The U.S. Inventory of Greenhouse Gas Emissions and Sinks: Fast Facts

U.S. Greenhouse Gas Emissions and Sinks (Tg CO_2 Equivalents)

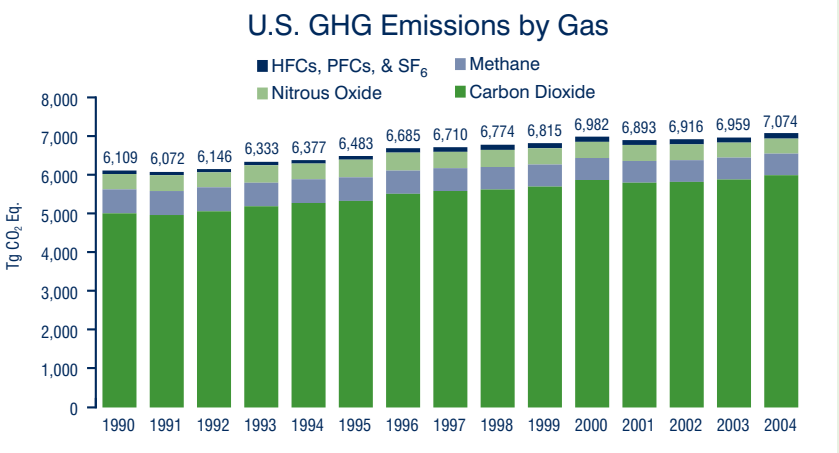
Gas/Source	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Change from 1990 to 2004 Absolute	Change from 1990 to 2004 Percent
CO_2	**5,005.3**	**4,961.8**	**5,057.7**	**5,187.3**	**5,271.7**	**5,325.3**	**5,508.7**	**5,580.9**	**5,620.2**	**5,695.0**	**5,864.5**	**5,795.2**	**5,815.9**	**5,877.7**	**5,988.0**	**982.7**	**19.6%**
Fossil Fuel Combustion	4,696.6	4,656.6	4,760.2	4,887.1	4,952.3	4,996.7	5,184.2	5,242.7	5,271.8	5,342.4	5,533.7	5,486.9	5,501.8	5,571.1	5,656.6	960.0	20.4%
Non-Energy Use of Fuels	117.2	123.3	116.3	119.3	130.6	132.7	132.0	139.6	152.8	160.6	140.7	131.0	136.5	133.5	153.4	36.2	30.9%
Iron and Steel Production	85.0	76.2	73.7	69.3	73.3	73.5	67.6	71.8	67.7	63.8	65.3	57.8	54.6	53.3	51.3	(33.7)	(39.6)%
Cement Manufacture	33.3	32.5	32.8	34.6	36.1	36.8	37.1	38.3	39.2	40.0	41.2	41.4	42.9	43.1	45.6	12.3	36.9%
Waste Combustion	10.9	12.0	12.7	13.5	14.2	15.7	17.2	17.8	17.1	17.6	17.9	18.6	18.9	19.4	19.4	8.4	77.3%
Ammonia Production and Urea Application	19.3	19.2	20.0	20.4	21.1	20.5	20.3	20.7	21.9	20.6	19.6	16.7	18.5	15.3	16.9	(2.4)	(12.5)%
Lime Manufacture	11.2	11.1	11.4	11.6	12.1	12.8	13.5	13.7	13.9	13.5	13.3	12.8	12.3	13.0	13.7	2.5	21.8%
Limestone and Dolomite Use	5.5	5.0	4.9	4.9	5.5	7.4	7.8	7.2	7.4	8.1	6.0	5.7	5.9	4.7	6.7	1.2	21.1%
Natural Gas Flaring	5.8	5.9	5.3	6.8	6.9	9.0	8.5	7.9	6.6	6.9	5.8	6.1	6.2	6.1	6.0	0.2	3.9%
Aluminum Production	7.0	7.2	7.0	6.4	5.7	5.8	6.2	6.2	6.4	6.5	6.2	4.5	4.6	4.6	4.3	(2.7)	(38.3)%
Soda Ash Manufacture and Consumption	4.1	4.0	4.1	4.0	4.0	4.3	4.2	4.4	4.3	4.2	4.2	4.1	4.1	4.1	4.2	0.1	1.5%
Petrochemical Production	2.2	2.3	2.4	2.6	2.7	2.8	2.8	2.9	3.0	3.1	3.0	2.8	2.9	2.8	2.9	0.7	30.4%
Titanium Dioxide Production	1.3	1.3	1.5	1.6	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.3	1.0	72.7%
Phosphoric Acid Production	1.5	1.4	1.5	1.3	1.5	1.5	1.6	1.5	1.6	1.5	1.4	1.3	1.3	1.4	1.4	(0.1)	(8.8)%
Ferroalloys	2.0	1.8	1.8	1.7	1.8	1.9	2.0	2.0	2.0	2.0	1.7	1.3	1.2	1.2	1.3	(0.7)	(35.0)%
Carbon Dioxide Consumption	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	1.0	0.8	1.0	1.3	1.2	0.3	37.5%
Zinc Production	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.0	0.9	0.5	0.5	(0.4)	(46.5)%
Lead Production	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	(+)	(9.3)%
Silicon Carbide Consumption	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	+	33.2%
Land-Use Change and Forestry (Sink)[a]	*(910.4)*	*(908.5)*	*(872.6)*	*(752.0)*	*(747.8)*	*(614.9)*	*(603.8)*	*(641.3)*	*(744.0)*	*(765.7)*	*(759.5)*	*(768.0)*	*(768.6)*	*(774.8)*	*(780.1)*	*130.3*	*(14.3)%*
