

## NONRENEWABLE ORGANICS STATISTICS

By Thomas D. Kelly

[All values in metric tons]

Last modification: July 19, 2004

Year	Asphalt and road oil	Coal	Lubricants	Waxes and oils	Petroleum coke	Oil and gas products	Total nonrenewable organics
1900	9,000	199,000	1,200,000	70,000	5,000	10,000	1,500,000
1901	13,000	219,000	1,250,000	70,000	5,000	10,000	1,600,000
1902	18,900	254,000	1,300,000	70,000	5,000	10,000	1,700,000
1903	41,900	303,000	1,350,000	70,000	5,000	10,000	1,800,000
1904	40,300	261,000	1,400,000	80,000	5,000	10,000	1,800,000
1905	47,500	271,000	1,450,000	80,000	5,000	10,000	1,900,000
1906	59,000	282,000	1,500,000	80,000	5,000	10,000	1,900,000
1907	125,000	259,000	1,550,000	80,000	5,000	10,000	2,000,000
1908	109,000	271,000	1,600,000	80,000	5,000	10,000	2,100,000
1909	118,000	288,000	1,650,000	90,000	5,000	10,000	2,200,000
1910	146,000	317,000	1,700,000	90,000	5,000	10,000	2,300,000
1911	251,000	332,000	1,750,000	90,000	5,000	10,000	2,400,000
1912	376,000	452,000	1,800,000	90,000	5,000	10,000	2,700,000
1913	500,000	551,000	1,850,000	90,000	5,000	10,000	3,000,000
1914	612,000	530,000	1,900,000	100,000	5,000	10,000	3,200,000
1915	955,000	709,000	1,950,000	100,000	5,000	10,000	3,700,000
1916	1,140,000	1,010,000	2,000,000	100,000	5,000	10,000	4,300,000
1917	1,220,000	1,220,000	2,050,000	100,000	5,000	10,000	4,600,000
1918	1,090,000	1,130,000	2,080,000	110,000	5,000	10,000	4,400,000
1919	1,170,000	1,240,000	2,050,000	115,000	5,000	10,000	4,600,000
1920	1,580,000	1,070,000	2,220,000	134,000	5,000	10,000	5,000,000
1921	1,390,000	833,000	1,810,000	149,000	5,000	10,000	4,200,000
1922	1,860,000	1,000,000	2,330,000	157,000	5,000	10,000	5,400,000
1923	2,150,000	1,340,000	2,650,000	172,000	5,000	10,000	6,300,000
1924	2,790,000	1,320,000	2,730,000	201,000	5,000	10,000	7,100,000
1925	2,880,000	1,510,000	3,090,000	225,000	10,000	10,000	7,700,000
1926	2,810,000	1,720,000	3,390,000	243,000	10,000	10,000	8,200,000
1927	3,110,000	1,860,000	3,260,000	271,000	10,000	10,000	8,500,000
1928	3,690,000	2,050,000	3,480,000	294,000	10,000	10,000	9,500,000
1929	3,520,000	2,010,000	3,550,000	296,000	10,000	20,000	9,400,000
1930	3,500,000	1,800,000	3,250,000	296,000	10,000	30,000	8,900,000
1931	3,610,000	1,610,000	3,000,000	318,000	10,000	40,000	8,600,000
1932	3,300,000	1,240,000	2,500,000	326,000	10,000	50,000	7,400,000
1933	3,110,000	1,390,000	2,580,000	379,000	10,000	60,000	7,500,000
1934	3,350,000	1,600,000	2,780,000	350,000	10,000	70,000	8,200,000
1935	3,560,000	1,800,000	2,960,000	240,000	13,000	80,000	8,650,000
1936	4,600,000	2,140,000	3,360,000	275,000	27,000	90,000	10,500,000
1937	4,940,000	2,020,000	3,510,000	288,000	51,200	100,000	10,900,000
1938	5,280,000	2,120,000	3,190,000	250,000	88,700	120,000	11,000,000
1939	5,760,000	2,320,000	3,570,000	299,000	117,000	200,000	12,300,000
1940	5,940,000	1,750,000	3,710,000	413,000	149,000	270,000	12,200,000
1941	7,330,000	2,490,000	4,550,000	494,000	169,000	500,000	15,500,000
1942	7,290,000	2,750,000	4,370,000	770,000	198,000	550,000	15,900,000
1943	6,410,000	2,830,000	4,730,000	887,000	167,000	711,000	15,700,000
1944	6,550,000	2,650,000	4,850,000	922,000	171,000	1,270,000	16,400,000
1945	6,740,000	2,630,000	5,310,000	935,000	315,000	1,500,000	17,400,000
1946	8,120,000	2,350,000	5,250,000	745,000	365,000	1,600,000	18,400,000
1947	9,290,000	2,590,000	5,490,000	652,000	307,000	1,420,000	19,700,000
1948	9,550,000	2,580,000	5,410,000	763,000	358,000	1,780,000	20,400,000
1949	9,450,000	2,350,000	4,980,000	572,000	545,000	2,260,000	20,200,000
1950	10,800,000	2,750,000	5,840,000	725,000	668,000	2,980,000	23,800,000

