

No. 161.—QUANTITY of COAL PRODUCED in each STATE and TERRITORY of the UNITED STATES, during the Calendar Years 1869, 1876, 1877, 1878, 1879, and 1880.

[Weight expressed in tons of 2,240 pounds.]

STATE OR TERRITORY.	1869. <i>a</i>	1876.	1877.	1878.	1879.	1880.
ANTHRACITE.	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Pennsylvania . . . . .	13,866,180	<i>b</i> 21,436,667	<i>b</i> 23,619,911	<i>b</i> 20,605,262	<i>b</i> 26,142,689	<i>b</i> 26,437,242
BITUMINOUS.						
Pennsylvania . . . . .	7,798,517	11,500,000	12,500,000	13,500,000	14,500,000	19,000,000
Illinois . . . . .	2,629,563	3,500,000	3,500,000	3,500,000	3,500,000	4,000,000
Ohio . . . . .	2,527,285	3,500,000	5,250,000	5,000,000	5,000,000	7,000,000
Maryland . . . . .	1,819,824	1,835,081	1,574,339	1,679,322	1,730,709	2,136,160
Missouri . . . . .	621,930	900,000	900,000	900,000	900,000	1,500,000
West Virginia . . . . .	608,878	800,000	1,000,000	1,000,000	1,250,000	1,400,000
Indiana . . . . .	437,870	950,000	1,000,000	1,000,000	1,000,000	1,196,490
Iowa . . . . .	263,487	1,500,000	1,500,000	1,500,000	1,600,000	1,600,000
Kentucky . . . . .	150,582	650,000	850,000	900,000	1,000,000	1,600,000
Tennessee . . . . .	133,418	550,000	750,000	375,000	450,000	641,042
Virginia . . . . .	61,803	90,000	90,000	75,000	90,000	100,000
Kansas . . . . .	32,938	123,000	200,000	300,000	400,000	550,000
Oregon . . . . .		200,000	200,000	200,000	200,000	200,000
Michigan . . . . .	21,150	30,000	30,000	30,000	35,000	35,000
California . . . . .		600,000	600,000	600,000	600,000	600,000
Rhode Island . . . . .	14,000	14,000	14,000	14,000	15,000	15,000
Alabama . . . . .	11,000	100,000	175,000	200,000	250,000	340,000
Nebraska . . . . .	1,425	30,000	50,000	75,000	75,000	100,000
Wyoming . . . . .	50,000	500,000	100,000	100,000	175,000	225,000
Washington . . . . .	17,844	100,000	150,000	150,000	170,000	175,000
Utah . . . . .	5,800	45,000	45,000	60,000	225,000	275,000
Colorado . . . . .	4,500	250,000	300,000	367,000	400,000	575,000
Georgia . . . . .					100,000	100,000
Totals . . . . .	31,077,994	49,005,748	54,308,250	52,130,584	62,808,398	69,200,934

*a* The statistics for 1869 are derived from the United States Census. The statistics for 1876, 1877, 1878, 1879, and 1880 are compiled from data collected and estimates made by Mr. Frederick E. Seward, editor of the Coal Trade Journal of New York.

*b* Includes 3,000,000 tons estimated as the local consumption.

Source: Statistical Abstract of the United States: 1880 Edition.

## Natural Resources

This section presents data on the area, ownership, production, trade, reserves, and disposition of natural resources. Natural resources is defined here as including forestry, fisheries, and mining and mineral products.

**Forestry**—Presents data on the area, ownership, and timber resource of commercial timberland; forestry statistics covering the National Forests and Forest Service cooperative programs; product data for lumber, pulpwood, woodpulp, paper and paperboard, and similar data.

The principal sources of data relating to forests and forest products are *Forest Resources of the United States, 1991*; *Timber Demand and Technology Assessment, 2003*; *U.S. Timber Production, Trade, Consumption, and Price Statistics*; *Land Areas of the National Forest System*, issued annually by the Forest Service of the Department of Agriculture; *Agricultural Statistics* issued by the Department of Agriculture; and reports of the annual survey of manufactures, and the annual *Current Industrial Reports*, issued by the Census Bureau on the Internet and in print in the annual *Manufacturing Profiles*. Additional information is published in the monthly *Survey of Current Business* of the Bureau of Economic Analysis, and the annual *Wood Pulp and Fiber Statistics* and *The Statistics of Paper, Paperboard, and Wood Pulp* of the American Forest and Paper Association, Washington, DC.

The completeness and reliability of statistics on forests and forest products vary considerably. The data for forest land area and stand volumes are much more reliable for areas that have been recently surveyed than for those for which only estimates are available. In general, more data are available for lumber and other manufactured products such as particle board and softwood panels, etc., than for the primary forest products such as poles and piling and fuelwood.

**Fisheries**—The principal source of data relating to fisheries is *Fisheries of the United States*, issued annually by the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA). The NMFS collects and disseminates data on commercial landings of fish and shellfish. Annual reports include quantity and value of commercial landings of fish and shellfish disposition of landings and number and kinds of fishing vessels and fishing gear. Reports for the fish-processing industry include annual output for the wholesaling and fish processing establishments, annual and seasonal employment. The principal source for these data is the annual *Fisheries of the United States*.

**Mining and mineral products**—Presents data relating to mineral industries and their products, general summary measures of production and employment, and more detailed data on production, prices, imports and exports, consumption, and distribution for specific industries and products. Data on mining and mineral products may also be found in Sections 19, 21, and 28 of this *Abstract*; data on mining employment may be found in Section 12.

Mining comprises the extraction of minerals occurring naturally (coal, ores, crude petroleum, natural gas) and quarrying, well operation, milling, refining and processing, and other preparation customarily done at the mine or well site or as a part of extraction activity. (Mineral preparation plants are usually operated together with mines or quarries.) Exploration for minerals is included as is the development of mineral properties.

The principal governmental sources of these data are the *Minerals Yearbook* and *Mineral Commodity Summaries*, published by the U.S. Geological Survey, Department of the Interior, and various monthly and annual publications of the Energy Information Administration, Department of

Energy. See text, Section 19, for a list of Department of Energy publications. In addition, the Census Bureau conducts a census of mineral industries every 5 years.

Nongovernment sources include the *Annual Statistical Report* of the American Iron and Steel Institute, Washington, DC; *Metals Week* and the monthly *Engineering and Mining Journal*, issued by the McGraw-Hill Publishing Co., New York, NY; *The Iron Age*, issued weekly by the Chilton Co., Philadelphia, PA; and the *Joint Association Survey of the U.S. Oil and Gas Industry*, conducted jointly by the American Petroleum Institute, Independent Petroleum Association of America, and Mid-Continent Oil and Gas Association.

Mineral statistics, with principal emphasis on commodity detail, have been collected by the U.S. Geological Survey and the former Bureau of Mines since 1880. Current data in U.S. Geological Survey publications include quantity and value of non-fuel minerals produced, sold or used by producers, or shipped; quantity of minerals stocked; crude materials treated and prepared minerals recovered; and consumption of mineral raw materials.

Censuses of mineral industries have been conducted by the Census Bureau at various intervals since 1840. Beginning with the 1967 census, legislation provides for a census to be conducted every 5 years for years ending in "2" and "7." The most recent results, published for 2002, are based on the North American Industry Classification System (NAICS). The censuses provide, for the various types of mineral establishments, information on operating costs, capital expenditures, labor, equipment, and energy requirements in relation to their value of shipments and other receipts. Commodity statistics on many manufactured mineral products are also collected by the Census Bureau at monthly, quarterly, or annual intervals and issued in its *Current Industrial Reports* series.

In general, figures shown in the individual commodity tables include data for outlying areas and may therefore not agree with summary tables. Except for crude petroleum and refined products, the export and import figures include foreign trade passing through the customs districts of United States and Puerto Rico but exclude shipments between U.S. territories and the customs districts.

**Table 844. Gross Domestic Product of Natural Resource-Related Industries in Current and Real (2000) Dollars by Industry: 2000 to 2003**

[In billions of dollars (9,817.0 represents \$9,817,000,000,000). Data are based on the 1997 NAICS Codes. Data include nonfactor charges (capital consumption allowances, indirect business taxes, etc.) as well as factor charges against gross product; corporate profits and capital consumption allowances have been shifted from a company to an establishment basis]

Industry	Current dollars				Chained (2000) dollars			
	2000	2002	2003	2004	2000	2002	2003	2004
<b>All industries, total</b> <sup>1</sup> . . . . .	<b>9,817.0</b>	<b>10,487.0</b>	<b>11,004.0</b>	<b>11,735.0</b>	<b>9,817.0</b>	<b>10,074.8</b>	<b>10,381.4</b>	<b>10,841.9</b>
<b>Industries covered</b> . . . . .	<b>306.3</b>	<b>282.6</b>	<b>327.7</b>	<b>(NA)</b>	<b>306.3</b>	<b>291.7</b>	<b>291.6</b>	<b>(NA)</b>
Percent of all industries . . . . .	3.1	2.7	3.0	(NA)	3.1	2.9	2.8	(NA)
Agriculture, forestry, and fishing . . . . .	98.0	96.9	113.9	116.6	98.0	98.1	103.5	96.9
Farms . . . . .	71.5	70.8	84.8	(NA)	71.5	69.9	72.7	(NA)
Agricultural services . . . . .	26.5	26.1	29.1	(NA)	26.5	28.3	31.1	(NA)
Mining . . . . .	121.3	104.9	130.3	147.5	121.3	112.4	104.6	106.9
Metal mining . . . . .	81.0	60.4	83.2	(NA)	81.0	77.6	65.3	(NA)
Coal mining . . . . .	27.0	27.4	27.7	(NA)	27.0	24.7	25.1	(NA)
Oil and gas extraction . . . . .	13.4	17.1	19.4	(NA)	13.4	10.9	12.7	(NA)
Nonmetallic minerals . . . . .	45.7	43.3	43.3	(NA)	45.7	42.8	43.4	(NA)
Timber-related manufacturing . . . . .	87.0	80.8	83.5	(NA)	87.0	81.2	83.5	(NA)
Wood products . . . . .	31.4	30.0	32.0	(NA)	31.4	29.9	29.9	(NA)
Paper products . . . . .	55.6	50.8	51.5	(NA)	55.6	51.3	53.6	(NA)

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, May 2005. See also <<http://www.bea.doc.gov/bea/newsrelarchive/2005/gdpind04.pdf>> (released 20 April 2005).

**Table 845. Natural Resource-Related Industries—Establishments, Employees, and Annual Payroll, by Industry: 2000 and 2002**

[1,791.3 represents 1,791,300. Excludes government employees, railroad employees, self-employed persons, etc. See "General Explanation" in source for definitions and statement on reliability of data. An establishment is a single physical location where business is conducted or where services or industrial operations are performed]

Industry	NAICS code <sup>1</sup>	2000			2002		
		Establishments	Number of employees <sup>2</sup> (1,000)	Annual payroll (bil. dol.)	Establishments	Number of employees <sup>2</sup> (1,000)	Annual payroll (bil. dol.)
<b>Natural resource-related industries, total</b> . . . . .	<b>(X)</b>	<b>72,932</b>	<b>1,791.3</b>	<b>66.58</b>	<b>73,021</b>	<b>1,676.9</b>	<b>66.68</b>
Forestry, fishing, hunting and agriculture support . . . . .	11	26,076	183.6	4.68	26,552	181.2	4.98
Forestry and logging . . . . .	113	13,347	83.1	2.26	12,509	75.8	2.21
Timber tract operations . . . . .	1131	469	3.3	0.13	680	4.2	0.16
Forest nurseries & gathering forest products . . . . .	1132	258	1.7	0.07	352	2.7	0.08
Logging . . . . .	1133	12,620	78.1	2.06	11,477	69.0	1.97
Fishing, hunting & trapping . . . . .	114	2,671	10.0	0.34	2,385	9.2	0.34
Fishing . . . . .	1141	2,308	7.5	0.27	1,916	6.5	0.25
Hunting & trapping . . . . .	1142	363	2.5	0.08	469	2.7	0.08
Agriculture & forestry support activities . . . . .	115	10,058	90.4	2.08	11,658	96.1	2.44
Crop production support activities . . . . .	1151	5,061	57.6	1.35	5,324	58.5	1.51
Animal production support activities . . . . .	1152	3,450	18.2	0.38	4,537	22.9	0.50
Forestry support activities . . . . .	1153	1,547	14.7	0.35	1,797	14.7	0.42
Mining . . . . .	21	23,738	456.1	22.09	23,871	465.8	23.96
Oil & gas extraction . . . . .	211	7,740	83.0	5.39	7,629	88.3	6.41
Mining (except oil & gas) . . . . .	212	7,231	204.3	9.34	7,205	194.2	9.12
Coal mining . . . . .	2121	1,253	70.7	3.54	1,194	74.9	3.81
Metal ore mining . . . . .	2122	522	34.8	1.72	351	25.7	1.37
Nonmetallic mineral mining & quarrying . . . . .	2123	5,456	98.8	4.08	5,660	93.6	3.94
Mining support activities . . . . .	213	8,767	168.8	7.35	9,037	183.3	8.43
Timber-related manufacturing . . . . .	(X)	23,118	1,151.6	39.80	22,598	1,030.0	37.74
Wood product manufacturing . . . . .	321	17,328	597.7	16.51	17,052	534.0	15.92
Sawmills & wood preservation . . . . .	3211	4,695	131.4	3.78	4,368	116.0	3.55
Veneer, plywood & engineered wood product mfg. . . . .	3212	1,904	120.6	3.75	1,844	111.0	3.67
Other wood product mfg . . . . .	3219	10,729	345.8	8.95	10,840	307.0	8.70
Paper manufacturing . . . . .	322	5,790	553.9	23.29	5,546	496.0	21.81
Pulp, paper & paperboard mills . . . . .	3221	597	177.1	9.48	628	163.0	9.11
Converted paper product manufacturing . . . . .	3222	5,193	376.8	13.82	4,918	333.0	12.71

X Not applicable. <sup>1</sup> North American Industry Classification System, 1997. <sup>2</sup> Covers full- and part-time employees who are on the payroll in the pay period including March 12.

Source: U.S. Census Bureau, "County Business Patterns"; published November 2004; <<http://www.census.gov/epcd/cbp/view/cbpview.html>>.

**Table 846. Oil and Gas Extraction Industry—Establishments, Employees and Payroll by State: 2002**

[5,036.621 represents \$5,036,621,000. Covers establishments with payroll. Employees are for the week including March 12. Data based on the 2002 Economic Census. Offshore areas refer to those areas not associated with a state. For statement on methodology, see Appendix III]

State	Crude petroleum and natural gas extraction (211111) <sup>1</sup>			State	Natural gas liquid extraction (211112) <sup>1</sup>		
	Establishments	Paid employees	Annual payroll (\$1,000)		Establishments	Paid employees	Annual payroll (\$1,000)
United States . . . . .	7,178	94,886	5,036,621	United States . . . . .	511	9,693	528,190
Alabama . . . . .	37	1,042	64,411	Alabama . . . . .	10	204	11,004
California . . . . .	215	3,666	224,144	California . . . . .	18	708	38,567
Colorado . . . . .	344	4,057	254,900	Colorado . . . . .	21	401	22,276
Illinois . . . . .	175	899	32,210	Illinois . . . . .	9	281	15,946
Kansas . . . . .	375	2,325	104,281	Kansas . . . . .	10	126	6,526
Louisiana . . . . .	425	11,270	634,319	Louisiana . . . . .	76	1,341	72,969
Michigan . . . . .	88	926	41,363	Michigan . . . . .	11	156	7,920
New Mexico . . . . .	167	2,097	118,118	New Mexico . . . . .	39	840	47,263
Oklahoma . . . . .	1,039	9,382	438,850	Oklahoma . . . . .	35	581	30,090
Pennsylvania . . . . .	145	1,629	81,514	Texas . . . . .	180	3,631	200,008
Texas . . . . .	2,794	40,408	2,172,312	Wyoming . . . . .	35	583	35,671
Utah . . . . .	55	1,860	56,946				
West Virginia . . . . .	210	1,720	71,397				
Wyoming . . . . .	180	2,553	127,296				
Offshore Areas . . . . .	5	501	36,626				
Alabama . . . . .	10	204	11,004				
California . . . . .	18	708	38,567				

<sup>1</sup> Based on North American Industry Classification System, 2002;

Source: U.S. Census Bureau, 2002 Economic Census, issued October 2004. See also <<http://www.census.gov/econ/census02>>.

**Table 847. Natural Resource-Related Industries—Establishments, Sales, Payroll and Employees by Industry: 1997 and 2002**

[174 represents \$174,000,000,000. Includes only establishments of firms with payroll. See Appendix III]

Industry	NAICS code <sup>1</sup>	1997			2002				
		Estab-lish-ments	Sales, receipts, revenue, or ship-ments (bil. dol.)	Annual payroll (bil. dol.)	Paid employ-ees (1,000)	Estab-lish-ments	Sales, receipts, revenue, or ship-ments (bil. dol.)	Annual payroll (bil. dol.)	Paid employ-ees (1,000)
Mining . . . . .	21	25,000	174	21	509	23,932	184	21	485
Oil & gas extraction . . . . .	211	8,312	103	6	111	7,689	115	6	105
Mining (except oil & gas) . . . . .	212	7,348	51	9	229	7,220	48	9	197
Mining support activities . . . . .	213	9,340	20	6	169	9,023	21	7	183
Manufacturing <sup>2</sup> . . . . .	31-33	362,829	3,835	570	16,805	350,054	3,906	574	14,693
Wood product mfg . . . . .	321	17,367	88	14	570	17,178	88	16	540
Paper mfg . . . . .	322	5,868	150	22	574	5,501	153	21	488
Petroleum & coal products manufacturing . . . . .	324	2,146	177	6	108	2,240	216	6	103

<sup>1</sup> North American Industry Classification System, 1997. <sup>2</sup> Includes other industries not shown separately.