International Bunker Fuels[b]	*113.5*	*119.9*	*109.7*	*99.8*	*97.7*	*100.7*	*102.3*	*109.9*	*114.6*	*105.2*	*101.4*	*97.8*	*89.5*	*84.1*	*94.5*	*(19.0)*	*(16.7)%*
Biomass Combustion[b]	*216.7*	*217.6*	*228.1*	*222.3*	*231.3*	*241.9*	*244.3*	*233.2*	*217.2*	*222.3*	*226.8*	*200.5*	*194.4*	*202.1*	*211.2*	*(5.5)*	*(2.5)%*
CH_4	**618.1**	**618.2**	**618.8**	**606.9**	**612.4**	**608.9**	**599.0**	**588.8**	**579.5**	**569.0**	**566.9**	**560.3**	**559.8**	**564.4**	**556.7**	**(61.3)**	**(9.9)%**
Landfills	172.3	172.4	172.6	172.4	170.2	163.2	158.7	151.6	144.4	141.6	139.0	136.2	139.8	142.4	140.9	(31.4)	(18.2)%
Natural Gas Systems	126.7	127.5	127.0	128.3	128.9	128.1	129.0	128.0	125.4	121.7	126.7	125.6	125.4	124.7	118.8	(7.9)	(6.2)%
Enteric Fermentation	117.9	117.1	119.4	118.8	120.4	123.0	120.5	118.3	116.7	116.8	115.6	114.6	114.7	115.1	112.6	(5.3)	(4.5)%
Coal Mining	81.9	79.0	77.0	65.2	65.1	65.8	63.1	62.6	62.8	58.9	56.3	55.5	52.5	54.8	56.3	(25.6)	(31.2)%
Manure Management	31.2	33.2	32.0	32.8	35.1	36.1	34.7	36.4	38.8	38.1	38.0	38.9	39.3	39.2	39.4	8.2	26.4%
Wastewater Treatment	24.8	25.8	26.9	27.7	28.9	29.9	30.7	31.7	32.6	33.6	34.3	34.7	35.8	36.6	36.9	12.1	49.0%
Petroleum Systems	34.4	34.4	33.2	32.2	31.7	31.1	30.8	30.3	29.7	28.5	27.8	27.4	26.8	25.9	25.7	(8.8)	(25.5)%
Rice Cultivation	7.1	7.0	7.9	7.0	8.2	7.6	7.0	7.5	7.9	8.3	7.5	7.6	6.8	6.9	7.6	0.4	6.2%
Stationary Sources	7.9	8.0	8.3	7.8	7.8	8.1	8.3	7.3	6.8	7.0	7.3	6.6	6.2	6.5	6.4	(1.4)	(18.0)%
Abandoned Coal Mines	6.0	6.1	6.6	6.9	8.1	8.2	8.4	7.5	6.9	6.9	7.2	6.6	6.0	5.8	5.6	(0.4)	(6.1)%
Mobile Sources	4.7	4.6	4.6	4.6	4.4	4.3	4.2	4.0	3.8	3.6	3.5	3.3	3.2	3.0	2.9	(1.8)	(37.6)%
Petrochemical Production	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.4	1.5	1.5	1.6	0.5	38.6%
Iron and Steel Production	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.1	1.0	1.0	1.0	(0.3)	(20.8)%
Field Burning of Agricultural Residues	0.7	0.6	0.8	0.6	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.9	0.2	27.2%
Silicon Carbide Production	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	(+)	(66.7)%
International Bunker Fuels[b]	*0.2*	*0.2*	*0.2*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.2*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*(0.1)*	*(35.6)%*
N_2O	**394.9**	**409.6**	**385.5**	**450.6**	**404.1**	**454.2**	**462.9**	**420.5**	**440.6**	**419.4**	**416.2**	**412.8**	**407.4**	**386.1**	**386.7**	**(8.2)**	**(2.1)%**
Agricultural Soil Management	266.1	278.5	252.5	312.7	261.5	308.1	314.4	276.6	301.1	281.2	278.2	282.9	277.8	259.2	261.5	(4.6)	(1.7)%