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[All values in metric tons]

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Year	Asphalt and road oil	Coal	Lubricants	Waxes and oils	Petroleum coke	Oil and gas products	Total nonrenewable organics
1951	11,900,000	2,830,000	6,360,000	882,000	650,000	3,910,000	26,500,000
1952	12,900,000	2,430,000	5,740,000	945,000	618,000	3,570,000	26,200,000
1953	13,000,000	2,870,000	6,090,000	1,130,000	890,000	5,060,000	29,000,000
1954	13,800,000	2,280,000	5,800,000	1,250,000	1,300,000	6,100,000	30,500,000
1955	15,300,000	2,610,000	6,390,000	1,450,000	965,000	7,350,000	34,100,000
1956	16,400,000	2,710,000	6,610,000	1,580,000	1,460,000	8,130,000	36,900,000
1957	15,900,000	2,840,000	6,200,000	1,690,000	1,670,000	8,210,000	36,500,000
1958	16,900,000	2,190,000	5,940,000	1,880,000	2,320,000	9,490,000	38,700,000
1959	17,900,000	2,150,000	6,450,000	2,230,000	2,380,000	11,100,000	42,200,000
1960	18,300,000	2,200,000	6,420,000	2,360,000	2,440,000	11,900,000	43,600,000
1961	18,700,000	2,070,000	6,250,000	2,570,000	2,950,000	13,000,000	45,500,000
1962	20,000,000	2,000,000	6,560,000	2,710,000	3,080,000	15,000,000	49,400,000
1963	20,500,000	1,930,000	6,560,000	2,850,000	2,760,000	15,900,000	50,500,000
1964	20,900,000	2,240,000	6,890,000	2,680,000	2,710,000	18,100,000	53,500,000
1965	22,100,000	2,450,000	7,090,000	2,660,000	3,120,000	20,200,000	57,600,000
1966	23,300,000	2,400,000	7,360,000	2,820,000	3,060,000	22,900,000	61,800,000
1967	22,800,000	2,320,000	6,640,000	2,530,000	3,390,000	24,700,000	62,400,000
1968	24,500,000	2,380,000	7,290,000	2,970,000	3,350,000	28,200,000	68,700,000
1969	25,100,000	2,480,000	7,340,000	2,850,000	3,690,000	32,400,000	73,900,000
1970	26,900,000	2,420,000	7,470,000	2,610,000	4,000,000	35,400,000	78,800,000
1971	27,600,000	2,140,000	7,420,000	2,700,000	4,000,000	36,800,000	80,700,000
1972	28,100,000	2,190,000	7,970,000	2,770,000	4,000,000	39,400,000	84,400,000
1973	31,400,000	2,190,000	8,870,000	3,470,000	4,330,000	41,400,000	91,700,000
1974	29,000,000	2,180,000	8,530,000	4,180,000	3,980,000	42,800,000	90,700,000
1975	25,200,000	1,890,000	7,520,000	5,210,000	4,140,000	35,500,000	79,500,000
1976	24,900,000	1,910,000	8,420,000	7,360,000	4,260,000	41,800,000	88,700,000
1977	26,100,000	2,100,000	8,720,000	8,070,000	5,650,000	45,900,000	96,500,000
1978	28,500,000	2,100,000	9,470,000	7,110,000	4,640,000	46,800,000	98,600,000
1979	28,500,000	2,400,000	9,920,000	6,640,000	3,530,000	54,700,000	106,000,000
1980	23,900,000	2,200,000	8,300,000	7,610,000	4,360,000	70,400,000	117,000,000
1981	20,600,000	1,900,000	8,000,000	7,090,000	5,260,000	61,700,000	105,000,000
1982	20,600,000	1,300,000	7,300,000	6,300,000	4,170,000	54,500,000	94,000,000
1983	22,400,000	1,100,000	7,600,000	5,910,000	1,810,000	55,100,000	94,000,000
1984	24,800,000	1,400,000	8,100,000	5,380,000	2,900,000	56,100,000	99,000,000
1985	25,700,000	1,000,000	7,600,000	5,380,000	2,720,000	56,600,000	99,000,000
1986	27,100,000	640,000	7,400,000	4,990,000	2,540,000	58,300,000	101,000,000
1987	28,100,000	730,000	8,400,000	4,720,000	4,360,000	64,600,000	111,000,000
1988	28,200,000	640,000	8,100,000	5,250,000	4,540,000	66,100,000	113,000,000
1989	27,200,000	540,000	8,300,000	5,120,000	4,170,000	66,600,000	112,000,000
1990	29,000,000	540,000	8,600,000	5,120,000	5,440,000	71,600,000	120,000,000
1991	26,700,000	540,000	7,600,000	5,770,000	4,540,000	74,900,000	120,000,000
1992	27,400,000	1,100,000	7,700,000	4,590,000	6,900,000	78,000,000	126,000,000
1993	28,700,000	820,000	7,900,000	4,330,000	3,381,000	82,300,000	127,000,000
1994	29,000,000	820,000	8,300,000	4,460,000	4,170,000	87,800,000	135,000,000
1995	29,400,000	820,000	8,100,000	4,460,000	3,990,000	88,300,000	135,000,000
1996	29,200,000	820,000	7,900,000	3,500,000	4,540,000	90,900,000	137,000,000
1997	30,400,000	820,000	8,300,000	4,590,000	3,630,000	95,600,000	143,000,000
1998	31,400,000	730,000	8,700,000	5,120,000	6,350,000	94,200,000	147,000,000
1999	33,000,000	730,000	8,900,000	4,880,000	8,530,000	104,000,000	160,000,000
2000	31,700,000	730,000	8,700,000	4,990,000	4,170,000	99,500,000	150,000,000
2001	31,400,000	640,000	8,000,000	5,120,000	6,170,000	90,600,000	142,000,000