Source: U.S. Census Bureau, 2002 Economic Census, Comparative Statistics for the United States 1997 NAICS Basis. See also <http://www.census.gov/econ/census02>.

**Table 848. Timber-Based Manufacturing Industries—Establishments, Shipments, Payroll and Employees: 2002**

[3,906,024,316 represents \$3,906,024,316,000. Data based on the 2002 Economic Census. See Appendix III]

Industry	NAICS code <sup>1</sup>	Estab-lish-ments	Value of shipments (\$1,000)	Annual payroll (\$1,000)	Paid employees (1,000)
Manufacturing	31-33	350,054	3,906,024,316	573,802,788	14,692,765
<b>Wood product manufacturing . . . . .</b>	<b>321</b>	<b>17,178</b>	<b>88,294,243</b>	<b>15,909,908</b>	<b>539,784</b>
Sawmills and wood preservation . . . . .	3211	4,322	25,761,530	3,490,857	107,728
Saw mills . . . . .	321113	3,807	21,339,251	3,118,252	95,452
Wood preservation . . . . .	321114	515	4,422,279	372,605	12,276
Veneer, plywood, & engineered wood product mfg. . . . .	3212	1,916	20,093,795	3,659,563	113,589
Other wood product manufacturing . . . . .	3219	10,940	42,438,918	8,759,488	318,467
Millwork . . . . .	32191	4,717	22,353,587	4,386,903	150,073
Wood container and pallet manufacturing . . . . .	32192	2,946	5,075,309	1,152,608	50,896
All other wood product manufacturing . . . . .	32199	3,277	15,010,022	3,219,977	117,498
<b>Paper manufacturing . . . . .</b>	<b>322</b>	<b>5,501</b>	<b>152,651,488</b>	<b>21,336,257</b>	<b>487,906</b>
Pulp, paper, and paperboard mills . . . . .	3221	560	70,483,801	8,879,983	158,857
Pulp mills . . . . .	32211	32	3,531,242	469,688	7,730
Paper mills . . . . .	32212	329	46,098,951	5,849,652	104,938
Paperboard mills . . . . .	32213	199	20,853,608	2,560,643	46,189
Converted paper product manufacturing . . . . .	3222	4,941	82,167,687	12,456,274	329,049
Paperboard container manufacturing . . . . .	32221	2,664	43,271,298	7,033,538	184,008
Paper bag and coated and treated paper mfg. . . . .	32222	924	17,658,326	2,551,871	64,520
Stationery product manufacturing . . . . .	32223	636	7,903,016	1,302,387	38,647
Other converted paper product manufacturing . . . . .	32229	717	13,335,047	1,568,478	41,874
Printing and related support activities . . . . .	323	37,532	95,653,027	25,738,613	718,542
Petroleum and coal products manufacturing . . . . .	324	2,240	216,019,846	6,202,508	102,976

<sup>1</sup> North American Industry Classification System, 1997.

Source: U.S. Census Bureau, 2002 Economic Census, Comparative Statistics for the United States 1997 NAICS Basis. See also <http://www.census.gov/econ/census02>.

**Table 849. National Forest System Land—State and Other Areas: 2004**

[In thousands of acres (232,489 represents 232,489,000). As of September 30]

State and other area	Gross area within unit boundaries <sup>1</sup>	National Forest System Land <sup>2</sup>	State and other area	Gross area within unit boundaries <sup>1</sup>	National Forest System Land <sup>2</sup>	State and other area	Gross area within unit boundaries <sup>1</sup>	National Forest System Land <sup>2</sup>
<b>Total . . . . .</b>	<b>232,489</b>	<b>192,858</b>	KS . . . . .	116	108	OH . . . . .	834	237
<b>U.S. . . . .</b>	<b>232,433</b>	<b>192,830</b>	KY . . . . .	2,208	811	OK . . . . .	579	400
AL . . . . .	1,288	667	LA . . . . .	1,025	604	OR . . . . .	17,502	15,667
AK . . . . .	24,359	21,974	ME . . . . .	93	53	PA . . . . .	743	513
AZ . . . . .	11,891	11,263	MD . . . . .	-	-	RI . . . . .	-	-
AR . . . . .	3,522	2,593	MA . . . . .	-	-	SC . . . . .	1,379	624
CA . . . . .	24,430	20,770	MI . . . . .	4,894	2,868	SD . . . . .	2,369	2,014
CO . . . . .	16,019	14,499	MN . . . . .	5,467	2,840	TN . . . . .	1,276	701
CT . . . . .	-	-	MS . . . . .	2,317	1,171	TX . . . . .	1,994	755
DE . . . . .	-	-	MO . . . . .	3,060	1,489	UT . . . . .	9,209	8,194
DC . . . . .	-	-	MT . . . . .	19,117	16,924	VT . . . . .	817	394
FL . . . . .	1,434	1,157	NE . . . . .	442	352	VA . . . . .	3,223	1,664
GA . . . . .	1,857	865	NV . . . . .	6,275	5,836	WA . . . . .	10,112	9,276
HI . . . . .	-	-	NH . . . . .	828	732	WV . . . . .	1,877	1,041
ID . . . . .	21,904	20,716	NJ . . . . .	-	-	WI . . . . .	2,023	1,527
IL . . . . .	857	293	NM . . . . .	10,455	9,419	WY . . . . .	9,703	9,238
IN . . . . .	644	201	NY . . . . .	16	16			
IA . . . . .	-	-	NC . . . . .	3,165	1,255	PR . . . . .	56	28
			ND . . . . .	1,106	1,106	VI . . . . .	-	-

- Represents zero or rounds to zero. <sup>1</sup> Comprises all publicly- and privately-owned land within authorized boundaries of national forests, purchase units, national grasslands, land utilization projects, research and experimental areas, and other areas.

<sup>2</sup> Federally-owned land within the "gross area within unit boundaries."

Source: U.S. Forest Service, *Land Areas of the National Forest System*, annual.



**Table 850. Timber-Based Manufacturing Industries—Employees, Payroll, and Shipments: 2003**

[13,876 represents 13,876,000. Based on the Annual Survey of Manufactures; for description, see Appendix III]

Selected industries	1997 NAICS code <sup>1</sup>	All employees			Production workers, total (1,000)	Value added by manufactures		Value of shipments (mil. dol.)
		Number (1,000)	Payroll			Total (mil. dol.)	Per production worker (dol.)	
			Total (mil. dol.)	Per employee (dol.)				
<b>Manufacturing, all industries<sup>2</sup></b>	<b>31-33</b>	<b>13,876</b>	<b>565,026</b>	<b>40,721</b>	<b>9,795</b>	<b>1,912,124</b>	<b>195,224</b>	<b>3,979,917</b>
Wood product manufacturing	321	511	15,631	30,564	420	36,571	87,148	91,240
Sawmills & wood preservation	3211	104	3,453	33,295	89	8,404	94,516	26,680
Veneer, plywood, & engineered wood product	3212	110	3,639	33,004	89	8,872	99,177	21,571
Other wood product	3219	297	8,539	28,707	241	19,295	79,973	42,990
Millwork	32191	148	4,371	29,599	121	10,117	83,720	23,677
Wood container & pallet	32192	47	1,116	23,996	39	2,352	60,562	4,933
All other wood product	32199	103	3,051	29,554	82	6,826	83,664	14,379
Paper	322	464	20,773	44,737	361	72,084	199,920	149,270
Pulp, paper, & paperboard mills	3221	145	8,261	57,048	115	35,000	303,438	66,651
Pulp mills	32211	8	491	60,916	6	1,723	273,276	3,891
Paper mills	32212	92	5,230	56,821	74	23,048	313,286	42,169
Paperboard mills	32213	45	2,540	56,801	35	10,229	288,372	20,591
Converted paper product	3222	320	12,512	39,158	245	37,084	151,227	82,620
Paperboard container	32221	176	6,948	39,379	135	17,407	126,894	43,108
Paper bag & coated & treated paper	32222	64	2,627	40,942	48	8,608	180,218	18,197
Stationery product	32223	39	1,345	34,448	31	3,398	109,958	7,706
Other converted paper product	32229	40	1,592	39,920	32	7,670	243,500	13,609

<sup>1</sup> North American Industry Classification System, 1997; see text, Section 15. <sup>2</sup> Includes other industries not shown separately.

Source: U.S. Census Bureau, *Annual Survey of Manufactures, 2003*, Series M03(AS)-1 (RV). See also <<http://www.census.gov/prod/ec02/am0331gs1.pdf>> (issued April 2005).

**Table 851. Timber Products—Production, Foreign Trade, and Consumption by Type of Product: 1990 to 2004**

[In millions of cubic feet, roundwood equivalent (15,577 represents 15,577,000,000)]

Type of product	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Industrial roundwood:</b>											
Domestic production	15,577	15,537	15,413	15,703	15,620	15,632	15,436	14,634	14,902	14,819	15,301
Softwoods	10,968	10,191	10,153	10,180	10,097	10,381	10,201	9,859	10,124	10,001	10,251
Hardwoods	4,609	5,347	5,260	5,523	5,523	5,251	5,235	4,775	4,778	4,817	5,050
Imports	3,091	3,907	3,885	4,008	4,157	4,370	4,529	4,605	4,505	4,954	5,575
Exports	2,307	2,282	2,264	2,290	1,951	1,964	1,996	1,759	1,769	1,698	2,139
Consumption	16,361	17,161	17,034	17,421	17,827	18,038	17,969	17,481	17,637	18,075	18,737
Softwoods	11,779	11,961	11,996	12,072	12,339	12,754	12,659	12,552	12,790	12,944	13,303
Hardwoods	4,582	5,200	5,038	5,349	5,488	5,284	5,310	4,929	4,847	5,131	5,434
<b>Lumber:</b>											
Domestic production	7,317	6,815	6,886	7,103	7,093	7,379	7,199	6,820	7,060	7,240	7,347
Imports	1,909	2,522	2,616	2,619	2,721	2,807	2,845	2,903	3,036	3,193	3,697
Exports	589	460	449	452	350	404	428	354	353	360	644
Consumption	8,637	8,877	9,053	9,270	9,463	9,782	9,616	9,369	9,744	10,073	10,400
<b>Plywood and veneer:</b>											
Domestic production	1,423	1,303	1,281	1,213	1,201	1,208	1,187	1,067	1,074	1,044	930
Imports	97	107	97	114	131	160	155	173	205	240	244
Exports	109	89	87	103	55	45	42	32	31	35	20
Consumption	1,410	1,321	1,291	1,224	1,277	1,323	1,300	1,208	1,249	1,249	1,154
<b>Pulp products:</b>											
Domestic production	5,313	6,079	5,908	6,097	6,114	5,813	5,881	5,691	5,708	5,706	5,750
Imports	1,038	1,248	1,144	1,249	1,269	1,355	1,459	1,458	1,180	1,437	1,488
Exports	646	905	891	929	818	768	842	801	810	793	801
Consumption	5,704	6,422	6,161	6,417	6,565	6,400	6,498	6,348	6,078	6,351	6,437
<b>Logs:</b>											
Imports	4	13	18	20	30	47	68	70	81	80	146
Exports	674	451	422	384	316	326	331	307	309	356	474
Pulpwood chips, exports	288	377	416	422	412	422	353	265	265	155	200
<b>Fuelwood consumption:</b>											
	3,019	2,937	2,739	2,542	2,523	2,542	2,561	2,571	2,581	2,591	1,500

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1965–1999*, Research Paper FPL-RP-595; and unpublished data. See also <<http://www.fpl.fs.fed.us/documents/fplrpfplr595.pdf>>.

**Table 852. Selected Timber Products—Imports and Exports: 1990 to 2004**

[In million board feet (13,063 represents 13,063,000,000), exceptions indicated]

Product	Unit	1990	1995	1998	1999	2000	2001	2002	2003	2004
<b>IMPORTS <sup>1</sup></b>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	13,063	17,524	19,012	19,576	19,906	20,443	21,434	21,981	25,493
From Canada	Percent	91.3	97.1	96.0	93.0	92.0	93.0	90.4	90.0	83.3
Logs, total	Mil. bd. ft. <sup>3</sup>	23	80	185	294	435	452	525	497	454
From Canada	Percent	84	70	91	95	96	97	97	98	97
Paper and board <sup>4</sup>	1,000 tons	12,195	14,292	14,538	16,917	17,555	18,513	19,433	20,034	21,146
Woodpulp	1,000 tons	4,893	5,969	5,984	6,660	7,227	7,348	7,247	6,691	6,726
Plywood	Mil. sq. ft. <sup>5</sup>	1,687	1,951	2,429	2,987	2,917	3,246	3,868	4,489	5,896
<b>EXPORTS</b>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	4,614	2,958	2,189	2,549	2,700	2,190	2,186	2,193	3,842
To: Canada	Percent	14	22	26	26	26	26	27	29	12
Japan	Percent	28	33	16	14	12	10	7	7	11
Europe	Percent	15	17	26	21	19	18	16	16	9
Logs, total	Mil. bd. ft. <sup>3</sup>	4,213	2,820	1,978	2,038	2,068	1,918	1,934	2,224	2,287
To: Canada	Percent	9	25	39	39	41	46	50	54	49
Japan	Percent	62	61	51	49	45	39	34	29	28
China	Percent	9	1	1	-	-	1	2	2	3
Paper and board <sup>4</sup>	1,000 tons	5,163	7,621	9,103	9,477	10,003	11,504	11,564	11,868	12,566
Woodpulp	1,000 tons	5,905	8,261	6,025	5,936	6,409	6,167	6,254	5,847	6,225
Plywood	Mil. sq. ft. <sup>5</sup>	1,766	1,517	970	797	754	580	563	640	783

- Represents zero. <sup>1</sup> Customs value of imports; see text, Section 28. <sup>2</sup> Includes railroad ties. <sup>3</sup> Log scale. <sup>4</sup> Includes paper and board products. Excludes hardboard. <sup>5</sup> 3/8 inch basis.

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1965-1999*, Research Paper FPL-RP-595; and unpublished data. See also <<http://www.fpl.fs.fed.us/documnts/flprp/flprp595.pdf>>.

**Table 853. Lumber Consumption by Species Group and End Use: 1995 to 2004**

[In million board feet (59.3 represents 59,300,000), except per capita in board feet. Per capita consumption based on estimated resident population as of July 1]

Item	1995	2000	2002	2003	2004	End-use	1995	2000	2002	2003	2004
<b>Total</b>	<b>59.3</b>	<b>66.1</b>	<b>67.5</b>	<b>67.5</b>	<b>73.0</b>	New housing	15.9	20.6	20.0	20.0	21.0
						Residential upkeep and improvements	14.3	16.4	17.3	17.5	17.9
Per capita	225	240	235	232	248	New nonresidential construction <sup>1</sup>	5.8	7.7	5.5	5.5	5.5
Species group:						Manufacturing	5.5	(NA)	(NA)	8.1	7.9
Softwoods	47.6	54.0	56.4	56.2	62.5	Shipping	8.5	7.7	8.0	7.5	7.8
Hardwoods	11.7	12.2	11.1	11.3	10.5	Other <sup>2</sup>	10.2	6.7	7.5	6.9	7.0

NA Not available. <sup>1</sup> In addition to new construction, includes railroad ties laid as replacements in existing track and lumber used by railroads for railcar repair. <sup>2</sup> Includes upkeep and improvement of nonresidential buildings and structures; made-at-home projects, such as furniture, boats, and picnic tables; made-on-the-job items such as advertising and display structures; and miscellaneous products and uses.

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1965-1999*, Research Paper FPL-RP-595. See also <<http://www.fpl.fs.fed.us/documnts/flprp/flprp595.pdf>>.