Mobile Sources	43.5	45.5	48.5	50.8	52.3	53.4	54.2	54.8	54.8	54.1	53.1	50.0	47.5	44.8	42.8	(0.6)	(1.5)%
Manure Management	16.3	16.8	16.5	17.0	17.0	17.1	17.0	17.3	17.4	17.4	17.8	18.1	18.0	17.5	17.7	1.4	8.8%
Nitric Acid	17.8	17.8	18.3	18.6	19.6	19.9	20.7	21.2	20.9	20.1	19.6	15.9	17.2	16.7	16.6	(1.2)	(6.8)%
Human Sewage	12.9	13.3	13.5	13.7	14.2	14.2	14.4	14.6	14.9	15.4	15.5	15.6	15.6	15.8	16.0	3.1	24.2%
Stationary Sources	12.3	12.2	12.4	12.6	12.8	12.9	13.5	13.5	13.4	13.4	13.9	13.5	13.2	13.6	13.7	1.4	11.5%
Settlements Remaining Settlements	5.6	5.7	5.7	5.9	6.2	6.0	6.2	6.2	6.2	6.2	6.0	5.8	6.0	6.2	6.4	0.8	14.8%
Adipic Acid	15.2	14.8	13.1	14.0	15.0	17.2	17.0	10.3	6.0	5.5	6.0	4.9	5.9	6.2	5.7	(9.5)	(62.2)%
N_2O Product Usage	4.3	4.2	3.9	4.5	4.5	4.5	4.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	0.5	10.8%
Waste Combustion	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.1	9.8%
Field Burning of Agricultural Residues	0.4	0.4	0.4	0.3	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.1	38.5%
Forest Land Remaining Forest Land	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	556.3%
International Bunker Fuels[b]	*1.0*	*1.0*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*1.0*	*1.0*	*0.9*	*0.9*	*0.9*	*0.8*	*0.8*	*0.9*	*(0.1)*	*(11.7)%*
HFCs, PFCs, and SF_6	**90.8**	**82.5**	**84.3**	**88.3**	**89.0**	**94.8**	**114.1**	**120.1**	**133.4**	**131.5**	**134.7**	**124.9**	**132.7**	**131.0**	**143.0**	**52.2**	**57.5%**
Substitution of Ozone Depleting Substances	0.4	0.8	2.1	4.7	9.6	24.1	34.6	45.2	54.5	62.8	71.2	78.6	86.2	93.5	103.3	102.9	25,845.2%
HCFC-22 Production	35.0	30.8	34.9	31.8	31.6	27.0	31.1	30.0	40.1	30.4	29.8	19.8	19.8	12.3	15.6	(19.4)	(55.4)%
Electrical Transmission and Distribution	28.6	27.3	24.7	28.9	26.3	21.2	23.8	21.2	16.7	16.1	15.3	15.3	14.5	14.0	13.8	(14.8)	(51.7)%
Semiconductor Manufacture	2.9	2.9	2.9	3.6	4.0	5.0	5.5	6.3	7.1	7.2	6.3	4.5	4.4	4.3	4.7	1.8	61.7%
Aluminum Production	18.4	15.6	14.4	13.8	12.1	11.9	12.5	11.0	9.1	9.0	9.0	4.0	5.3	3.8	2.8	(15.6)	(84.5)%
Magnesium Production and Processing	5.4	5.1	5.4	5.5	5.4	5.6	6.6	6.4	5.8	6.0	3.2	2.6	2.6	3.0	2.7	(2.7)	(50.0)%
Total	**6,109.0**	**6,072.1**	**6,146.3**	**6,333.2**	**6,377.2**	**6,483.3**	**6,684.7**	**6,710.2**	**6,773.7**	**6,814.9**	**6,982.3**	**6,893.1**	**6,915.8**	**6,959.1**	**7,074.4**	**965.4**	**15.8%**
Net Emission (Sources and Sinks)	**5,198.6**	**5,163.6**	**5,273.7**	**5,581.2**	**5,629.3**	**5,868.4**	**6,080.9**	**6,069.0**	**6,029.6**	**6,049.2**	**6,222.8**	**6,125.1**	**6,147.2**	**6,184.3**	**6,294.3**	**1,095.7**	**21.1%**

