Table 3.5. Carbon dioxide intensities of fuels and electricity for regions and countries.

Region	Carbon Dioxide Intensity Of Electricity kg CO_2 kWh^{-1}	Note
Region		a
Africa	0.705	b
Asia	0.772	b
EU	0.362	c
Europe (OECD)	0.391	c
Europe (non-OECD)	0.584	b
Latin America	0.189	b
Middle East	0.672	b
N America	0.567	c
Pacific	0.465	c
Former USSR	0.367	c
Carbon Dioxide Intensities Of Fuels Used In The Calculations	g CO_2 MJ^{-1}	
Fuel		
Natural gas	56.1	d
Gasoline	69.3	d
Kerosene	71.5	d
Diesel Oil	74.1	d
Liquefied Petroleum Gas	63.1	d
Residual Fuel Oil	77.4	d
Anthracite	98.3	d
Bituminous Coal	94.6	d
Sub-bituminous coal	96.1	d
Lignite	101.2	d
Oil Shale	106.7	d
Peat	106.0	d

Country	Carbon Dioxide Intensity Of Electricity kg CO_2 kWh^{-1}	Note
Argentina	0.319	b
Australia	0.885	c
Austria	0.187	c
Belgium	0.310	c
Brazil	0.087	b
Canada	0.225	c
China	1.049	b
Denmark	0.385	c
Finland	0.222	c
France	0.078	c
Germany	0.512	c
Greece	0.876	c
India	1.003	b
Indonesia	0.715	b
Ireland	0.722	c
Italy	0.527	c
Japan	0.389	c
Malaysia	0.465	b
Mexico	0.689	b
Netherlands	0.487	c
New Zealand	0.167	c
Norway	0.003	c
Pakistan	0.524	b
Philippines	0.534	b
Portugal	0.508	c
Russia	0.347	b
S Africa	0.941	b
Saudi Arabia	0.545	b
Singapore	0.816	b
Spain	0.455	c
Sweden	0.041	c
Switzerland	0.007	c
UK	0.507	c
USA	0.610	c

Notes:

a. Regions as defined in IEA (2002a) and IEA (2003).

b. Carbon dioxide from "Public Electricity and Heat Production"5 (units Mtonnes CO_2) in summary tables of IEA (2002b), divided by Total Final Consumption electricity and heat6 given as ktonne Oil Equivalent in IEA (2002a), further divided by 11.63 to convert to kg CO_2 kWh^{-1}.

c. Carbon dioxide as in 2 above, divided by Total Final Consumption[4] given as GWh in IEA (2003), multiplied by 1000 to convert to kg CO2 kWh^{-1}.

d. Values from Table 3 of IEA (2002b) multiplied by 44/12 to convert to mass of CO_2.

e. Using this category has the effect that all energy inputs to systems that generate electricity and heat are counted against both the electricity and heat generated.

f. Total Final Consumption is electricity or heat available at the consumer net of transmission and distribution losses.