**Table 854. Selected Timber Products—Producer Price Indexes: 1990 to 2004**

[1982 = 100. For information about producer prices, see text, Section 14, Prices]

Product	1990	1995	1998	1999	2000	2001	2002	2003	2004
<b>Lumber and wood products</b>	<b>129.7</b>	<b>178.1</b>	<b>179.1</b>	<b>183.6</b>	<b>178.2</b>	<b>174.4</b>	<b>173.3</b>	<b>177.4</b>	<b>195.6</b>
Lumber	124.6	173.4	179.5	188.2	178.8	171.6	170.6	174.3	203.7
Softwood lumber	123.8	178.5	182.7	196.0	178.6	170.1	170.8	170.8	210.0
Hardwood lumber	131.0	167.0	178.7	177.3	185.9	181.3	178.3	188.8	199.3
Millwork	130.4	163.8	171.1	174.7	176.4	179.2	179.8	181.8	191.9
General millwork	132.0	165.4	172.4	175.6	178.0	181.8	183.3	185.4	193.1
Prefabricated structural members	122.3	163.5	170.1	178.1	175.1	173.5	168.5	171.0	193.6
Plywood	114.2	165.3	157.3	176.4	157.6	154.3	151.7	167.0	198.5
Softwood plywood	119.6	188.1	174.9	207.0	173.3	167.8	164.1	195.9	250.9
Hardwood plywood and related products	102.7	122.2	126.9	128.6	130.2	130.4	131.5	129.0	134.4
Other wood products	114.7	143.7	135.2	131.1	130.5	130.5	127.2	129.9	134.3
Boxes	119.1	145.0	150.7	152.3	155.2	154.5	154.3	157.6	162.7
<b>Pulp, paper, and allied products</b>	<b>141.2</b>	<b>172.2</b>	<b>171.7</b>	<b>174.1</b>	<b>183.7</b>	<b>184.8</b>	<b>185.9</b>	<b>190.0</b>	<b>195.6</b>
Pulp, paper, and prod, ex bldg paper	132.9	163.4	147.0	147.9	161.4	157.7	155.3	157.1	162.1
Woodpulp	151.3	183.2	122.6	119.7	145.3	125.8	116.2	121.4	132.4
Wastepaper	138.9	371.1	145.4	183.6	282.5	148.6	173.1	197.3	231.5
Paper	128.8	159.0	145.4	141.8	149.8	150.6	144.7	146.1	149.4
Writing and printing papers	129.1	158.4	139.9	137.8	146.6	146.4	143.8	144.7	146.1
Newsprint	119.6	161.8	143.4	(NA)	127.5	138.6	105.7	112.1	124.3
Paperboard	135.7	183.1	151.6	153.2	176.7	172.1	164.3	162.7	170.3
Converted paper and paperboard products	135.2	157.0	152.2	153.5	162.7	164.5	163.8	165.3	168.2
Office supplies and accessories	121.4	134.9	131.2	129.5	133.8	136.9	135.7	137.4	137.7
Building paper & building board mill prods	112.2	144.9	132.9	141.6	138.8	129.3	129.3	159.9	192.1

NA Not available.

Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly.

**Table 855. Selected Species—Stumpage Prices In Current and Constant (1996) Dollars: 1990 to 2004**

[In dollars per 1,000 board feet. Stumpage prices are based on sales of sawtimber from National Forests]

Species	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>CURRENT DOLLARS</b>											
<b>Softwoods:</b>											
Douglas fir <sup>1</sup>	466	454	436	331	254	315	433	258	185	193	93
Southern pine <sup>2</sup>	127	248	241	307	288	269	258	168	166	164	183
Sugar pine <sup>3</sup>	285	397	318	234	200	229	187	192	209	95	94
Ponderosa pine <sup>3, 4</sup>	218	150	274	270	205	181	155	143	118	111	65
Western hemlock <sup>5</sup>	203	297	248	211	161	96	46	34	73	86	63
<b>Hardwoods:</b>											
All eastern hardwoods <sup>6</sup>	146	309	259	287	241	195	341	264	384	279	427
Oak, white, red, and black <sup>6</sup>	188	297	237	265	270	317	258	153	207	304	291
Maple, sugar	135	286	238	357	395	448	314	271	485	560	618
<b>CONSTANT (1996) DOLLARS <sup>8</sup></b>											
<b>Softwoods:</b>											
Douglas fir <sup>1</sup>	428	417	436	304	233	289	397	237	170	152	69
Southern pine <sup>2</sup>	117	228	241	282	264	247	237	154	153	129	136
Sugar pine <sup>3</sup>	262	364	318	215	183	210	172	176	191	49	70
Ponderosa pine <sup>3, 4</sup>	200	138	274	248	188	166	142	131	108	88	49
Western hemlock <sup>5</sup>	186	272	248	194	148	88	42	31	67	68	47
<b>Hardwoods:</b>											
All eastern hardwoods <sup>6</sup>	134	283	259	263	221	179	313	242	353	224	317
Oak, white, red, and black <sup>6</sup>	172	272	237	243	248	291	237	140	190	239	216
Maple, sugar	124	262	238	328	362	411	288	249	445	441	459

<sup>1</sup> Western Washington and western Oregon. <sup>2</sup> Southern region. <sup>3</sup> Pacific Southwest region (formerly California region). <sup>4</sup> Includes Jeffrey pine. <sup>5</sup> Pacific Northwest region. <sup>6</sup> Eastern and Southern regions. <sup>7</sup> Eastern region. <sup>8</sup> Deflated by the producer price index, all commodities.

Source: U.S. Forest Service, *Timber Demand and Technology Assessment*, RWU-4851. Also in *Agricultural Statistics*, annual.

**Table 856. Paper and Paperboard—Production and New Supply: 1990 to 2003**

[In millions of short tons (80.45 represents 80,450,000)]

Item	1990	1995	1997	1998	1999	2000	2001	2002	2003, prel.
<b>Production, total</b>	<b>80.45</b>	<b>91.33</b>	<b>96.92</b>	<b>96.40</b>	<b>98.65</b>	<b>96.05</b>	<b>90.38</b>	<b>91.11</b>	<b>89.81</b>
Paper, total	39.36	42.87	44.70	44.76	45.98	45.52	42.10	41.56	40.37
Paperboard, total	39.32	46.64	50.40	49.83	51.04	48.97	46.81	48.13	48.02
Unbleached kraft	20.36	22.70	23.22	23.20	23.11	21.80	20.44	21.09	21.73
Semichemical	5.64	5.66	6.05	5.89	6.01	5.95	5.58	5.84	6.10
Bleached kraft	4.40	5.30	5.55	5.49	5.71	5.44	5.30	5.30	5.36
Recycled	8.92	12.98	15.58	15.25	16.21	15.79	15.50	15.91	14.83
Wet machine board E	0.15	0.15	0.10	0.10	0.06	0.06	0.05	0.05	0.05
Building paper E	0.81	0.81	0.79	0.79	0.66	0.64	0.58	0.55	0.55
Insulating board E	0.86	0.86	0.93	0.93	0.91	0.86	0.85	0.83	0.83
<b>New supply, all grades, excluding products</b>	<b>87.68</b>	<b>98.16</b>	<b>101.27</b>	<b>103.01</b>	<b>106.90</b>	<b>105.02</b>	<b>99.12</b>	<b>100.41</b>	<b>99.73</b>
Paper, total	49.49	52.77	54.15	55.13	57.30	57.13	53.23	53.50	53.19
Newsprint	13.41	12.76	12.61	12.80	13.09	12.92	11.47	11.18	11.05
Printing/writing papers	25.46	29.55	30.75	31.38	32.53	32.99	30.38	30.93	31.00
Packaging and ind. conv. papers	4.72	4.24	4.27	4.29	4.71	4.27	4.31	4.20	3.96
Tissue	5.90	6.22	6.52	6.66	6.98	6.95	7.07	7.20	7.18
Paperboard, total	36.30	43.45	45.13	45.67	47.59	46.02	44.09	45.29	44.95
Construction and other	1.90	1.95	1.99	2.20	2.00	1.88	1.80	1.62	1.59

Source: American Forest and Paper Association, Washington, DC, *Monthly Statistical Summary of Paper, Paperboard and Woodpulp*.



**Table 857. Fishery Products—Domestic Catch, Imports, and Disposition: 1990 to 2003**

[Live weight, in millions of pounds (16,349 represents 16,349,000,000). For data on commercial catch for selected countries, see Table 1347, Section 30]

Item	1990	1995	1997	1998	1999	2000	2001	2002	2003
<b>Total</b> . . . . .	<b>16,349</b>	<b>16,484</b>	<b>17,131</b>	<b>16,897</b>	<b>17,378</b>	<b>17,338</b>	<b>18,118</b>	<b>19,028</b>	<b>19,848</b>
For human food . . . . .	12,662	13,584	13,739	14,175	14,462	14,738	15,306	16,007	17,185
For industrial use . . . . .	3,687	2,900	3,392	2,722	2,916	2,599	2,812	3,021	2,663
<b>Domestic catch</b> . . . . .	<b>9,404</b>	<b>9,788</b>	<b>9,846</b>	<b>9,194</b>	<b>9,339</b>	<b>9,069</b>	<b>9,492</b>	<b>9,397</b>	<b>9,505</b>
For human food . . . . .	7,041	7,667	7,248	7,174	6,832	6,912	7,314	7,205	7,519
For industrial use . . . . .	2,363	2,121	2,597	2,020	2,507	2,157	2,178	2,192	1,986
<b>Imports</b> <sup>1</sup> . . . . .	<b>6,945</b>	<b>6,696</b>	<b>7,286</b>	<b>7,703</b>	<b>8,039</b>	<b>8,269</b>	<b>8,626</b>	<b>9,631</b>	<b>10,343</b>
For human food . . . . .	5,621	5,917	6,491	7,001	7,630	7,827	7,992	8,802	9,666
For industrial use <sup>2</sup> . . . . .	1,324	779	795	702	409	442	634	829	677
<b>Exports</b> <sup>1</sup> . . . . .	<b>4,627</b>	<b>5,166</b>	<b>5,537</b>	<b>4,889</b>	<b>5,208</b>	<b>5,757</b>	<b>7,107</b>	<b>6,979</b>	<b>6,756</b>
For human food . . . . .	3,832	4,175	4,326	3,709	4,130	4,586	5,774	5,587	5,392
For industrial use <sup>2</sup> . . . . .	795	991	1,211	1,180	1,078	1,171	1,333	1,392	1,364
<b>Disposition of domestic catch</b> . . . . .	<b>9,404</b>	<b>9,788</b>	<b>9,846</b>	<b>9,194</b>	<b>9,339</b>	<b>9,069</b>	<b>9,492</b>	<b>9,397</b>	<b>9,505</b>
Fresh and frozen . . . . .	6,501	7,099	6,877	6,870	6,416	6,657	7,085	6,826	7,264
Canned . . . . .	751	769	648	516	712	530	536	652	498
Cured . . . . .	126	90	108	129	133	119	123	117	119
Reduced to meal, oil, etc. . . . .	2,026	1,830	2,213	1,679	2,078	1,763	1,748	1,802	1,624

<sup>1</sup> Excludes imports of edible fishery products consumed in Puerto Rico; includes landings of tuna caught by foreign vessels in American Samoa. <sup>2</sup> Fish meal and sea herring.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <http://www.st.nmfs.gov/st11/fus/fus01/2003-fus.pdf (released September 2004).

**Table 858. Fisheries—Quantity and Value of Domestic Catch: 1980 to 2003**

Year	Quantity (mil. lb. <sup>1</sup> )			Value (mil. dol.)	Average price per lb. (cents)	Year	Quantity (mil. lb. <sup>1</sup> )			Value (mil. dol.)	Average price per lb. (cents)
	Total	For human food	For industrial products <sup>2</sup>				Total	For human food	For industrial products <sup>2</sup>		
1980 . . . . .	6,482	3,654	2,828	2,237	34.5	1997 . . . . .	9,846	7,248	2,597	3,447	35.0
1985 . . . . .	6,258	3,294	2,964	2,326	37.2	1998 . . . . .	9,194	7,174	2,020	3,128	34.1
1990 . . . . .	9,404	7,041	2,363	3,522	37.5	1999 . . . . .	9,339	6,832	2,507	3,464	37.0
1992 . . . . .	9,637	7,618	2,019	3,678	38.2						
1993 . . . . .	<sup>3</sup> 10,467	8,214	2,253	3,471	33.2	2000 . . . . .	9,069	6,912	2,157	3,549	39.1
1994 . . . . .	10,461	7,936	2,525	3,807	36.8	2001 . . . . .	9,492	7,314	2,178	3,228	34.0
1995 . . . . .	9,788	7,667	2,121	3,770	38.5	2002 . . . . .	9,397	7,205	2,192	3,092	32.9
1996 . . . . .	9,565	7,474	2,091	3,487	36.5	2003 . . . . .	9,505	7,519	1,986	3,342	35.2

<sup>1</sup> Live weight. <sup>2</sup> Meal, oil, fish solubles, homogenized condensed fish, shell products, bait, and animal food. <sup>3</sup> Represents record year.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <http://www.st.nmfs.gov/st11/fus/fus01/2003-fus.pdf (released September 2004).

**Table 859. Domestic Fish and Shellfish Catch and Value by Major Species Caught: 1990 to 2003**

Species	Quantity (1,000 lb.)				Value (\$1,000)			
	1990	2000	2002	2003	1990	2000	2002	2003
<b>Total</b> . . . . .	<b>9,403,571</b>	<b>9,068,985</b>	<b>9,397,164</b>	<b>9,505,448</b>	<b>3,521,995</b>	<b>3,549,481</b>	<b>3,092,318</b>	<b>3,342,184</b>
<b>Fish, total</b> <sup>1</sup> . . . . .	<b>8,091,068</b>	<b>7,689,661</b>	<b>8,089,987</b>	<b>8,248,374</b>	<b>1,900,097</b>	<b>1,594,815</b>	<b>1,359,392</b>	<b>1,519,522</b>
Cod: Atlantic . . . . .	95,881	25,060	29,841	23,586	61,329	26,384	30,715	27,494
Pacific . . . . .	526,396	530,505	512,827	567,544	91,384	142,330	96,206	159,619
Flounder . . . . .	254,519	412,723	372,697	364,560	112,921	109,910	102,370	94,427
Halibut . . . . .	70,454	75,190	82,044	79,515	96,700	143,826	135,603	172,191
Herring, sea: Atlantic . . . . .	113,095	160,269	135,871	211,713	5,746	9,972	9,106	15,496
Herring, sea: Pacific . . . . .	108,120	74,835	78,408	74,337	32,178	12,403	11,534	10,424
Menhaden . . . . .	1,962,160	1,760,498	1,750,609	1,599,344	93,896	112,403	105,102	96,080
Pollock, Alaska . . . . .	3,108,031	2,606,802	3,341,105	3,361,802	268,344	160,525	203,696	203,183
Salmon . . . . .	733,146	628,638	567,179	674,096	612,367	270,213	155,010	200,838
Tuna . . . . .	62,393	50,779	49,358	61,912	105,040	95,176	84,116	86,934
Whiting (Atlantic, silver) . . . . .	44,500	26,855	17,622	19,019	11,281	11,370	7,454	9,316
Whiting (Pacific, hake) . . . . .	21,232	452,718	285,714	309,363	1,229	18,809	13,584	17,153
<b>Shellfish, total</b> <sup>1</sup> . . . . .	<b>1,312,503</b>	<b>1,379,324</b>	<b>1,307,177</b>	<b>1,257,074</b>	<b>1,621,898</b>	<b>1,954,666</b>	<b>1,732,926</b>	<b>1,822,662</b>
Clams . . . . .	139,198	118,482	130,076	127,794	130,194	153,973	167,215	162,294
Crabs . . . . .	499,416	299,006	307,601	338,854	483,837	405,006	397,695	483,586
Lobsters: American . . . . .	61,017	83,180	82,252	71,735	154,677	301,300	293,329	284,814
Oysters . . . . .	29,193	41,146	34,397	37,046	93,718	90,667	89,071	103,045
Scallops, sea . . . . .	39,917	32,747	53,056	56,018	153,696	164,609	203,707	229,140
Shrimp . . . . .	346,494	332,486	316,727	313,628	491,433	690,453	460,878	424,027
Squid, Pacific . . . . .	36,082	259,508	160,677	88,229	2,636	27,077	18,262	23,137

<sup>1</sup> Includes other types of fish and shellfish, not shown separately.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <http://www.st.nmfs.gov/st11/fus/fus01/2003-fus.pdf (released September 2004).

**Table 860. U.S. Private Aquaculture—Trout and Catfish Production and Value: 1990 to 2004**

[67.8 represents 67,800,000. Periods are from September 1 of the previous year to August 31 of stated year. Data are for foodsize fish, those over 12 inches long]

Item	Unit	1990	1995	1999	2000	2001	2002	2003	2004
<b>TROUT FOODSIZE</b>									
Number sold . . . . .	Millions . . . . .	67.8	60.2	61.0	58.5	54.5	50.2	46.1	47.5
Total weight . . . . .	Mil. lb. . . . .	56.8	55.6	60.2	59.2	56.9	54.5	50.8	55.0
Total value of sales . . . . .	Mil. dol. . . . .	64.6	60.8	64.7	63.7	64.4	58.3	52.9	57.1
Average price received . . . . .	Dol./lb. . . . .	1.14	1.09	1.07	1.08	1.13	1.07	1.04	1.04
Percent sold to processors . . . . .	Percent . . . . .	58	68	68	70	68	69	68	72
<b>CATFISH FOODSIZE</b>									
Number sold . . . . .	Millions . . . . .	272.9	321.8	424.5	420.1	406.9	405.8	381.7	389.3
Total weight . . . . .	Mil. lb. . . . .	392.4	481.5	635.2	633.8	647.5	673.7	699.3	682.2
Total value of sales . . . . .	Mil. dol. . . . .	305.1	378.1	464.7	468.8	410.7	378.5	397.1	450.9
Average price received . . . . .	Dol./lb. . . . .	0.78	0.79	0.73	0.74	0.63	0.56	0.57	0.66
Fish sold to processors . . . . .	Mil. lb. . . . .	360.4	446.9	596.6	593.6	597.1	630.6	661.5	630.0
Avg. price paid by processors . . . . .	Cents/lb. . . . .	75.8	78.6	73.7	75.1	64.7	56.8	58.1	69.7
Processor sales . . . . .	Mil. dol. . . . .	183.1	227.0	292.7	297.2	296.4	317.6	319.3	306.8
Avg. price received by processors . . . . .	Cents/lb. . . . .	224.1	240.3	234.0	236.0	226.0	207.0	205.0	223.0
Inventory (January 1) . . . . .	Mil. lb. . . . .	9.4	10.9	12.6	13.6	15.0	12.3	13.6	15.2

Source: U.S. Department of Agriculture, National Agricultural Statistics Service, *Trout Production*, released February; *Catfish Production*, released February; and *Catfish Processing*, released February. Also in *Agricultural Statistics*, annual.