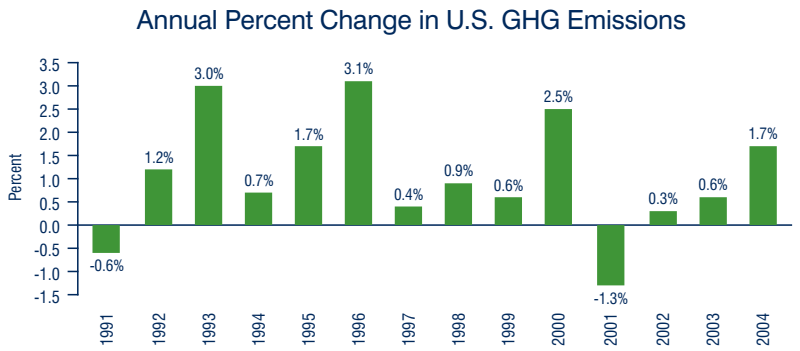
+ Does not exceed 0.05 Tg CO_2 Eq
[a] Sinks are only included in net emissions total.
[b] Emissions from International Bunker Fuels and Biomass Combustion are not included in totals.

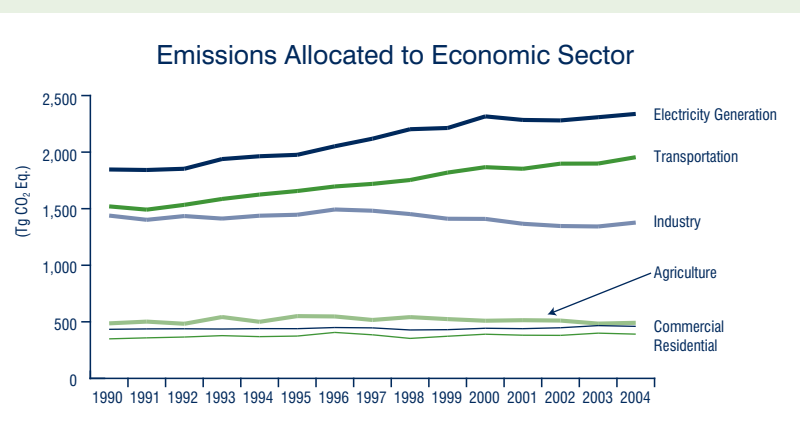
Note: Totals may not sum due to independent rounding. Emissions weighted using GWP values from IPCC Second Assessment Report (1996) in keeping with UNFCCC reporting guidelines.