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**[All values in metric tons]**

**Last modification: July 19, 2004**

<b>Year</b>	<b>Asphalt and road oil</b>	<b>Coal</b>	<b>Lubricants</b>	<b>Waxes and oils</b>	<b>Petroleum coke</b>	<b>Oil and gas products</b>	<b>Total nonrenewable organics</b>
2002	30,900,000	730,000	7,900,000	5,250,000	6,900,000	91,040,000	143,000,000

## **Nonrenewable Organics Worksheet Notes**

### **Data Sources**

Sources of data for the nonrenewable organics worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR); the U.S. International Trade Commission publication, Synthetic Organic Chemicals (SOC); and the U.S. Department of Energy publication, Annual Energy Review (AER). All data are estimates of U.S. apparent consumption of fossil fuels used for nonfuel purposes.

### **Asphalt and Road Oil**

For the years 1900–01, estimates from Consumption of Materials in the United States, 1900–1995 (Matos and Wagner, 1998) are used. Asphalt and road oil data for the years 1902–79 are recorded from the MR and the MYB. For the years 1980–2002, data are recorded from the AER.

### **Coal**

For the years 1900–17 estimates from Consumption of Materials in the United States, 1900–1995 (Matos and Wagner, 1998) are used. Coal chemicals data are recorded for the years 1918–79 from the MR and the MYB. For the years 1980–2002, coal data are recorded from the AER.

### **Lubricants**

For the years 1900–17, estimates from Consumption of Materials in the United States, 1900–1995 (Matos and Wagner, 1998) are used. Lubricant data for the years 1918–79 are recorded from the MR and MYB. For the years 1980–2002, lubricant data are recorded from the AER.

### **Waxes and Oils**

For the years 1900–17, estimates from Consumption of Materials in the United States, 1900–1995 (Matos and Wagner, 1998) are used. Miscellaneous oils and waxes data are recorded from the MR and MYB for the years 1918–79. For the years 1980–2002, the category, Other, data consisting of distillate fuel oil, residual fuel oil, waxes, and miscellaneous products are recorded from the AER.

### **Petroleum Coke**

For the years 1900–34 estimates from Consumption of Materials in the United States, 1900–1995 (Matos and Wagner, 1998) are used. For the years 1935–79, data are from the MYB. A declining factor was used to estimate petroleum coke for nonfuel uses (Matos and Wagner, 1998). For the years 1980–2002, Petroleum Coke data are recorded from the AER.

### **Oil and Gas Products**

For the years 1900–34 estimates from Consumption of Materials in the United States, 1900–1995 (Matos and Wagner, 1998) are used. For the years 1934–79, the categories Natural Gas for Carbon Black, Plastic Resins, and Synthetic Rubber data are recorded (and summed) from SOC. For the years 1980–2002, the AER categories: Liquefied Petroleum Gases, Natural Gas, Pentanes Plus, Petrochemical Feedstock, and Special Naphthas are combined to estimate Oil and Gas Products.

### **Total Nonrenewable Organics**

Total nonrenewable organics data are the sum of all categories listed above. For the years 1900–34, two significant figures are reported because of the estimates made in calculating some categories.

### **References**

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**For more information, please contact:**

**Thomas D. Kelly**  
**Minerals and Materials Analysis Section, USGS**  
**(303) 236-8747 x 269**  
**kellyt@usgs.gov**