**Table 861. Supply of Selected Fishery Items: 1990 to 2003**

[In millions of pounds (734 represents 734,000,000). Totals available for U.S. consumption are supply minus exports plus imports. Round weight is the complete or full weight as caught]

Species	Unit	1990	1995	1997	1998	1999	2000	2001	2002	2003
Shrimp . . . . .	Heads-off weight . . .	734	832	923	1,002	1,084	1,172	1,312	1,430	1,607
Tuna, canned . . . . .	Canned weight . . . . .	856	875	829	912	1,020	980	796	922	982
Snow crab . . . . .	Round weight . . . . .	37	42	110	254	216	122	171	172	198
Clams . . . . .	Meat weight . . . . .	152	144	124	119	125	133	139	144	143
Salmon, canned . . . . .	Canned weight . . . . .	148	147	82	83	123	95	81	135	111
American lobster . . . . .	Round weight . . . . .	95	94	112	110	122	124	125	135	126
Spiny lobster . . . . .	Round weight . . . . .	89	89	76	100	91	99	79	87	93
Scallops . . . . .	Meat weight . . . . .	74	62	66	58	64	78	76	91	94
Sardines, canned . . . . .	Canned weight . . . . .	61	44	49	50	57	(NA)	(NA)	(NA)	(NA)
Oysters . . . . .	Meat weight . . . . .	56	63	58	61	55	71	58	62	69
King crab . . . . .	Round weight . . . . .	19	21	45	62	52	41	38	47	47
Crab meat, canned . . . . .	Canned weight . . . . .	9	12	15	22	26	29	35	44	47

NA Not available.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <<http://www.st.nmfs.gov/st11/fus/fus03/2003-fus.pdf>> (released September 2004).

**Table 862. Canned, Fresh, and Frozen Fishery Products—Production and Value: 1990 to 2003**

[In millions of pounds (1,178 represents 1,178,000,000). Fresh fishery products exclude Alaska and Hawaii. Canned fishery products data are for natural pack only]

Product	Production (mil. lb.)					Value (mil. dol.)				
	1990	1995	2000	2002	2003	1990	1995	2000	2002	2003
<b>Canned, total</b> <sup>1</sup> . . . . .	<b>1,178</b>	<b>1,927</b>	<b>1,747</b>	<b>1,317</b>	<b>1,301</b>	<b>1,562</b>	<b>1,887</b>	<b>1,626</b>	<b>1,290</b>	<b>1,224</b>
Tuna . . . . .	581	667	671	547	529	902	939	856	675	669
Salmon . . . . .	196	244	171	224	188	366	419	288	296	242
Clam products . . . . .	110	129	127	140	126	76	110	120	118	113
Sardines, Maine . . . . .	13	14	(Z)	(Z)	(Z)	17	24	(Z)	(Z)	(Z)
Shrimp . . . . .	1	1	2	2	1	3	7	11	9	5
Crabs . . . . .	1	(Z)	(Z)	(Z)	(Z)	4	(Z)	(Z)	(Z)	(Z)
Oysters <sup>2</sup> . . . . .	1	(Z)	(Z)	(Z)	(Z)	1	(Z)	1	(Z)	(Z)
<b>Fish fillets and steaks</b> <sup>3</sup> . . . . .	<b>441</b>	<b>385</b>	<b>368</b>	<b>517</b>	<b>611</b>	<b>843</b>	<b>841</b>	<b>823</b>	<b>981</b>	<b>1,126</b>
Cod . . . . .	65	65	56	50	56	132	152	167	155	172
Flounder . . . . .	54	35	27	25	21	154	86	71	73	62
Haddock . . . . .	7	3	6	8	8	24	11	24	32	35
Ocean perch, Atlantic . . . . .	1	(Z)	(Z)	(Z)	1	1	1	1	1	2
Rockfish . . . . .	33	25	11	8	5	53	38	25	15	12
Pollock, Atlantic . . . . .	12	4	2	4	7	21	10	4	11	10
Pollock, Alaska . . . . .	164	135	160	308	367	174	184	178	330	395
Other . . . . .	105	118	106	114	146	284	359	353	364	438

<sup>Z</sup> Less than 500,000 pounds or \$500,000. <sup>1</sup> Includes other products, not shown separately. <sup>2</sup> Includes oyster specialties. <sup>3</sup> Fresh and frozen.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <<http://www.st.nmfs.gov/st11>> (released September 2004).

**Table 863. Mining and Primary Metal Production Indexes: 1990 to 2004**

[Index 1997 = 100]

Industry group	1990	1995	1997	1998	1999	2000	2001	2002	2003	2004
<b>Mining</b>	<b>99.0</b>	<b>96.7</b>	<b>100.0</b>	<b>98.5</b>	<b>93.6</b>	<b>95.8</b>	<b>96.7</b>	<b>92.6</b>	<b>92.2</b>	<b>91.4</b>
Coal	96.1	94.6	100.0	101.6	98.9	97.0	101.6	97.7	95.3	99.1
Oil and gas extraction	103.2	100.0	100.0	99.2	96.6	97.1	98.1	96.3	95.3	92.3
Crude oil and natural gas	104.7	100.4	100.0	99.6	96.4	96.6	97.8	95.9	95.6	91.8
Oil and gas drilling	92.9	81.3	100.0	93.5	73.4	104.0	125.9	90.8	105.5	115.3
Metal mining	84.9	92.8	100.0	99.6	91.4	91.0	82.7	75.7	70.4	72.3
Iron ore	89.2	98.9	100.0	99.2	91.3	99.2	73.2	81.1	73.2	83.1
Nonferrous ores	91.9	100.4	100.0	107.5	99.4	94.5	89.3	(NA)	(NA)	(NA)
Copper ore	89.4	104.7	100.0	105.4	90.7	81.4	76.9	(NA)	(NA)	(NA)
<b>Primary metals, manufacturing</b>	<b>85.6</b>	<b>93.8</b>	<b>100.0</b>	<b>101.6</b>	<b>101.4</b>	<b>98.1</b>	<b>88.7</b>	<b>90.3</b>	<b>87.4</b>	<b>92.3</b>
Nonferrous metals	89.6	99.1	100.0	105.7	97.5	89.5	81.3	81.4	69.2	73.8
Copper	60.6	111.9	100.0	102.9	89.1	56.9	47.7	42.5	38.8	38.9
Aluminum	97.6	93.4	100.0	105.2	106.3	98.5	87.9	96.4	94.2	97.7
Iron and steel	85.3	94.8	100.0	99.8	100.5	99.5	90.0	92.0	93.3	100.6

NA Not available.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly; and *Industrial Production and Capacity Utilization*, Statistical Release G.17, monthly.

**Table 864. Mineral Industries—Employment, Hours, and Earnings: 1990 to 2004**

[In thousands (680 represents 680,000). Based on the Current Employment Statistics Program, see Appendix III]

Industry and item	Unit	1990	1995	1999	2000	2001	2002	2003	2004
<b>All mining:</b>									
All employees	1,000	680	558	517	520	533	512	503	523
Production workers	1,000	469	391	374	383	398	378	364	385
Avg. weekly hours	Number	46.1	46.8	45.4	45.5	45.5	43.9	44.4	45.4
Avg. weekly earnings	Dollars	630	711	760	771	789	769	796	838
<b>Coal mining:</b>									
All employees	1,000	136	97	79	72	74	74	70	72
Production workers	1,000	110	78	65	59	63	63	59	60
Avg. weekly hours	Number	44.7	45.7	45.6	45.6	47.0	45.4	46.2	47.7
Avg. weekly earnings	Dollars	822	929	953	945	957	934	964	1,030
<b>Oil and gas extraction:</b>									
All employees	1,000	190	152	131	125	124	121.9	122.9	123
Production workers	1,000	84	73	71	67	68	68	68	70
Avg. weekly hours	Number	44.4	43.6	41.9	41.3	41.3	39.5	41.1	43.5
Avg. weekly earnings	Dollars	591	677	802	802	825	761	778	807
<b>Metal mining:</b>									
All employees	1,000	53	48	42	38	33	29	27	27
Production workers	1,000	43	39	32	29	25	22	20	20
Avg. weekly hours	Number	42.5	43.4	44.1	43.4	43.4	42.8	43.7	45.1
Avg. weekly earnings	Dollars	646	788	874	871	866	878	957	1,034
<b>Nonmetallic minerals, except fuels:</b>									
All employees	1,000	113	108	114	115	111	107	105	108
Production workers	1,000	85	81	87	87	83	50	78	82
Avg. weekly hours	Number	45.0	46.3	45.9	46.1	46.3	45.2	45.1	44.6
Avg. weekly earnings	Dollars	532	632	702	722	745	749	773	791

Source: U.S. Bureau of Labor Statistics, *Bulletin 2370* and *Employment and Earnings*, March and June issues.

**Table 865. Selected Mineral Products—Average Prices: 1990 to 2004**

[Excludes Alaska and Hawaii, except as noted]

Year	Nonfuels							Fuels			
	Copper, electro-lytic (cents per lb.)	Platinum <sup>1</sup> (dol./troy oz.)	Gold (dol./fine oz.)	Silver (dol./fine oz.)	Lead (cents per lb.)	Tin (New York) (cents per lb.)	Zinc (cents per lb.)	Sulfur, crude <sup>2</sup> (dol./metric ton)	Bituminous coal <sup>3,4</sup> (dol./short ton)	Crude petroleum <sup>3</sup> (dol./bbl.)	Natural gas <sup>3</sup> (dol./1,000 cu. ft.)
1990	123	467	385	4.82	46	386	75	80.14	27.43	20.03	1.71
1991	109	371	363	4.04	34	363	53	71.45	27.49	16.54	1.64
1992	107	356	345	3.94	35	402	58	48.14	26.78	15.99	1.74
1993	92	370	361	4.30	32	350	46	31.86	26.15	14.25	2.04
1994	111	411	385	5.29	37	369	49	30.08	25.68	13.19	1.85
1995	138	425	386	5.15	42	416	56	44.46	25.56	14.62	1.55
1996	109	398	389	5.19	49	412	51	34.11	25.17	18.46	2.17
1997	107	397	332	4.89	47	381	65	36.06	24.64	17.23	2.32
1998	79	375	295	5.54	45	373	51	29.14	24.87	10.87	1.96
1999	76	379	280	5.25	44	366	53	37.81	23.88	15.56	2.19
2000	88	549	280	5.00	44	370	56	24.73	24.15	26.72	3.69
2001	77	533	272	4.39	44	315	44	10.01	25.36	21.84	4.12
2002	76	543	311	4.62	44	292	39	11.84	26.57	22.51	2.95
2003	85	694	365	4.91	44	340	41	28.71	26.57	27.56	4.98
2004	134	852	410	6.46	53	643	52	28.00	(NA)	(NA)	(NA)

NA Not available. <sup>1</sup> Average annual dealer prices. <sup>2</sup> F.o.b. works. <sup>3</sup> Average value at the point of production or domestic first purchase price. <sup>4</sup> Includes lignite.

Source: Nonfuels, through 1994, U.S. Bureau of Mines, thereafter, U.S. Geological Survey, *Minerals Yearbook* and *Mineral Commodities Summaries*, annual; fuels, U.S. Energy Information Administration, *Annual Energy Review* and most recent year from the *Monthly Energy Review*.

**Table 866. Mineral Production: 1990 to 2004**

[In millions of short tons (1,029.1 represents 1,029,100,000). Data represent production as measured by mine shipments, mine sales or marketable production]

Minerals and Metals	Unit	1990	1995	2000	2003	2004, est.
<b>FUEL MINERALS</b>						
Coal, total	Mil. sh. tons	1,029.1	1,033.0	1,073.6	1,069.5	(NA)
Bituminous	Mil. sh. tons	693.2	613.8	574.3	559.2	(NA)
Sub-bituminous	Mil. sh. tons	244.3	328.0	409.2	428.4	(NA)
Lignite	Mil. sh. tons	88.1	86.5	85.6	80.6	(NA)
Anthracite	Mil. sh. tons	3.5	4.7	4.6	1.3	(NA)
Natural gas (marketed production)	Tril. cu. ft.	18.59	19.51	20.00	20.07	(NA)
Petroleum (crude)	Mil. bbl.	2,686	2,394	2,125	2,074	1,982
Uranium (recoverable content)	Mil. lb.	8.9	6.0	4.0	2.0	(NA)
<b>NONFUEL MINERALS</b>						
Asbestos (sales)	1,000 metric tons	(D)	9	5	-	-
Barite, primary, sold/used by producers	1,000 metric tons	430	543	392	468	550
Boron minerals, sold or used by producers	1,000 metric tons	1,090	1,190	1,070	1,150	1,160
Bromine, sold or used by producers	1,000 metric tons	177	218	228	216	222
Cement:						
Portland	Mil. metric tons	67	73	84	88	93
Masonry	Mil. metric tons	3	4	4	5	5
Clays	1,000 metric tons	42,200	43,100	40,800	40,000	48,900
Diatomite	1,000 metric tons	631	722	677	620	635
Feldspar <sup>2</sup>	1,000 metric tons	630	880	790	800	790
Fluorspar, finished shipments	1,000 metric tons	64	51	-	-	-
Garnet (industrial)	1,000 metric tons	47	46	60	29	30
Gypsum, crude	Mil. metric tons	15	17	20	17	18
Helium <sup>3</sup>	Mil. cu. meters	85	101	98	87	85
Lime, sold or used by producers	Mil. metric tons	16	19	20	18	20
Mica, scrap & flake, sold/used by producers	1,000 metric tons	109	108	101	79	76
Peat, sales by producers	1,000 metric tons	721	660	847	632	624
Perlite, processed, sold or used	1,000 metric tons	576	700	672	493	510
Phosphate rock (marketable)	Mil. metric tons	46	44	39	35	37
Potash (K <sub>2</sub> O equivalent) sales	1,000 metric tons	1,710	1,480	1,300	1,100	1,200
Pumice & pumicite, producer sales	1,000 metric tons	443	529	1,050	870	1,070
Salt, common, sold/used by producers	Mil. metric tons	37	41	46	44	45
Sand & gravel, sold/used by producer	Mil. metric tons	855	935	1,148	1,158	1,219
Construction	Mil. metric tons	829	907	1,120	1,160	1,190
Industrial	Mil. metric tons	26	28	28	28	29
Sodium carbonate (natural) (soda ash)	1,000 metric tons	9,100	10,100	10,200	10,600	10,800
Sodium sulfate (natural)	1,000 metric tons	349	327	(NA)	472	425
Stone	Mil. metric tons	1,110	2,420	2,810	2,840	2,900
Crushed and broken	Mil. metric tons	1,110	1,260	1,560	1,530	1,600
Dimension <sup>5</sup>	1,000 metric tons	1,120	1,160	1,250	1,340	1,300
Sulfur: Total shipments	1,000 metric tons	11,500	12,100	10,700	9,600	10,000
Sulfur: Frasch mines (shipments)	1,000 metric tons	3,680	3,150	900	-	-
Talc, and pyrophyllite, crude	1,000 metric tons	1,270	1,060	851	869	911
Vermiculite concentrate	1,000 metric tons	209	171	150	(NA)	(NA)
<b>METALS</b>						
Antimony ore and concentrate	Metric tons	(D)	262	(D)	-	-
Aluminum	1,000 metric tons	4,048	3,375	3,668	2,703	2,500
Bauxite (dried)	1,000 metric tons	(D)	(D)	(NA)	(NA)	(NA)
Copper (recoverable content)	1,000 metric tons	1,590	1,850	1,450	1,120	1,160
Gold (recoverable content)	Metric tons	294	317	353	277	247
Iron ore (gross weight) <sup>6</sup>	Mil. metric tons	56	63	63	49	55
Lead (recoverable content)	1,000 metric tons	484	386	449	449	(NA)
Magnesium metal	1,000 metric tons	139	142	(D)	(D)	(D)
Manganiferous ore (gross weight) <sup>7</sup>	1,000 metric ton	(D)	(D)	-	(NA)	(NA)
Mercury <sup>8</sup>	Metric tons	(NA)	(D)	(NA)	(NA)	(NA)
Molybdenum (concentrate)	1,000 metric tons	62	61	41	34	40
Nickel	1,000 metric tons	(Z)	2	-	-	-
Palladium metal	Kilograms	5,930	5,260	10,300	14,000	14,200
Platinum metal	Kilograms	1,810	1,590	4,390	4,170	4,200
Silicon (silicon content)	1,000 metric tons	418	396	367	248	240
Silver (recoverable content)	Metric tons	2,120	1,560	1,860	1,240	1,200
Titanium concentrate: Ilmenite (gross weight)	1,000 metric tons	(D)	(D)	(D)	(D)	(D)
Tungsten ore and concentrate <sup>9</sup>	Metric tons	(D)	-	-	(NA)	-
Zinc (recoverable content)	1,000 metric tons	515	603	805	738	712

- Represents zero. D Withheld to avoid disclosing individual company data. NA Not available. Z Less than half of the unit of measure. <sup>1</sup> 42 gal. bbl. <sup>2</sup> Beginning 1995, includes aplite. <sup>3</sup> Refined. <sup>4</sup> Excludes abrasive stone, bituminous limestone and sandstone, and ground soapstone, all included elsewhere in table. Includes calcareous marl and slate. <sup>5</sup> Includes Puerto Rico. <sup>6</sup> Represents shipments; includes by-product ores. <sup>7</sup> 5- to 35-percent manganiferous ore. <sup>8</sup> Covers mercury recovered as a by-product of gold ores only. <sup>9</sup> Content of ore and concentrate.

