2379	2368	1	0.345	27.9	0.008	273	2380	0.006	0.003
	Other countries	2582	2577	1	0.187	27.9	0.019	273	2587	0.947	0.117
	Russia	2271	2308	1	0.117	27.9	0.006	273	2313	0.955	0.086

Utilized factors are based on:

ABI Lab: Linee guida sull'applicazione in banca degli Standards GRI (Global Reporting Initiative) in materia ambientale - Update 2022

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 2022 for electricity the residual mix was used as recommended by the ABI Energia Guidelines, if not available the national mix was used

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

GWP-100year IPCC AR6 WGI 2021