1990-2004 Trends

- Total GHG emissions rose 16 percent since 1990 (increasing 1.3 percent since 2000)
- Dominant gas emitted was CO_2, mostly from fossil fuel combustion
- Methane emissions decreased by 10 percent
- Nitrous oxide emissions decreased by 2 percent
- HFC, PFC, and SF_6 emissions have grown by 58 percent







United States Environmental Protection Agency

Office of Atmospheric Programs (6207J) • April 2006

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The U.S. Inventory of Greenhouse Gas Emissions and Sinks:

Reference Tables and Conversions

Global Warming Potentials (100 Year Time Horizon)

Gas	GWP	
	SAR[a]	TAR[b]
Carbon dioxide (CO_2)	1	1
Methane (CH_4)*	21	23
Nitrous oxide (N_2O)	310	296
HFC-23	11,700	12,000
HFC-125	2,800	3,400
HFC-134a	1,300	1,300
HFC-143a	3,800	4,300
HFC-152a	140	120
HFC-227ea	2,900	3,500
HFC-236fa	6,300	9,400
HFC-4310mee	1,300	1,500
CF_4	6,500	5,700
C_2F_6	9,200	11,900
C_4F_{10}	7,000	8,600
C_6F_{14}	7,400	9,000
SF_6	23,900	22,200

[a] *IPCC Second Assessment Report* (1996)
[b] *IPCC Third Assessment Report* (2001)

* The methane GWP includes the direct effects and those indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

Note: GWP values from the *IPCC Second Assessment Report* are used in accordance with UNFCCC guidelines.

Global Warming Potential (GWP) is defined as the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas. The GWP-weighted emissions of direct greenhouse gases in the U.S. Inventory are presented in terms of equivalent emissions of carbon dioxide (CO_2), using units of teragrams of carbon dioxide equivalents (Tg CO_2 Eq.).

Conversion:

Tg $= 10^9$ kg $= 10^6$ metric tons
$= 1$ million metric tons

The molecular weight of carbon is 12, and the molecular weight of oxygen is 16; therefore, the molecular weight of CO_2 is 44 (i.e., 12+[16×2]), as compared to 12 for carbon alone. Thus, carbon comprises $12/44^{ths}$ of carbon dioxide by weight.

Conversion from gigagrams of gas to teragrams of carbon dioxide equivalents:

$$\text{Tg CO}_2\text{ Eq.} = \left(\frac{\text{Gg}}{\text{of gas}}\right) \times \text{(GWP)} \times \left(\frac{\text{Tg}}{\text{1,000 Gg}}\right)$$