Source: Nonfuels, through 1995, U.S. Bureau of Mines, thereafter, U.S. Geological Survey, *Minerals Yearbook* and *Mineral Commodities Summaries*, annual; fuels, U.S. Energy Information Administration, *Annual Energy Review* and *Uranium Industry Annual*.

**Table 867. Nonfuel Mineral Commodities—Summary: 2004**

[In thousands of metric tons (2,500 represents except as indicated. Preliminary estimates. Average price in dollars per metric tons except as noted]

Mineral	Mineral disposition				Average price per unit (dollars)	Employment (number)	
	Unit	Production	Exports	Net import reliance <sup>1</sup> (percent)			Consumption, apparent
Aluminum . . . . .	1,000 metric tons . .	2,500	1,700	41	6,300	20.82	58,200
Antimony (contained) . . . . .	Metric tons . . . . .	34,100	3,680	85	27,400	21.27	30
Asbestos . . . . .	1,000 metric tons . .	-	2	100	3	4255.00	-
Barite . . . . .	1,000 metric tons . .	550	78	79	2,600	30.00	340
Bauxite and alumina . . . . .	1,000 metric tons . .	(NA)	744	100	2,600	422.00	(NA)
Beryllium (contained) . . . . .	Metric tons . . . . .	100	80	55	220	(NA)	(NA)
Bismuth (contained) . . . . .	Metric tons . . . . .	-	120	90	(NA)	23.10	-
Boron (B <sub>2</sub> O <sub>3</sub> content) . . . . .	1,000 metric tons . .	562	192	(5)	509	4640.00	1,300
Bromine (contained) . . . . .	1,000 metric tons . .	222	8	(5)	220	780.70	1,500
Cadmium (contained) . . . . .	Metric tons . . . . .	3600	400	(5)	500	290.60	(NA)
Cement . . . . .	1,000 metric tons . .	95,000	840	23	121,200	485.00	18,100
Chromium . . . . .	1,000 metric tons . .	10130	70	72	450	411(NA)	(NA)
Clays . . . . .	1,000 metric tons . .	48,900	5,580	(5)	43,500	(NA)	6,230
Cobalt (contained) . . . . .	Metric tons . . . . .	102,500	2,700	76	10,200	224.50	(NA)
Copper (mine, contained) . . . . .	1,000 metric tons . .	1,160	750	43	2,640	12134.00	7.0
Diamond (industrial) . . . . .	Million carats . . . . .	254	83	40	421	130.24	(NA)
Diatomite . . . . .	1,000 metric tons . .	635	136	(5)	500	4258	1,000
Feldspar . . . . .	1,000 metric tons . .	790	8	2	810	54.00	400
Fluorspar . . . . .	1,000 metric tons . .	-	22	100	622	(NA)	-
Garnet (industrial) . . . . .	Metric tons . . . . .	29,700	10,500	34	50,400	450-2,000	180
Germanium (contained) . . . . .	Kilograms . . . . .	15,000	(NA)	(NA)	(NA)	714640.00	65
Gold (contained) . . . . .	Metric tons . . . . .	247	500	(5)	(NA)	15410.00	7,000
Gypsum (crude) . . . . .	1,000 metric tons . .	18,000	130	26	39,300	46.90	5,900
Iodine . . . . .	Metric tons . . . . .	1,340	1,330	74	5,210	71612.91	30
Iron ore (usable) . . . . .	Million metric tons . .	54.60	8.8	8	58.8	41731.00	4,800
Iron and steel slag (metal) . . . . .	1,000 metric tons . .	20,000	100	5	19,900	415.75	2,700
Lead (contained) . . . . .	1,000 metric tons . .	1,610	275	(5)	1,520	53.00	2,720
Lime . . . . .	1,000 metric tons . .	20,400	86	(Z)	20,500	90.00	5,350
Magnesium compounds . . . . .	1,000 metric tons . .	280	50	48	540	(NA)	370
Magnesium metal . . . . .	1,000 metric tons . .	(NA)	15	68	110	(NA)	400
Mercury . . . . .	Metric tons . . . . .	10(NA)	300	(NA)	(NA)	18350.00	(NA)
Mica, scrap and flake . . . . .	1,000 metric tons . .	166	10	35	117	4245.00	(NA)
Molybdenum (contained) . . . . .	Metric tons . . . . .	39,900	54,100	(5)	1,700	29.67	568
Nickel (contained) . . . . .	Metric tons . . . . .	-	55,900	1949	126,000	2013823.00	-
Nitrogen (fixed)-ammonia . . . . .	1,000 metric tons . .	8,900	430	38	14,200	421275.00	1,300
Peat . . . . .	1,000 metric tons . .	607	30	56	1,370	29.28	700
Perlite . . . . .	1,000 metric tons . .	510	40	23	660	35.22	135
Phosphate rock . . . . .	1,000 metric tons . .	37,000	40	6	(NA)	27.12	3,300
Platinum-group metals . . . . .	Kilograms . . . . .	18,400	49,600	90	(NA)	1622(NA)	1,500
Potash (K <sub>2</sub> O equivalent) . . . . .	1,000 metric tons . .	1,200	200	70	5,800	423170.00	1,130
Pumice and pumicite . . . . .	1,000 metric tons . .	1,070	25	26	1,450	24.12	100
Salt . . . . .	1,000 metric tons . .	45,100	800	20	53,900	42422.00	4,100
Silicon (contained) . . . . .	1,000 metric tons . .	240	23	56	560	2559.00	(NA)
Silver (contained) . . . . .	Metric tons . . . . .	1,200	340	54	6,200	16.46	900
Sodium carbonate (soda ash) . . . . .	1,000 metric tons . .	10,800	4,700	(5)	6,300	26105.00	2,500
Sodium sulfate . . . . .	1,000 metric tons . .	425	140	(5)	330	27114.00	225
Stone (crushed) . . . . .	Million metric tons . .	1,600	2	(Z)	1,610	46.08	78,700
Sulfur (all forms) . . . . .	1,000 metric tons . .	10,000	675	20	12,400	42828.00	2,700
Talc . . . . .	1,000 metric tons . .	911	210	1	921	4112.00	450
Thallium (contained) . . . . .	Kilograms . . . . .	-	1500	100	(NA)	71,300.00	(NA)
Tin (contained) . . . . .	Metric tons . . . . .	109,000	4,600	88	50,400	24.12	(NA)
Titanium dioxide . . . . .	1,000 metric tons . .	1,430	590	(5)	1,120	2290.93	4,400
Tungsten (contained) . . . . .	Metric tons . . . . .	103,600	4,340	73	11,800	3047.00	(NA)
Vermiculite . . . . .	1,000 metric tons . .	NA	10	(NA)	(NA)	143.00	100
Zinc (contained) . . . . .	1,000 metric tons . .	1,130	712	56	1,470	2310.53	1,800
Zirconium (Zr <sub>2</sub> O <sub>2</sub> ) content . . . . .	Metric tons . . . . .	(D)	41,000	(5)	(D)	432400.00	(NA)

- Represents or rounds to zero. D Withheld to avoid disclosure. NA Not available. Z Less than half the unit of measure.  
<sup>1</sup> Calculated as a percent of apparent consumption. <sup>2</sup> Dollars per pound. <sup>3</sup> Refinery production. <sup>4</sup> Dollars per metric ton.  
<sup>5</sup> Net exporter. <sup>6</sup> Metal, vacuum-cast ingot. <sup>7</sup> Granulated pentahydrate borax in bulk, f.o.b. mine. <sup>8</sup> Dollars per kilogram.  
<sup>9</sup> Bulk, purified bromine. <sup>10</sup> 1- to 5-short ton lots. <sup>11</sup> Secondary production. <sup>12</sup> Columbite price. <sup>13</sup> Value of imports, dollars per carat. <sup>14</sup> Reported consumption. <sup>15</sup> Zone refined. <sup>16</sup> Price of flake imports. <sup>17</sup> Includes employment at calcining plants. <sup>18</sup> Price of eastern Canadian ore. <sup>19</sup> Delivered, No. 1 Heavy, Melting composite price. <sup>20</sup> Year-end price.  
<sup>21</sup> 46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports. <sup>22</sup> Dollars per 76-pound flask. <sup>23</sup> London Metal Exchange cash price. <sup>24</sup> F.o.b. Gulf Coast. <sup>25</sup> Dealer price of platinum. <sup>26</sup> Price of K<sub>2</sub>O, muriate. <sup>27</sup> Vacuum and open pan, bulk, pellets and packaged, f.o.b. mine and plant. <sup>28</sup> Ferrosilicon, 50% Si. <sup>29</sup> Quoted year-end price, dense, bulk, f.o.b. Green River, WY, dollars per short ton. <sup>30</sup> Quoted price, bulk, f.o.b. works, East, dollars per short ton. <sup>31</sup> Elemental sulfur, f.o.b. mine and/or plant. <sup>32</sup> Rutile, list, year-end.

Source: U.S. Geological Survey, *Mineral Commodity Summaries*, annual.



**Table 868. Value of Domestic Nonfuel Mineral Production by State: 1990 to 2004**

[In millions of dollars (33,445 represents \$33,445,000,000), except as indicated. For similar data on fuels, see Table 875]

State	1990	1995	2000	2002	2003	2004		
						Total	Rank	Percent of U.S.
<b>United States<sup>1</sup></b>	<b>33,445</b>	<b>38,506</b>	<b>40,100</b>	<b>38,000</b>	<b>37,600</b>	<b>44,000</b>	<b>(X)</b>	<b>100.00</b>
Alabama	559	706	1,070	968	863	982	17	2.23
Alaska	577	538	1,140	1,030	1,060	1,320	12	3.01
Arizona	3,085	4,190	2,550	1,920	2,100	3,000	3	6.83
Arkansas	381	492	506	543	445	514	29	1.17
California	2,771	2,760	3,350	3,440	3,170	3,620	1	8.23
Colorado	377	570	566	619	672	762	22	1.73
Connecticut	122	93	<sup>2</sup> 100	142	142	132	42	0.30
Delaware <sup>2</sup>	10	9	<sup>2</sup> 12	18	16	21	50	0.05
Florida	1,574	1,540	1,920	2,020	2,000	2,220	5	5.05
Georgia	1,504	1,690	1,660	1,450	1,670	1,830	6	4.15
Hawaii	106	114	91	75	74	75	45	0.17
Idaho	375	510	398	307	294	322	37	0.73
Illinois	667	828	907	950	911	1,030	16	2.35
Indiana	428	589	729	740	734	774	21	1.76
Iowa	310	456	510	487	477	533	28	1.21
Kansas	349	498	624	661	688	741	23	1.69
Kentucky	359	432	497	372	559	674	24	1.53
Louisiana	368	434	404	294	331	364	34	0.83
Maine	55	68	<sup>2</sup> 102	106	100	122	43	0.28
Maryland	368	324	357	375	382	478	32	1.09
Massachusetts	128	190	210	235	186	221	38	0.50
Michigan	1,440	1,520	1,670	1,580	1,350	1,530	10	3.49
Minnesota	1,482	1,530	1,570	1,090	1,230	1,590	8	3.62
Mississippi	111	131	157	176	174	189	40	0.43
Missouri	1,105	1,140	1,320	1,290	1,290	1,540	9	3.50
Montana	573	574	582	442	492	582	27	1.32
Nebraska	90	146	170	89	94	95	44	0.22
Nevada	2,621	3,060	<sup>2</sup> 2,800	2,900	2,940	3,250	2	7.40
New Hampshire	36	50	<sup>2</sup> 59	68	64	65	47	0.15
New Jersey	229	243	286	285	272	330	36	0.75
New Mexico	1,103	1,130	812	571	533	811	20	1.85
New York	773	886	970	1,010	978	1,060	15	2.41
North Carolina	586	735	779	708	676	822	19	1.87
North Dakota	25	31	42	39	38	52	48	0.12
Ohio	733	891	1,060	1,060	968	1,090	13	2.48
Oklahoma	259	357	453	462	479	498	30	1.13
Oregon	205	239	<sup>2</sup> 439	320	311	356	35	0.81
Pennsylvania	1,031	1,080	<sup>2</sup> 1,250	1,270	1,260	1,400	11	3.18
Rhode Island	18	31	24	17	26	37	49	0.08
South Carolina	450	447	560	460	484	586	26	1.33
South Dakota	319	332	260	186	206	210	39	0.48
Tennessee	663	665	770	629	606	660	25	1.50
Texas	1,459	1,680	2,050	2,180	2,030	2,400	4	5.47
Utah	1,335	1,850	<sup>2</sup> 1,420	1,240	1,260	1,740	7	3.95
Vermont	87	60	43	71	73	69	46	0.16
Virginia	507	515	692	697	727	868	18	1.97
Washington	483	582	691	450	430	447	33	1.02
West Virginia	133	181	<sup>2</sup> 182	173	168	179	41	0.41
Wisconsin	215	416	349	340	404	487	31	1.11
Wyoming	911	973	922	1,010	1,010	1,090	14	2.48

X Not applicable. <sup>1</sup> Includes undistributed not shown separately. <sup>2</sup> Partial data only; excludes values withheld to avoid disclosing individual company data.

Source: U.S. Geological Survey, *Minerals Yearbook*, annual, and *Mineral Commodities Summaries*, annual. See also <<http://minerals.er.usgs.gov/minerals/pubs/mcs/2004/mcs2004.pdf>> (released 31 January 2004).

**Table 869. Principal Fuels, Nonmetals, and Metals—World Production and the U.S. Share: 1990 to 2004**

[In millions of short tons (5,386 represents 5,386,000,000), except as indicated]

Mineral	World production					Percent U.S. of world			
	Unit	1990	1995	2000	2004 <sup>1</sup>	1990	1995	2000	2004 <sup>1</sup>
<b>Fuels:</b> <sup>2</sup>									
Coal	Mil. sh. ton	5,386	5,218	5,059	(NA)	19	20	22	(NA)
Petroleum (crude)	Bil. bbl	22.1	22.8	24.9	26.5	12	11	9	7
Natural gas (dry, marketable)	Tril. cu. ft.	73.6	78.0	88.0	(NA)	24	24	19	(NA)
Natural gas plant liquids	Bil. bbl	1.7	2.0	2.3	(NA)	34	32	31	(NA)
<b>Nonmetals:</b>									
Asbestos	1,000 metric tons	4,010	2,180	2,110	2,280	(D)	(Z)	(Z)	-
Barite	1,000 metric tons	5,770	4,870	6,470	6,900	7	11	6	8
Feldspar	1,000 metric tons	5,990	7,910	9,580	11,000	11	11	8	7
Fluorspar	1,000 metric tons	5,120	4,170	4,470	4,930	1	1	(NA)	-
Gypsum	Mil. metric tons	104	98	106	106	15	17	19	17
Mica (incl. scrap)	1,000 metric tons	217	328	328	300	51	43	31	25
Nitrogen, (fixed) - ammonia	Mil. metric tons	98	100	108	109	13	13	11	8
Phosphate rock, gross wt.	Mil. metric tons	162	130	132	138	29	33	30	27
Potash (K <sub>2</sub> O equivalent)	Mil. metric tons	28	25	27	30	6	6	4	4
Sulfur, elemental	Mil. metric tons	58	54	58	63	20	22	19	16
<b>Metals, mine basis:</b>									
Bauxite	Mil. metric tons	113	112	136	156	(D)	(D)	(NA)	(NA)
Columbian concentrates (Nb content)	1,000 metric tons	12	18	33	33	-	-	-	-
Copper	1,000 metric tons	8,950	10,100	13,200	14,500	18	18	11	8
Gold	Metric tons	2,180	2,230	2,590	2,470	14	14	14	10
Iron ore	Mil. metric tons	983	1,030	1,070	1,250	6	6	6	4
Lead	1,000 metric tons	3,370	2,830	3,184	3,150	15	14	15	14
Mercury	Metric tons	4,523	3,160	1,350	1,750	12	(D)	(NA)	(D)
Molybdenum	1,000 metric tons	111	126	133	139	55	48	31	29
Nickel	1,000 metric tons	974	1,040	1,270	1,400	(Z)	(Z)	(Z)	-
Silver	1,000 metric tons	16	15	18	20	13	10	11	6
Tantalum concentrates	Metric tons	344	356	1,040	1,270	-	-	-	-
<b>Titanium concentrates:</b>									
Ilmenite	1,000 metric tons	4,070	4,010	5,010	4,800	(D)	(D)	7	6
Rutile	1,000 metric tons	481	416	387	400	(D)	(D)	(D)	(D)
Tungsten <sup>3</sup>	1,000 metric tons	52	39	44	60	(D)	-	(NA)	-
Vanadium <sup>3</sup>	1,000 metric tons	33	34	56	44	6	6	-	-
Zinc <sup>3</sup>	1,000 metric tons	7,150	7,280	8,788	9,100	7	8	10	8
<b>Metals, smelter basis:</b>									
Aluminum	1,000 metric tons	19,300	19,700	24,400	28,900	21	17	15	9
Cadmium	1,000 metric tons	20	19	20	17	8	7	10	3
Copper	1,000 metric tons	9,472	10,400	11,000	12,700	15	15	9	4
Iron, pig	Mil. metric tons	551	536	573	703	9	10	8	6
Lead <sup>4</sup>	1,000 metric tons	5,950	5,590	6,580	NA	22	25	22	(D)
Magnesium <sup>5</sup>	1,000 metric tons	354	395	428	570	39	36	(D)	(D)
Raw Steel	Mil. metric tons	771	752	845	1,030	12	13	12	9
Tin <sup>6</sup>	1,000 metric tons	220	189	271	250	-	-	2	-
Zinc	1,000 metric tons	7,180	7,370	9,137	10,100	5	5	4	3

- Represents or rounds to zero. <sup>D</sup> Withheld to avoid disclosing company data. <sup>NA</sup> Not available. <sup>Z</sup> Less than half the unit of measure. <sup>1</sup> Preliminary data. <sup>2</sup> Source: Energy Information Administration, *International Energy Annual*. <sup>3</sup> Content of ore and concentrate. <sup>4</sup> Refinery production. <sup>5</sup> Primary production; no smelter processing necessary. <sup>6</sup> Production from primary sources only.

Source: Nonfuels, through 1990, U.S. Bureau of Mines, thereafter, U.S. Geological Survey, *Minerals Yearbook*, annual, and *Mineral Commodity Summaries*, annual; fuels, U.S. Energy Information Administration, *International Energy Annual*. See also <<http://minerals.er.usgs.gov/minerals/pubs/mcs/2005/mcs2005.pdf>>.

**Table 870. Net U.S. Imports of Selected Minerals and Metals as Percent of Apparent Consumption: 1980 to 2004**

[In percent. Based on net imports which equal the difference between imports and exports plus or minus Government stockpile and industry stock changes]

Minerals in rank of net imports	1980	1990	1995	1999	2000	2001	2002	2003	2004
Bauxite <sup>1</sup>	94	98	99	100	100	100	100	100	100
Columbium	100	100	100	100	100	100	100	100	100
Manganese	98	100	100	100	100	100	100	100	100
Mica (sheet)	100	100	100	100	100	100	100	100	100
Strontium	100	100	100	100	100	100	100	100	100
Vanadium	35	(D)	84	76	100	100	100	100	100
Tin	79	71	84	85	88	86	88	89	88
Tantalum	90	86	80	80	80	80	80	80	80
Barite	44	71	65	67	84	86	78	77	79
Cobalt	93	84	79	75	78	76	72	79	76
Tungsten	53	81	90	65	66	64	69	63	73
Chromium	67	80	75	79	77	63	69	73	72
Potash	65	68	75	80	80	80	80	80	70
Zinc <sup>2</sup>	60	64	71	72	72	73	75	72	70
Silver	7	(NA)	(NA)	39	43	44	68	56	54
Nickel	76	64	60	63	56	46	46	48	49
Copper	16	15	27	27	37	22	37	40	43
Aluminum	( <sup>3</sup> )	( <sup>3</sup> )	23	31	33	38	39	38	41
Gypsum	35	46	29	25	27	26	23	23	26
Iron and steel	25	13	21	17	18	16	15	10	18
Iron ore	25	21	14	18	10	26	10	13	8

<sup>D</sup> Withheld to avoid disclosure. <sup>NA</sup> Not available. <sup>1</sup> Includes alumina. <sup>2</sup> Beginning 1990, effect of sharp rise in exports of concentrates. If calculated on a refined zinc-ore basis, reliance would be about the same as pre-1990 level; 1990, 64%; 1995, 71%; and 1999, 71%. <sup>3</sup> Net exports.

Source: Through 1994, U.S. Bureau of Mines; thereafter, U.S. Geological Survey, *Mineral Commodity Summaries*; import and export data from U.S. Census Bureau.

**Table 871. Federal Offshore Leasing, Exploration, Production, and Revenue: 1990 to 2004**

[In millions (56.79 represents 56,790,000), except as indicated. See source for explanation of terms and for reliability statement]

Item	Unit	1990	1995	1999	2000	2001	2002	2003	2004
Tracts offered . . . . .	Number . . . . .	10,459	10,995	7,453	7,992	8,790	8,548	10,349	8,676
Tracts leased . . . . .	Number . . . . .	825	835	333	553	942	804	923	888
Acres offered . . . . .	Millions . . . . .	56.79	59.70	40.22	42.89	49.15	45.69	55.31	46.14
Acres leased . . . . .	Millions . . . . .	4.30	4.34	1.77	2.92	5.00	4.20	4.85	4.69
Bonus paid for leased tracts . . . . .	Bil. dol . . . . .	0.6	0.4	0.3	0.3	1.0	0.1	0.4	0.6
New wells being drilled:									
Active . . . . .	Number . . . . .	120	124	219	224	213	119	135	156
Suspended . . . . .	Number . . . . .	266	247	110	146	97	72	48	56
Wells completed . . . . .	Number . . . . .	13,167	13,475	13,676	13,718	13,921	13,282	13,619	13,556
Cumulative wells (since 1953):									
Wells plugged and abandoned . . . . .	Number . . . . .	14,677	18,008	22,115	22,814	24,218	25,232	26,867	28,076
Revenue, total <sup>1</sup> . . . . .	Bil. dol . . . . .	3.4	2.7	3.2	5.2	<sup>2</sup> 5.8	5.0	5.9	5.3
Bonuses . . . . .	Bil. dol . . . . .	0.8	0.4	0.2	0.4	<sup>2</sup> 0.5	0.1	1.1	0.52
Oil and gas royalties <sup>1</sup> . . . . .	Bil. dol . . . . .	2.6	2.1	2.6	4.1	<sup>2</sup> 4.8	4.7	4.4	4.5
Rentals . . . . .	Bil. dol . . . . .	0.09	0.09	0.21	0.21	<sup>2</sup> 0.13	0.44	0.25	0.21
Sales value <sup>3</sup> . . . . .	Bil. dol . . . . .	17.0	13.8	17.4	27.4	<sup>2</sup> 31.4	31.0	29	30.6
Oil . . . . .	Bil. dol . . . . .	7.0	6.3	6.5	11.5	<sup>2</sup> 11.3	12.1	8.3	8.4
Natural gas . . . . .	Bil. dol . . . . .	9.5	7.5	10.9	15.9	<sup>2</sup> 20.1	18.9	20.7	22.2
Sales volume: <sup>4</sup>									
Oil . . . . .	Mil. bbls. . . . .	324	409	513	566	<sup>2</sup> 463	612	310	248
Natural gas . . . . .	Bil. cu. ft. . . . .	5,093	4,692	4,992	4,723	<sup>2</sup> 3,470	4,971	3,501	3,941

<sup>1</sup> Includes condensate royalties. <sup>2</sup> Covers January through September 2001 only. <sup>3</sup> Production value is value at time of production, not current value. <sup>4</sup> Excludes sales volumes for gas lost, gas plant products or sulfur.

Source: U.S. Department of the Interior, Minerals Management Service, *Federal Offshore Statistics*, annual.

**Table 872. Uranium Concentrate (U<sub>3</sub>O<sub>8</sub>) Industry—Summary: 1990 to 2004**

[In million feet (1.7 represents 1,700,000), except as indicated. See also Table 911 in Section 19, Energy and Utilities]

Item	Unit	1990	1995	1998	1999	2000	2001	2002	2003	2004
Exploration and development, surface drilling . . . . .	Mil. ft. . . . .	1.7	1.3	4.6	2.5	1.0	0.7	(D)	(D)	1.2
Expenditures . . . . .	Mil. dol. . . . .	(NA)	2.6	18.1	7.9	5.6	2.7	(D)	(D)	10.6
Number of mines operated . . . . .	Number . . . . .	39	12	15	14	10	7	6	4	6
Underground . . . . .	Number . . . . .	27	-	4	3	1	-	-	1	2
Openpit . . . . .	Number . . . . .	2	-	-	-	-	-	-	-	-
In situ leaching . . . . .	Number . . . . .	7	5	6	6	4	3	3	2	3
Other sources . . . . .	Number . . . . .	3	7	5	5	5	4	3	1	1
Mine production . . . . .	1,000 pounds . . . . .	5,876	3,528	4,782	4,548	3,123	2,647	2,405	2,200	2,452
Underground . . . . .	1,000 pounds . . . . .	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Openpit . . . . .	1,000 pounds . . . . .	1,881	-	-	-	-	-	-	-	-
In situ leaching . . . . .	1,000 pounds . . . . .	(D)	3,372	3,721	3,830	2,995	(D)	(D)	(D)	(D)
Other sources . . . . .	1,000 pounds . . . . .	3,995	156	1,062	718	128	(D)	(D)	(D)	(D)
Uranium concentrate production . . . . .	1,000 pounds . . . . .	8,886	6,043	4,705	4,611	3,958	2,639	2,344	2,000	2,282
Concentrate shipments from mills and plants . . . . .	1,000 pounds . . . . .	12,957	5,500	4,863	5,527	3,187	2,203	3,810	1,600	2,280
Employment . . . . .	Person-years . . . . .	1,335	1,107	1,120	848	627	423	426	321	420

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. NA Not available.

Source: U.S. Department of Energy, *Uranium Industry*, annual. See also <<http://www.eia.doe.gov/fuelnuclear.html>>.

**Table 873. Petroleum Industry—Summary: 1980 to 2003**

[548 represents 548,000. Includes all costs incurred for drilling and equipping wells to point of completion as productive wells or abandonment after drilling becomes unproductive. Based on sample of operators of different size drilling establishments]

Item	Unit	1980	1990	1995	1998	1999	2000	2001	2002	2003
Crude oil producing wells										
Dec. 31)	1,000	548	602	574	562	546	534	530	529	520
Daily output per well	Bbl.	15.9	12.2	11.4	11.1	10.8	10.9	10.9	10.9	11.0
Completed wells drilled, total	1,000	57.73	26.50	17.75	20.77	16.53	25.68	31.46	23.46	27.56
Crude oil	1,000	30.88	11.54	7.09	6.77	4.02	7.09	7.74	5.83	5.48
Gas	1,000	15.25	10.36	7.78	10.80	10.34	15.85	21.10	15.28	19.15
Dry	1,000	11.60	4.60	2.88	3.19	2.17	2.74	2.63	2.35	2.93
Average depth per well <sup>1</sup>	Feet	4,172	4,649	5,500	6,059	5,254	4,890	5,361	5,305	5,842
Average cost per well <sup>1</sup>	\$1,000	368	384	513	769	856	755	943	1,054	(NA)
Average cost per foot <sup>1</sup>	Dollars	77.02	76.07	87.22	128.97	152.02	142.16	181.94	195.31	(NA)
Crude oil production, total	Mil. bbl.	3,138	2,685	2,394	2,282	2,147	2,125	2,117	2,097	2,094
Value at wells	Bil. dol.	67.9	53.8	35.0	24.8	33.4	56.9	46.3	47.21	57.71
Average price per barrel	Dollars	21.59	20.03	14.62	10.87	15.56	26.72	21.84	22.51	27.56
Lower 48 states	Mil. bbl.	2,548	2,037	1,853	1,853	1,764	1,771	1,766	1,738	1,738
Alaska	Mil. bbl.	590	647	542	429	383	354	351	359	356
Onshore	Mil. bbl.	2,760	2,290	1,838	1,664	1,508	1,478	1,416	1,366	1,335
Offshore	Mil. bbl.	377	395	557	618	639	647	702	731	759
Imports: Crude oil	Mil. bbl.	1,921	2,151	2,639	3,178	3,117	3,311	3,405	3,336	3,521
Refined petroleum products	Mil. bbl.	601	775	586	731	775	872	928	872	952
Exports: Crude oil	Mil. bbl.	104.8	39.8	34.7	40.2	43.1	18.3	7.3	3.3	4.4
Proved reserves	Bil. bbl.	29.8	26.3	22.4	21.0	21.8	22.0	22.4	22.7	21.9
Operable refineries	Number	319	205	175	163	159	158	155	153	149
Capacity (Jan. 1)	Mil. bbl.	6,566	5,683	5,632	5,734	5,935	6,026	6,057	6,127	6,116
Refinery input, total	Mil. bbl.	5,119	5,325	5,555	5,893	5,878	5,948	5,979	5,955	6,032
Crude oil	Mil. bbl.	4,921	4,894	5,100	5,434	5,403	5,499	5,522	5,456	5,586
Natural gas plant liquids	Mil. bbl.	169	170	172	147	136	139	157	157	153
Other liquids	Mil. bbl.	30	260	775	311	338	310	301	343	293
Refinery output, total	Mil. bbl.	5,337	5,574	5,838	6,216	6,201	6,294	6,309	6,305	6,383
Motor gasoline	Mil. bbl.	2,370	2,540	2,723	2,881	2,896	2,902	2,928	2,987	2,992
Jet fuel	Mil. bbl.	365	543	517	557	571	586	558	553	543
Distillate fuel oil	Mil. bbl.	971	1,068	1,152	1,250	1,241	1,307	1,349	1,311	1,356
Residual fuel oil	Mil. bbl.	577	347	288	278	255	254	263	219	242
Liquefied petroleum gases	Mil. bbl.	120	182	239	246	250	257	243	245	240
Utilization rate	Percent	75.4	87.1	92.0	95.6	92.6	92.6	92.6	90.7	92.5

NA Not available. <sup>1</sup> Source: American Petroleum Institute, *Joint Association Survey on Drilling Costs*, annual.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review, Petroleum Supply Annual; U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*; and *Monthly Energy Review*.

**Table 874. U.S. Petroleum Balance: 1980 to 2003**

[In millions of barrels (6,242 represents 6,242,000,000). Minus sign (-) indicates decreased]

Item	1980	1990	1995	1998	1999	2000	2001	2002	2003
<b>Petroleum products supplied for domestic use</b>	<b>6,242</b>	<b>6,201</b>	<b>7,087</b>	<b>6,905</b>	<b>7,125</b>	<b>7,211</b>	<b>7,172</b>	<b>7,213</b>	<b>7,312</b>
Production of products	5,765	5,934	6,940	6,733	6,774	6,903	6,942	6,925	6,979
Crude input to refineries	4,934	4,894	5,718	5,434	5,403	5,514	5,522	5,456	5,586
Oil, field production	3,138	2,685	2,406	2,282	2,147	2,125	2,118	2,097	2,073
Alaska	592	647	542	429	383	354	351	359	356
Lower 48 States	2,555	2,037	1,853	1,853	1,764	1,771	1,766	1,738	1,718
Net imports	1,821	2,112	2,604	3,137	3,144	3,301	3,398	3,333	3,523
Imports (gross excluding SPR) <sup>1</sup>	1,910	2,142	2,639	3,178	3,184	3,317	3,401	3,330	3,528
SPR <sup>1</sup> imports	16	10	-	-	3	3	4	6	-
Exports	-105	40	35	40	43	18	7	3	5
Other sources	33	98	102	15	113	82	7	26	-11
Natural gas liquids (NGL), supply	577	574	708	717	757	799	801	798	756
Other liquids	253	465	514	582	614	589	619	671	637
Net imports of refined products	484	326	101	225	252	305	303	249	312
Imports	578	598	407	508	537	648	636	581	660
Exports	94	272	307	283	284	343	333	332	348
Stock withdrawal, refined products	-7	-59	46	-53	98	2	-73	39	21
<b>TYPE OF PRODUCT SUPPLIED</b>									
<b>Total products supplied</b>	<b>6,242</b>	<b>6,201</b>	<b>6,469</b>	<b>6,905</b>	<b>7,125</b>	<b>7,211</b>	<b>7,172</b>	<b>7,213</b>	<b>7,312</b>
Finished motor gasoline	2,407	2,641	2,843	3,012	3,077	3,101	3,143	3,229	3,261
Distillate fuel oil	1,049	1,103	1,170	1,263	1,304	1,362	1,404	1,378	1,433
Residual fuel oil	918	449	311	324	303	333	296	255	282
Liquefied petroleum gases <sup>2</sup>	414	568	693	713	801	816	746	789	757
Other	1,454	1,440	1,452	1,593	1,639	1,598	1,583	1,561	1,579
<b>ENDING STOCKS</b>									
<b>Ending stocks, all oils</b>	<b>1,392</b>	<b>1,621</b>	<b>1,563</b>	<b>1,647</b>	<b>1,493</b>	<b>1,468</b>	<b>1,586</b>	<b>1,548</b>	<b>1,568</b>
Crude oil and lease condensate	358	323	303	324	284	286	312	278	269
Strategic Petroleum Reserve (SPR) <sup>1</sup>	108	586	592	571	567	541	550	599	638
Other	926	712	668	752	641	641	724	671	661

- Represents zero. <sup>1</sup> SPR = Strategic petroleum reserve. For more information, see Table 914. <sup>2</sup> Includes ethane.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual*, volume 1. See also <<http://www.eia.doe.gov/pub/oilgas/petroleum/datapublications/petroleumsupplyannual/psavolume1/current/pdf/volume1all.pdf>> (released June 2004).

**Table 875. Crude Petroleum and Natural Gas—Production and Value by Major Producing States: 1990 to 2003**

[2,685 mil. bbl. represents 2,685,000,000 bbl. or 18,594 bil. cu. ft. represents 18,594,000,000,000 cu. ft.]