Guide to Metric Unit Prefixes

Prefix/Symbol	Factor	
Atto (a)	10^{-18}	.000000000000000001
Femto (f)	10^{-15}	.000000000000001
Pico (p)	10^{-12}	.000000000001
Nano (n)	10^{-9}	.000000001
Micro (μ)	10^{-6}	.000001
Milli (m)	10^{-3}	.001
Centi (c)	10^{-2}	.01
Deci (d)	10^{-1}	.1
—	10^{0}	1
Deca (da)	10^{1}	10
Hecto (h)	10^{2}	100
Kilo (k)	10^{3}	1,000
Mega (M)	10^{6}	1,000,000
Giga (G)	10^{9}	1,000,000,000
Tera (T)	10^{12}	1,000,000,000,000
Peta (P)	10^{15}	1,000,000,000,000,000
Exa (E)	10^{18}	1,000,000,000,000,000,000

Unit Conversions

1 pound	= 0.454 kilograms	= 16 ounces		
1 kilogram	= 2.205 pounds	= 35.27 ounces		
1 short ton	= 0.9072 metric tons	= 2,000 pounds		
1 metric ton	= 1.1023 short tons	= 1,000 kilograms		
1 cubic foot	= 0.02832 cubic meters	= 28.3168 liters		
1 cubic meter	= 35.315 cubic feet	= 1,000 liters		
1 U.S. gallon	= 3.78541 liters	= 0.03175 barrels	= 0.02381 barrels petroleum	
1 liter	= 0.2642 U.S. gallons	= 0.0084 barrels	= 0.0063 barrels petroleum	
1 barrel	= 31.5 U.S. gallons	= 119 liters	= 0.75 barrels petroleum	
1 barrel petroleum	= 42 U.S. gallons	= 159 liters		
1 foot	= 0.3048 meters	= 12 inches		
1 meter	= 3.28 feet	= 39.37 inches		
1 mile	= 1.609 kilometers	= 5,280 feet		
1 kilometer	= 0.6214 miles	= 3,280.84 feet		
1 square mile	= 2.590 square kilometers	= 640 acres		
1 square kilometer	= 0.386 square miles	= 100 hectares		
1 acre	= 43,560 square feet	= 0.4047 hectares	= 4,047 square meters	

Energy Conversions

The common energy unit used in international reports of greenhouse gas emissions is the joule. A joule is the energy required to move an object one meter with the force of one Newton. A terajoule (TJ) is one trillion (10^{12}) joules. A British thermal unit (Btu, the customary U.S. energy unit) is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at or near 39.2 Fahrenheit.

1 TJ =
2.388×10^{11} calories
23.88 metric tons of crude oil equivalent
9.478×10^{8} Btu
277,800 kilowatt-hours

Energy Units

Btu	British thermal unit	1 Btu
MBtu	Thousand Btu	1×10^{3} Btu
MMBtu	Million Btu	1×10^{6} Btu
BBtu	Billion Btu	1×10^{9} Btu
TBtu	Trillion Btu	1×10^{12} Btu
QBtu	Quadrillion Btu	1×10^{15} Btu

Source for all data: *U.S. Inventory of Greenhouse Gas Emissions and Sinks 1990-2004* (EPA 2006)

CO_2 Emissions from Fossil Fuel Combustion = **Fuel Combusted x Carbon Content Coefficient x Fraction Oxidized x (44/12)**

May include adjustments for carbon stored in fossil fuel-based products, emissions from international bunker fuels, or emissions from territories.

Carbon Intensity of Different Fuel Types

The amount of carbon in fossil fuels per unit of energy content varies significantly by fuel type. For example, coal contains the highest amount of carbon per unit of energy, while petroleum has about 25 percent less carbon than coal, and natural gas about 45 percent less.

Converting Various Physical Units to Energy Units

The values in the following table provide conversion factors from physical units to energy equivalent units and from energy units to carbon contents. These factors can be used as default factors, if local data are not available.