State	Crude petroleum						Natural gas marketed production <sup>1</sup>					
	Quantity (mil. bbl.)			Value (mil. dol.)			Quantity (bil. cu. ft.)			Value (mil. dol.)		
	1990	2000	2003	1990	2000	2003	1990	2000	2003	1990	2000	2003
<b>Total</b> <sup>2</sup>	<b>2,685</b>	<b>2,131</b>	<b>2,073</b>	<b>53,772</b>	<b>56,932</b>	<b>57,144</b>	<b>18,594</b>	<b>20,198</b>	<b>19,912</b>	<b>31,658</b>	<b>74,339</b>	<b>97,250</b>
AL	18	10	8	387	289	228	135	523	346	373	2,087	2,051
AK	658	355	356	10,086	8,439	8,503	403	459	490	554	807	1,179
AR	10	7	7	222	193	192	175	172	170	360	898	877
CA	322	271	250	5,732	6,729	6,608	363	377	337	857	1,812	1,698
CO	31	18	21	722	533	648	243	753	1,011	377	2,765	4,591
FL	6	5	3	(NA)	(NA)	(NA)	6	6	3	15	(NA)	(NA)
IL	20	12	12	467	343	340	1	(Z)	(Z)	1	(NA)	(NA)
IN	3	2	2	73	59	53	(Z)	1	1	1	3	8
KS	59	34	34	1,359	970	974	574	526	419	893	1,690	1,815
KY	5	3	3	124	92	69	75	82	88	169	258	398
LA	148	105	90	3,409	3,060	2,750	5,242	5,069	1,350	9,587	18,642	7,614
MI	20	8	7	458	222	190	140	297	237	420	724	950
MS	30	20	17	630	520	456	95	89	134	167	293	688
MT	20	15	19	429	429	554	50	70	86	90	198	321
NE	5	3	3	119	83	79	1	1	1	2	3	5
NM	66	67	66	1,472	1,935	1,952	965	1,687	1,604	1,629	5,790	7,307
NY	(Z)	(Z)	(Z)	9	(NA)	(NA)	25	18	36	55	67	209
ND	39	33	29	849	922	861	52	52	56	93	206	197
OH	8	7	6	196	181	159	155	105	94	393	426	552
OK	117	70	65	2,690	2,035	1,942	2,258	1,613	1,558	3,548	5,857	7,737
PA	2	2	2	54	43	72	178	201	160	417	(NA)	(NA)
TX	674	443	406	15,060	12,681	11,821	6,343	6,205	5,244	9,939	24,384	27,171
UT	23	16	13	524	446	378	146	269	268	249	883	1,103
WV	2	1	1	43	38	37	178	264	188	568	(NA)	(NA)
WY	103	61	52	2,169	1,633	1,396	736	1,088	1,539	856	3,640	6,362
Federal offshore	296	558	599	6,468	15,252	17,073	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Lower 48 states	2,027	1,776	1,718	(NA)	(NA)	(NA)	18,191	19,739	19,422	(NA)	(NA)	(NA)

NA Not available. Z Less than 500,000 barrels or 500 million cubic feet. <sup>1</sup> Excludes nonhydrocarbon gases. <sup>2</sup> Includes other states not shown separately. State production does not include state offshore production. U.S. level totals shown in Tables 879 and 880 may contain revisions not carried to state level.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual*, Vol. 2, and *Petroleum Marketing Annual*; and *Natural Gas Annual*, and *Natural Gas Monthly*.

**Table 876. Crude Oil, Natural Gas, and Natural Gas Liquids—Reserves by State: 1990 to 2003**

[26,254 mil. bbl. represents 26,254,000,000 bbl. As of December 31. Proved reserves are estimated quantities of the mineral, which geological and engineering data demonstrate with reasonable certainty, to be recoverable in future years from known reservoirs under existing economic and operating conditions. Based on a sample of operators of oil and gas wells]

Area	1990			2000			2003		
	Crude oil proved reserves (mil. bbl.)	Natural gas (bil. cu. ft.)	Natural gas liquids (mil. bbl.)	Crude oil proved reserves (mil. bbl.)	Natural gas (bil. cu. ft.)	Natural gas liquids (mil. bbl.)	Crude oil proved reserves (mil. bbl.)	Natural gas (bil. cu. ft.)	Natural gas liquids (mil. bbl.)
<b>United States</b> <sup>1</sup>	<b>26,254</b>	<b>169,346</b>	<b>7,586</b>	<b>22,045</b>	<b>177,427</b>	<b>8,345</b>	<b>21,891</b>	<b>189,044</b>	<b>7,459</b>
Alabama	44	4,125	170	34	4,149	150	52	4,301	60
Alaska	6,524	9,300	340	4,861	9,237	277	4,446	8,285	387
Arkansas	60	1,731	9	48	1,581	5	50	1,663	3
California	<sup>2</sup> 4,658	<sup>3</sup> 3,185	<sup>2</sup> 105	3,813	2,849	101	3,452	2,450	101
Colorado	305	4,555	169	217	10,428	316	217	15,436	395
Florida	(NA)	(NA)	(NA)	76	82	11	68	79	17
Illinois	(NA)	(NA)	(NA)	111	(NA)	(NA)	125	(NA)	(NA)
Indiana	131	(NA)	(NA)	15	(NA)	(NA)	19	(NA)	(NA)
Kansas	(NA)	(NA)	(NA)	237	5,299	306	243	4,819	248
Kentucky	321	9,614	313	24	1,760	56	25	1,889	66
Louisiana	33	1,016	25	529	9,239	436	452	9,325	295
Michigan	(NA)	(NA)	(NA)	56	2,729	35	75	3,428	48
Mississippi	(NA)	(NA)	(NA)	182	618	8	169	746	7
Montana	(NA)	(NA)	(NA)	235	885	4	315	1,059	8
Nebraska	221	899	15	18	(NA)	(NA)	16	(NA)	(NA)
New Mexico	(NA)	(NA)	(NA)	719	17,322	896	677	17,020	875
New York	687	17,260	990	(NA)	322	(NA)	(NA)	365	(NA)
North Dakota	285	586	60	270	433	54	353	448	45
Ohio	65	1,214	(NA)	59	1,185	(NA)	66	1,126	(NA)
Oklahoma	734	16,151	657	610	13,699	734	588	15,401	686
Pennsylvania	22	1,720	(NA)	15	1,741	(NA)	13	2,487	(NA)
Texas	<sup>2</sup> 7,106	<sup>3</sup> 28,192	<sup>2</sup> 2,575	5,273	42,082	2,819	4,583	45,730	2,517
Utah	249	1,510	( <sup>3</sup> )	283	4,235	( <sup>3</sup> )	221	3,516	( <sup>3</sup> )
Virginia	(NA)	138	(NA)	(NA)	1,704	(NA)	(NA)	1,717	(NA)
West Virginia	31	2,207	86	12	2,900	105	13	3,306	68
Wyoming	794	9,944	<sup>4</sup> 812	561	16,158	947	517	21,744	<sup>4</sup> 898
Federal offshore	2,805	31,433	619	3,770	26,748	1,078	5,120	22,570	725
Lower 48 States	19,730	160,046	7,246	17,184	168,190	8,068	17,445	180,759	7,072

NA Not available. <sup>1</sup> Includes miscellaneous not shown separately. <sup>2</sup> Excludes Federal offshore. <sup>3</sup> Included with Wyoming. <sup>4</sup> Includes Utah.

Source: Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 2003 Annual Report*, December 2004.



**Table 877. World Daily Crude Oil Production by Major Producing Country: 1980 to 2002**

[In thousands of barrels per day (59,600 barrels represents 59,600,000 barrels)]

Country	1980	1990	1995	1997	1998	1999	2000	2001	2002
<b>World, total</b> <sup>1</sup>	<b>59,600</b>	<b>60,566</b>	<b>62,335</b>	<b>65,690</b>	<b>66,921</b>	<b>65,848</b>	<b>68,342</b>	<b>67,942</b>	<b>66,842</b>
Algeria	1,106	1,175	1,202	1,277	1,246	1,202	1,254	1,310	1,306
Angola	150	475	646	714	735	745	746	742	896
Argentina	491	483	715	834	847	802	761	802	757
Australia	380	575	562	588	544	539	722	657	626
Brazil	182	631	695	841	969	1,132	1,269	1,295	1,455
Canada	1,435	1,553	1,805	1,922	1,981	1,907	1,977	2,029	2,171
China	2,114	2,774	2,990	3,200	3,198	3,195	3,249	3,300	3,390
Colombia	126	440	585	652	733	816	691	625	577
Egypt	595	873	920	856	834	852	748	698	631
India	182	660	703	675	661	653	646	642	665
Indonesia	1,577	1,462	1,503	1,520	1,518	1,472	1,423	1,340	1,267
Iran	1,662	3,088	3,643	3,664	3,634	3,557	3,696	3,724	3,444
Iraq	2,514	2,040	560	1,155	2,150	2,508	2,571	2,390	2,023
Kazakhstan	(X)	(X)	362	466	476	530	610	721	818
Kuwait	1,656	1,175	2,057	2,007	2,085	1,898	2,079	1,998	1,894
Libya	1,787	1,375	1,390	1,446	1,390	1,319	1,410	1,367	1,319
Malaysia	283	619	682	700	720	693	690	659	698
Mexico	1,936	2,553	2,618	3,023	3,070	2,906	3,012	3,157	3,177
Nigeria	2,055	1,810	1,993	2,132	2,153	2,130	2,165	2,256	2,118
Norway	528	1,704	2,768	3,143	3,017	3,018	3,197	3,117	2,990
Oman	282	685	851	904	900	910	970	913	897
Qatar	472	406	442	550	696	665	737	714	679
Russia	(X)	(X)	5,995	5,920	5,854	6,079	6,479	6,917	7,408
Saudi Arabia	9,900	6,410	8,231	8,362	8,389	7,833	8,404	8,031	7,634
Syria	164	388	575	561	553	538	523	518	511
United Arab Emirates	1,709	2,117	2,233	2,316	2,345	2,169	2,368	2,205	2,082
United Kingdom	1,622	1,820	2,489	2,518	2,616	2,684	2,275	2,282	2,292
<b>United States</b>	<b>8,597</b>	<b>7,355</b>	<b>6,560</b>	<b>6,452</b>	<b>6,252</b>	<b>5,881</b>	<b>5,822</b>	<b>5,801</b>	<b>5,746</b>
Venezuela	2,168	2,137	2,750	3,280	3,167	2,826	3,155	3,010	2,604
Yemen	(X)	193	345	362	388	409	440	438	443

X Not applicable. <sup>1</sup> Includes countries not shown separately.

Source: U.S. Energy Information Administration, *International Energy Annual, 2002*. See also <<http://tonto.eia.doe.gov/FTPROOT/international/021901.pdf>> (issued March 2004).

**Table 878. Liquefied Petroleum Gases—Summary: 1980 to 2004**

[In millions of 42-gallon barrels (561 barrels represents 561,000,000 barrels). Includes ethane]

Item	1980	1990	1995	1999	2000	2001	2002	2003	2004
<b>Production</b>	<b>561</b>	<b>638</b>	<b>760</b>	<b>814</b>	<b>843</b>	<b>813</b>	<b>822</b>	<b>767</b>	<b>795</b>
At natural gas plants	441	456	521	564	587	570	577	527	560
At refineries	121	182	234	250	258	243	245	240	235
Imports	79	68	53	66	79	75	67	82	95
Refinery input	85	107	105	87	87	88	90	83	84
Exports	9	14	21	18	27	16	24	20	16
Stocks, Dec. 31	116	98	93	89	83	121	106	94	104

Source: U.S. Energy Information Administration, *Petroleum Supply Annual*, volume 1.

**Table 879. Natural Gas Plant Liquids—Production and Value: 1980 to 2004**

[Barrels of 42 gallons (567 represents 567,000,000 )]

Item	Unit	1980	1990	1995	1999	2000	2001	2002	2003	2004
Field production <sup>1</sup>	Mil. bbl.	567	566	643	675	699	682	686	686	628
Pentanes plus	Mil. bbl.	126	112	122	111	112	112	109	109	100
Liquefied petroleum gases	Mil. bbl.	441	454	521	564	587	570	577	577	527
Natural gas processed	Tril. cu. ft.	15	15	17	17	17	17	16	15	(NA)

NA Not available <sup>1</sup> Includes other finished petroleum products, not shown separately.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual* and *Natural Gas Annual*.

**Table 880. Natural Gas—Supply, Consumption, Reserves, and Marketed Production: 1980 to 2003**

[182 represents 182,000]

Item	Unit	1980	1990	1995	1998	1999	2000	2001	2002	2003
Producing wells (year-end)	1,000	182	269	299	317	302	342	373	384	366
Production value at wells	Bil. dol.	32.1	31.8	30.2	38.2	43.4	74.3	82.3	58.8	97.9
Avg. per 1,000 cu. ft.	Dollars	1.59	1.71	1.55	1.96	2.19	3.68	4.00	2.95	4.88
Proved reserves <sup>1</sup>	Tril. cu. ft.	199	169	165	164	167	177	183	187	189
<b>Marketed production<sup>2</sup></b>	<b>Bil. cu. ft.</b>	<b>20,180</b>	<b>18,594</b>	<b>19,506</b>	<b>19,961</b>	<b>19,805</b>	<b>20,198</b>	<b>20,570</b>	<b>19,921</b>	<b>20,070</b>
Minus: Extraction losses	Bil. cu. ft.	777	784	908	938	973	1,016	954	957	964
Equals: Dry production	Bil. cu. ft.	19,403	17,810	18,599	19,024	18,832	19,182	19,616	18,964	19,106
Plus: Supplemental gas supplies	Bil. cu. ft.	155	123	110	102	98	90	86	68	65
Equals: Dry production with supplemental gas	Bil. cu. ft.	19,558	17,932	18,709	19,126	18,931	19,272	19,702	19,032	19,171
Plus: Withdrawals from storage	Bil. cu. ft.	1,972	1,986	3,025	2,432	2,808	3,550	2,344	3,180	3,095
Plus: Imports <sup>3</sup>	Bil. cu. ft.	985	1,532	2,841	3,152	3,586	3,782	3,977	4,015	3,928
Plus: Balancing item	Bil. cu. ft.	-640	307	996	657	-119	-306	99	18	-320
Equals: Total supply	Bil. cu. ft.	21,875	21,758	24,971	25,367	25,206	26,298	26,122	26,245	25,874
Minus: Exports	Bil. cu. ft.	49	86	154	159	163	244	373	516	692
Minus: Additions to storage <sup>5</sup>	Bil. cu. ft.	1,949	2,499	2,610	2,961	2,636	2,721	3,510	2,712	3,288
<b>Equals: Consumption, total</b>	<b>Bil. cu. ft.</b>	<b>19,877</b>	<b>19,174</b>	<b>22,207</b>	<b>22,246</b>	<b>22,405</b>	<b>23,333</b>	<b>22,239</b>	<b>23,018</b>	<b>21,894</b>
Lease and plant fuel	Bil. cu. ft.	1,026	1,236	1,220	1,173	1,079	1,151	1,119	1,114	1,123
Pipeline fuel	Bil. cu. ft.	635	660	700	635	645	642	625	667	635
Residential	Bil. cu. ft.	4,752	4,391	4,850	4,520	4,726	4,996	4,771	4,890	5,101
Commercial <sup>6</sup>	Bil. cu. ft.	2,611	2,623	3,031	2,999	3,045	3,182	3,023	3,103	3,129
Industrial	Bil. cu. ft.	7,172	7,018	8,164	8,320	8,079	8,142	7,344	7,557	6,967
Vehicle fuel	Bil. cu. ft.	(NA)	-	5	9	12	13	15	15	15
Electric utilities	Bil. cu. ft.	3,682	3,245	4,237	4,588	4,820	5,206	5,342	5,672	4,924
World production (dry)	Tril. cu. ft.	53.5	73.6	78.0	83.0	84.9	88.3	90.5	92.2	95.2
U.S. production (dry)	Tril. cu. ft.	19.4	17.8	18.6	19.0	18.8	19.2	19.6	18.9	19.0
Percent U.S. of world	Percent	36.3	24.2	23.9	22.9	22.2	21.7	21.7	20.5	20.0

- Represents zero. NA Not available. <sup>1</sup> Estimated, end of year. Source: U.S. Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, annual. <sup>2</sup> Marketed production includes gross withdrawals from reservoirs less quantities used for reservoir repressuring and quantities vented or flared. Excludes nonhydrocarbon gases subsequently removed. <sup>3</sup> Volumetric reduction in natural gas resulting from the extraction of natural gas constituents at natural gas processing plants. <sup>4</sup> Includes imports of liquefied natural gas. <sup>5</sup> Includes liquefied natural gas (LNG) storage in above ground tanks. <sup>6</sup> Includes deliveries to municipalities and public authorities for institutional heating and other purposes.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review*, *International Energy Annual*, *Natural Gas Annual*, Volume I and II, and *Monthly Energy Review*.

**Table 881. World Natural Gas Production by Major Producing Country: 1980 to 2003**

[In trillion cubic feet (53.35 represents 53,350,000,000,000)]

Country	1980	1990	1995	1998	1999	2000	2001	2002	2003
<b>World Total<sup>1</sup></b>	<b>53.35</b>	<b>73.57</b>	<b>77.96</b>	<b>83.03</b>	<b>84.93</b>	<b>88.29</b>	<b>90.45</b>	<b>92.15</b>	<b>95.18</b>
Russia	(NA)	(NA)	21.01	20.87	20.83	20.63	20.51	21.03	21.77
<b>United States</b>	<b>19.40</b>	<b>17.81</b>	<b>18.60</b>	<b>19.02</b>	<b>18.83</b>	<b>19.18</b>	<b>19.62</b>	<b>18.93</b>	<b>19.04</b>
Canada	2.76	3.85	5.60	5.98	6.27	6.47	6.60	6.63	6.45
Algeria	0.41	1.79	2.05	2.60	2.88	2.94	2.79	2.80	2.91
Iran	0.25	0.84	1.25	1.77	2.04	2.13	2.33	2.65	2.79
Indonesia	0.63	1.53	2.24	2.27	2.51	2.36	2.34	2.48	2.62
Norway	0.92	0.98	1.08	1.63	1.76	1.87	1.95	2.41	2.59
Netherlands	3.40	2.69	2.98	2.84	2.65	2.56	2.75	2.66	2.58
Saudi Arabia	0.33	1.08	1.34	1.65	1.63	1.76	1.90	2.00	2.12
Turkmenistan	(NA)	(NA)	1.14	0.47	0.79	1.64	1.70	1.89	2.08
Uzbekistan	(NA)	(NA)	1.70	1.94	1.96	1.99	2.23	2.04	2.03
Malaysia	0.06	0.65	1.02	1.37	1.42	1.50	1.66	1.71	1.89
United Arab Emirates	0.20	0.78	1.11	1.31	1.34	1.36	1.39	1.53	1.58
Mexico	0.90	0.90	0.96	1.27	1.29	1.31	1.30	1.33	1.49
Argentina	0.28	0.63	0.88	1.04	1.22	1.32	1.31	1.28	1.45
Australia	0.31	0.72	1.03	1.10	1.12	1.16	1.19	1.23	1.26
China	0.51	0.51	0.60	0.78	0.85	0.96	1.07	1.15	1.21
Qatar	0.18	0.28	0.48	0.69	0.78	1.03	0.95	1.04	1.09
Venezuela	0.52	0.78	0.89	1.11	0.95	0.96	1.12	1.05	1.05
India	0.05	0.40	0.63	0.76	0.75	0.79	0.85	0.88	0.96
Egypt	0.03	0.29	0.44	0.49	0.52	0.65	0.87	0.94	0.95
Trinidad and Tobago	0.08	0.18	0.27	0.33	0.41	0.49	0.54	0.61	0.87
Pakistan	0.29	0.48	0.65	0.71	0.78	0.86	0.77	0.81	0.84
Thailand	0.00	0.21	0.37	0.57	0.63	0.66	0.66	0.69	0.79
Germany	(NA)	(NA)	0.74	0.77	0.82	0.78	0.79	0.79	0.78
Ukraine	(NA)	(NA)	0.62	0.64	0.63	0.64	0.64	0.65	0.69
Nigeria	0.04	0.13	0.18	0.21	0.25	0.44	0.53	0.50	0.68
Oman	0.03	0.10	0.15	0.25	0.20	0.32	0.49	0.53	0.58
Kazakhstan	(NA)	(NA)	0.17	0.19	0.16	0.31	0.36	0.46	0.49
Italy	0.44	0.61	0.72	0.67	0.62	0.59	0.54	0.51	0.48
Romania	1.20	1.00	0.68	0.52	0.50	0.48	0.51	0.47	0.43
Bangladesh	0.05	0.16	0.26	0.29	0.32	0.34	0.36	0.38	0.42
Brunei	0.32	0.32	0.33	0.32	0.33	0.35	0.37	0.38	0.40
Bahrain	0.10	0.21	0.23	0.29	0.30	0.30	0.31	0.33	0.34
Kuwait	0.24	0.19	0.21	0.32	0.31	0.34	0.30	0.29	0.29

NA Not available. <sup>1</sup> Includes countries not shown separately.

Source: U. S. Energy Information Administration, *International Energy Annual*. See also <<http://www.eia.doe.gov>>.

**Table 882. Coal Supply, Disposition, and Prices: 1998 to 2003**

[In millions of short tons (1,089.9 represents 1,089,900,000)]

Item	1998	1999	2000	2001	2002	2003	2004
<b>United States, total</b> . . . . .	<b>1,117.5</b>	<b>1,100.4</b>	<b>1,073.6</b>	<b>1,127.7</b>	<b>1,094.3</b>	<b>1,071.8</b>	<b>1,111.5</b>
Consumption by sector:							
Total	1,038.3	1,045.3	1,084.1	1,060.1	1,066.4	1,094.9	1,104.3
Electric power	937.8	946.8	985.8	964.4	977.5	1,005.1	1,015.1
Electric utilities	910.9	894.1	(NA)	(NA)	(NA)	(NA)	(NA)
Other power producers	26.9	52.7	(NA)	(NA)	(NA)	(NA)	(NA)
Coke plants	28.2	28.1	28.9	26.1	23.7	24.2	23.7
Other industrial plants	67.4	65.5	65.2	65.3	60.7	61.3	61.2
Residential/commercial users	4.9	4.9	4.1	4.4	4.4	4.2	4.2
Year-end coal stocks:							
Total	164.6	183.0	140.0	181.9	192.1	165.5	147.2
Electric power	120.5	136.0	102.0	138.5	141.7	121.6	106.7
Coke plants	2.0	1.9	1.5	1.5	1.4	0.9	1.3
Other industrial plants	5.5	5.6	4.6	6.0	5.8	4.7	4.8
Producers/distributors	36.5	39.5	31.9	35.9	43.3	38.3	34.4
U.S. coal trade:							
Net exports	69.3	49.4	46.0	28.9	22.7	18.0	20.7
Exports	78.0	58.5	58.5	48.7	39.6	43.0	48.0
Steam coal	31.0	26.3	25.7	23.3	18.1	20.9	21.2
Metallurgical coal	47.1	32.1	32.8	25.4	21.5	22.1	26.8
Imports	8.7	9.1	12.5	19.8	16.9	25.0	27.3
Average delivered price (dollars per short ton):							
Electric utilities	25.64	24.72	24.28	24.68	24.74	25.72	27.28
Coke plants	46.06	45.85	44.38	46.42	50.67	50.63	61.50
Other industrial plants	32.26	31.59	31.46	32.26	35.49	34.70	39.30
Average free alongside ship (f.a.s.):							
Exports	38.89	36.50	34.90	36.97	40.44	35.98	54.11
Steam coal	30.24	29.91	29.67	31.88	34.51	26.94	42.03
Metallurgical coal	44.58	41.91	38.99	41.63	45.41	44.55	63.63
Imports	32.18	30.77	30.10	34.00	35.51	31.45	37.52

NA Not available. <sup>1</sup> Includes utility coal-fired power plants sold to nonutilities during 1998, 1999, and 2000. Coal consumption by cogenerators are included in the end-use sector.

Source: U.S. Energy Information Administration, *U.S. Coal Supply and Demand: 2003 Review*, annual. See also <http://tonto.eia.doe.gov/FTP/ROOT/coal/coalpubs.htm>.

**Table 883. Coal and Coke—Summary: 1980 to 2004**

[830 represents 830,000,000]. Includes coal consumed at mines. Recoverability varies between 40 and 90 percent for individual deposits; 50 percent or more of overall U.S. coal reserve base is believed to be recoverable]

Item	Unit	1980	1990	1995	2000	2001	2002	2003	2004
<b>COAL</b>									
<b>Coal production, total</b> <sup>1</sup> . . . . .	<b>Mil. sh. tons . . .</b>	<b>830</b>	<b>1,029</b>	<b>1,033</b>	<b>1,074</b>	<b>1,128</b>	<b>1,094</b>	<b>1,072</b>	<b>1,111</b>
Value . . . . .	<b>Bil. dol. . . . .</b>	20.45	22.39	19.45	18.02	19.60	19.68	19.27	(NA)
Anthracite production . . . . .	Mil. sh. tons . . .	6.1	3.5	4.7	4.6	1.9	1.4	1.3	(NA)
Bituminous coal and lignite . . . . .	Mil. sh. tons . . .	824	1,026	1,028	1,069	1,126	1,093	1,068	(NA)
Underground . . . . .	Mil. sh. tons . . .	337	425	396	374	381	357	353	(NA)
Surface . . . . .	Mil. sh. tons . . .	487	605	637	700	747	737	718	(NA)
Exports . . . . .	Mil. sh. tons . . .	92	106	89	58	49	40	43	48
Imports . . . . .	Mil. sh. tons . . .	1	3	9	13	20	17	25	27
Consumption <sup>2</sup> . . . . .	Mil. sh. tons . . .	703	896	941	1,081	1,060	1,066	1,095	(NA)
Electric power utilities . . . . .	Mil. sh. tons . . .	569	774	829	859	964	978	1,004	(NA)
Industrial . . . . .	Mil. sh. tons . . .	126	115	106	94	91	84	86	(NA)
Number of mines . . . . .	Number . . . . .	5,598	3,243	2,104	1,453	1,512	1,426	1,316	(NA)
Daily employment . . . . .	1,000 . . . . .	225	131	90	72	77	75	71	(NA)
Production, by state:									
Alabama . . . . .	Mil. sh. tons . . .	26	29	25	19	19	19	20	22
Illinois . . . . .	Mil. sh. tons . . .	63	60	48	33	34	33	32	32
Indiana . . . . .	Mil. sh. tons . . .	31	36	26	28	37	35	35	35
Kentucky . . . . .	Mil. sh. tons . . .	150	173	154	131	134	124	113	114
Montana . . . . .	Mil. sh. tons . . .	30	38	39	38	39	37	37	40
Ohio . . . . .	Mil. sh. tons . . .	39	35	26	22	25	21	22	23
Pennsylvania . . . . .	Mil. sh. tons . . .	93	71	62	75	74	68	64	66
Virginia . . . . .	Mil. sh. tons . . .	41	47	34	33	33	30	32	31
West Virginia . . . . .	Mil. sh. tons . . .	122	169	163	158	162	150	140	148
Wyoming . . . . .	Mil. sh. tons . . .	95	184	264	339	369	373	376	396
Other States . . . . .	Mil. sh. tons . . .	140	187	192	197	201	202	202	204
World production . . . . .	Mil. sh. tons . . .	4,200	5,386	5,079	4,929	5,227	5,252	(NA)	(NA)
Percent U.S. of world . . . . .	Percent . . . . .	19.8	19.1	20.3	21.8	21.6	20.8	(NA)	(NA)
<b>COKE</b>									
Coke production <sup>3</sup> . . . . .	Mil. sh. tons . . .	46.1	27.6	23.7	20.8	18.9	16.8	17.2	16.9
Imports . . . . .	Mil. sh. tons . . .	0.7	0.8	3.8	3.8	2.5	3.2	2.8	6.9
Exports . . . . .	Mil. sh. tons . . .	2.1	0.6	1.4	1.1	1.3	0.8	0.7	1.3
Consumption . . . . .	Mil. sh. tons . . .	41.3	27.8	25.8	23.2	20.2	19.6	19.4	22.5

NA Not available. <sup>1</sup> Includes bituminous coal, subbituminous coal, lignite, and anthracite. <sup>2</sup> Includes some categories not shown separately. <sup>3</sup> Includes beehive coke.

Source: U.S. Energy Information Administration, *Coal Industry*, annual; *Annual Energy Review*, *International Energy Annual*, and *Annual Coal Report*.

**Table 884. World Coal Production by Major Producing Country: 1980 to 2002**

[In millions of short tons (4,181.6 represents 4,181,600,000)]

Country	1980	1990	1995	1997	1998	1999	2000	2001	2002
<b>World, total</b> . . . . .	<b>4,181.6</b>	<b>5,347.5</b>	<b>5,078.6</b>	<b>5,135.9</b>	<b>5,048.2</b>	<b>4,943.0</b>	<b>4,929.2</b>	<b>5,227.1</b>	<b>5,252.5</b>
China . . . . .	683.6	1,190.4	1,537.0	1,507.1	1,429.0	1,364.9	1,314.4	1,458.7	1,521.2
<b>United States</b> . . . . .	<b>829.7</b>	<b>1,029.1</b>	<b>1,033.0</b>	<b>1,089.9</b>	<b>1,117.5</b>	<b>1,100.4</b>	<b>1,073.6</b>	<b>1,127.7</b>	<b>1,093.8</b>
India . . . . .	125.8	247.6	320.6	338.1	343.1	356.3	368.9	385.2	392.6
Australia . . . . .	116.1	225.8	266.5	291.5	316.8	320.8	338.2	362.9	377.7
South Africa . . . . .	131.9	193.2	227.3	244.3	246.9	243.0	248.4	250.3	245.3
Russia . . . . .	(X)	(X)	270.9	252.8	241.0	259.2	264.9	273.4	259.3
Germany <sup>1</sup> . . . . .	(X)	(X)	274.2	251.7	233.0	226.0	225.3	225.7	231.0
Poland . . . . .	253.5	237.1	220.2	221.5	196.2	187.6	178.3	178.9	171.8
Korea, North . . . . .	48.6	51.0	34.5	30.0	27.1	30.6	32.8	33.7	36.6
Ukraine . . . . .	(X)	(X)	94.6	84.8	85.1	88.0	89.3	92.5	92.6
Kazakhstan . . . . .	(X)	(X)	91.9	80.1	76.9	64.3	79.7	82.5	80.7
Canada . . . . .	40.4	75.3	82.7	86.7	82.8	79.9	76.2	77.6	73.2
Turkey . . . . .	20.2	52.3	60.6	66.0	74.3	73.9	69.6	72.5	58.7
Indonesia . . . . .	0.6	11.6	45.4	60.5	68.4	81.3	84.4	102.0	111.6
Czech Republic . . . . .	(X)	(X)	82.6	81.6	74.4	65.2	71.8	72.9	70.4
Greece . . . . .	25.6	57.2	63.6	64.9	67.1	68.4	70.4	73.1	75.0
Colombia . . . . .	4.5	22.6	28.4	35.9	37.2	36.1	42.0	47.9	48.3
United Kingdom . . . . .	143.8	104.1	52.5	51.8	44.1	39.9	33.7	34.7	32.6
Romania . . . . .	38.8	42.1	45.3	37.3	28.9	25.2	32.3	36.7	33.6
Bulgaria . . . . .	33.3	34.9	30.5	32.7	33.2	27.9	29.1	29.4	28.4
Spain . . . . .	31.2	39.6	31.4	29.1	28.6	26.8	25.9	25.0	24.3
Thailand . . . . .	1.6	13.7	20.3	25.8	22.0	20.1	19.6	21.6	21.8
Hungary . . . . .	28.3	19.7	16.1	17.2	16.1	16.0	15.5	15.3	14.2
Mexico . . . . .	4.0	8.6	10.3	11.5	12.4	11.4	12.5	12.8	12.1

X Not applicable. <sup>1</sup> For 1980 and 1990, represents East and West Germany combined.

Source: U.S. Energy Information Administration, *International Energy Annual, 2002*. See also <http://tonto.eia.doe.gov/FTP/ROOT/international/021901.pdf> (issued March 2004).

**Table 885. Demonstrated Coal Reserves by Major Producing State: 2002 and 2003**

[In millions of short tons (497,708 represents 497,708,000,000). As of January 1. The demonstrated reserve base represents the sum of coal in both measured and indicated resource categories of reliability. Measured resources of coal are estimates that have a high degree of geologic assurance from sample analyses and measurements from closely spaced and geological well known sample sites. Indicated resources are estimates based partly from sample and analyses and measurements and partly from reasonable geologic projections]

State	2002			2003		
	Total reserves	Method of mining		Total reserves	Method of mining	
		Under ground	Surface		Under ground	Surface
<b>United States<sup>1</sup></b> . . . . .	<b>497,708</b>	<b>336,928</b>	<b>160,780</b>	<b>496,092</b>	<b>336,199</b>	<b>159,893</b>
Alabama . . . . .	4,318	1,097	3,221	4,282	1,066	3,215
Alaska . . . . .	6,115	5,423	692	6,114	5,423	691
Colorado . . . . .	16,430	11,661	4,769	16,365	11,599	4,766
Illinois . . . . .	104,648	88,077	16,570	104,589	88,025	16,563
Indiana . . . . .	9,637	8,801	835	9,586	8,784	802
Iowa . . . . .	2,189	1,732	457	2,189	1,732	457
Kentucky . . . . .	30,614	17,484	13,130	30,422	17,346	13,076
Kentucky, Eastern . . . . .	10,977	1,491	9,486	10,824	1,387	9,437
Kentucky, Western . . . . .	19,637	15,993	3,644	19,597	15,959	3,639
Missouri . . . . .	5,991	1,479	4,512	5,991	1,479	4,512
Montana . . . . .	119,377	70,958	48,418	119,330	70,958	48,372
New Mexico . . . . .	12,249	6,199	6,051	12,212	6,187	6,025
North Dakota . . . . .	9,166	-	9,166	9,128	(NA)	9,128
Ohio . . . . .	23,419	17,631	5,788	23,382	17,606	5,777
Oklahoma . . . . .	1,562	1,233	328	1,559	1,233	327
Pennsylvania . . . . .	27,838	23,541	4,297	27,719	23,437	4,283
Anthracite . . . . .	7,204	3,845	3,359	7,203	3,845	3,358
Bituminous . . . . .	20,634	19,696	938	20,517	19,592	925
Texas . . . . .	12,559	-	12,559	12,500	(NA)	12,500
Utah . . . . .	5,534	5,267	268	5,488	5,221	268
Virginia . . . . .	1,850	1,247	603	1,794	1,204	590
Washington . . . . .	1,356	1,332	23	1,348	1,332	16
West Virginia . . . . .	33,713	29,722	3,991	33,473	29,548	3,925
Wyoming . . . . .	65,291	42,501	22,790	64,821	42,501	22,320

- Represents or rounds to zero. NA Not available. <sup>1</sup> Includes other states not shown separately.

Source: U.S. Energy Information Administration, unpublished data from the Coal Reserves Database.