Conversion Factors to Energy Units (Heat Equivalents) Heat Contents and Carbon Content Coefficients of Various Fuel Types

Fuel Type	Heat Content	Carbon Content Coefficients (Tg Carbon/QBtu)	Fraction Oxidized
Solid Fuels	**(Million Btu/Short Ton)**		
Anthracite Coal	22.57	28.26	0.99
Bituminous Coal	23.89	25.49	0.99
Sub-bituminous Coal	17.14	26.48	0.99
Lignite	12.87	26.30	0.99
Coke	24.80	31.00	0.99
Unspecified	25.00	25.34	0.99
Gas Fuels	**Btu/Cubic Foot**		
Natural Gas	1,030	14.47	0.995
Liquid Fuels	**Million Btu/Barrel**		
Crude Oil	5.80	20.33	0.99
Natural Gas Liquids and LRGs	3.72	16.99	0.995
Motor Gasoline	5.22	19.33	1.00[a]
Aviation Gasoline	5.05	18.87	0.99
Kerosene	5.67	19.72	0.99
Jet Fuel	5.67	19.33	0.99
Distillate Fuel	5.83	19.95	0.99
Residual Fuel	6.29	21.49	0.99
Naphtha for Petrofeed	5.25	18.14	0.99
Petroleum Coke	6.02	27.85	0.99
Other Oil for Petrofeed	5.83	19.95	0.99
Special Naphthas	5.25	19.86	0.99
Lubricants	6.07	20.24	0.99
Waxes	5.54	19.81	0.99
Asphalt & Road Oil	6.64	20.62	0.99
Still Gas	6.00	17.51	0.99
Misc. Products	5.80	20.33	0.99

Note: For fuels with variable heat contents and carbon content coefficients, 2004 U.S. average values are presented. All factors are presented in gross calorific values (GCV) (i.e., higher heating values).

[a] Fraction oxidized for motor gasoline is 1.00 in the transportation sector, 0.99 in other sectors.

Density Conversions

Methane (Natural Gas)	1 cubic meter	=	35.32 cubic feet	=	0.676 kilograms
Carbon dioxide	1 cubic meter	=	35.32 cubic feet	=	1.854 kilograms
Natural gas liquids	1 metric ton	=	11.60 barrels	=	1,844.20 liters
Unfinished oils	1 metric ton	=	7.46 barrels	=	1,186.04 liters
Alcohol	1 metric ton	=	7.94 barrels	=	1,262.36 liters
Liquefied petroleum gas	1 metric ton	=	11.60 barrels	=	1,844.20 liters
Aviation gasoline	1 metric ton	=	8.90 barrels	=	1,415.00 liters
Naphtha jet fuel	1 metric ton	=	8.27 barrels	=	1,314.82 liters
Kerosene jet fuel	1 metric ton	=	7.93 barrels	=	1,260.72 liters
Motor gasoline	1 metric ton	=	8.53 barrels	=	1,356.16 liters
Kerosene	1 metric ton	=	7.73 barrels	=	1,228.97 liters
Naphtha	1 metric ton	=	8.22 barrels	=	1,306.87 liters
Distillate	1 metric ton	=	7.46 barrels	=	1,186.04 liters
Residual oil	1 metric ton	=	6.66 barrels	=	1,058.85 liters
Lubricants	1 metric ton	=	7.06 barrels	=	1,122.45 liters
Bitumen	1 metric ton	=	6.06 barrels	=	963.46 liters
Waxes	1 metric ton	=	7.87 barrels	=	1,251.23 liters
Petroleum coke	1 metric ton	=	5.51 barrels	=	876.02 liters
Petrochemical feedstocks	1 metric ton	=	7.46 barrels	=	1,186.04 liters
Special naphtha	1 metric ton	=	8.53 barrels	=	1,356.16 liters
Miscellaneous products	1 metric ton	=	8.00 barrels	=	1,271.90 liters

Note: Gas densities are at room temperature and pressure.

For more information on calculating CO_2 emissions per kWh, download eGRID at: **http://www.epa.gov/cleanenergy/egrid**

For other related information, see: **http://www.epa.gov/globalwarming** **http://unfccc.int**

Download the Inventory at: http://www.epa.gov/globalwarming/publications/emissions