

## 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, 2001*; *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 (for 1997 results, see Tables 881 and 882).

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 1997, 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.

## No. 853. Natural Resource-Related Industries—Employees, Annual Payroll, and Establishments by Industry: 1999 to 2001

[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>	1999			2000			2001			Establishment by employment size-class (1,000)				
		Number of employees <sup>2</sup> (1,000)	Annual payroll (bil. dol.)	Average payroll per employee (dol.)	Number of employees <sup>2</sup> (1,000)	Annual payroll (bil. dol.)	Average payroll per employee (dol.)	Number of employees <sup>2</sup> (1,000)	Annual payroll (bil. dol.)	Average payroll per employee (dol.)	Total	Under 20 employees	20 to 99 employees	100 to 499 employees	500 and over employees
<b>Natural resource-related industries, total</b>	(X)	<b>1,803.0</b>	<b>65.39</b>	<b>36,266</b>	<b>1,791.3</b>	<b>66.58</b>	<b>37,166</b>	<b>1,759.8</b>	<b>69.10</b>	<b>38,718</b>	<b>73,794</b>	<b>47,980</b>	<b>10,973</b>	<b>3,640</b>	<b>289</b>
Percent of all industries	(X)	1.63	1.19	112.95	1.57	1.72	109.28	1.53	1.73	(X)	1.04	0.79	1.31	2.32	1.50
Forestry, fishing, hunting and agriculture support	11	192.2	4.81	25,046	183.6	4.68	25,509	183.5	4.79	26,117	26,447	24,813	1,467	159	8
Forestry and logging	113	83.8	2.26	26,916	83.1	2.26	27,137	78.0	2.16	27,722	12,795	31,445	626	26	-
Timber tract operations	1131	3.3	0.12	37,422	3.3	0.13	39,563	3.2	0.13	38,399	441	368	29	4	-
Forest nurseries & gathering forest products	1132	1.4	0.05	35,954	1.7	0.07	39,933	2.0	0.07	34,196	256	227	28	1	-
Logging	1133	79.2	2.08	26,326	78.1	2.06	26,331	72.7	1.96	27,069	12,098	11,508	569	21	-
Fishing, hunting & trapping	114	10.0	0.33	33,302	10.0	0.34	34,287	9.9	0.34	34,249	2,636	2,551	72	12	1
Fishing	1141	7.6	0.26	34,645	7.5	0.27	35,669	7.3	0.26	35,179	2,252	2,183	59	10	-
Hunting & trapping	1142	2.4	0.07	28,998	2.5	0.08	30,173	2.6	0.08	31,625	384	368	13	2	1
Agriculture & forestry support activities	115	98.3	2.22	22,613	90.4	2.08	23,043	95.5	2.29	23,960	11,016	10,119	769	121	7
Crop production support activities	1151	67.4	1.58	23,386	57.6	1.35	23,400	59.6	1.46	24,553	5,464	4,880	491	89	4
Animal production support activities	1152	16.7	0.33	19,507	18.2	0.38	21,086	20.1	0.45	21,798	3,999	3,820	165	13	1
Forestry support activities	1153	14.1	0.32	22,603	14.7	0.35	24,067	15.2	0.37	24,587	1,553	1,419	113	19	2
Mining	21	456.6	20.98	45,935	456.1	22.09	48,432	485.6	25.01	51,516	24,319	9,823	3,628	748	95
Oil & gas extraction	211	90.0	5.38	59,742	83.0	5.39	64,967	87.9	6.21	70,673	7,691	6,862	687	130	12
Oil & gas extraction	2111	90.0	5.38	59,742	83.0	5.39	64,967	87.9	6.21	70,673	7,691	6,862	687	130	12
Mining (except oil & gas)	212	215.9	9.63	44,572	204.3	9.34	45,731	200.7	9.58	47,743	7,323	5,276	1,680	326	41
Coal mining	2121	76.4	3.70	48,413	70.7	3.54	50,125	71.9	3.78	53,327	1,266	692	392	164	18
Metal ore mining	2122	39.9	1.84	46,206	34.8	1.72	49,353	32.8	1.65	50,290	484	375	375	44	19
Nonmetallic mineral mining & quarrying	2123	99.6	4.08	40,972	98.8	4.08	41,313	97.9	4.14	42,791	5,572	4,209	4,209	115	4
Mining support activities	213	150.7	5.97	39,641	168.8	7.35	43,570	196.8	9.21	46,802	9,305	7,710	1,244	342	42
Mining support activities	2131	150.7	5.97	39,641	168.8	7.35	43,570	196.8	9.21	46,802	9,305	7,710	1,244	342	42
Timber-related manufacturing	(X)	1,154.2	39.60	34,309	1,151.6	39.80	34,562	1,090.7	39.30	35,141	23,028	13,344	5,878	2,733	186
Wood product manufacturing	321	595.2	16.37	27,509	597.7	16.51	27,626	557.5	16.82	28,393	17,289	11,483	4,481	1,311	27
Sawmills & wood preservation	3211	131.9	3.75	28,431	131.4	3.78	28,798	122.1	3.52	28,811	4,594	3,099	1,203	291	1
Veneer, plywood & engineered wood product manufacturing	3212	117.5	3.63	30,846	120.6	3.75	31,098	116.4	3.70	31,744	1,944	811	774	348	11
Other wood product manufacturing	3219	345.7	9.00	26,023	345.8	8.95	25,882	318.8	8.61	27,009	10,751	7,531	2,504	672	44
Paper manufacturing	322	559.0	23.23	41,549	553.9	23.29	42,046	533.2	22.50	42,196	5,739	1,861	1,397	1,422	159
Pulp, paper & paperboard mills	3221	185.2	9.74	52,607	177.1	9.48	53,490	170.0	9.20	54,080	606	91	166	234	115
Converted paper product manufacturing	3222	373.8	13.48	36,071	376.8	13.82	36,666	363.2	13.30	36,632	5,133	1,770	2,131	1,188	44

- Represents zero. 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: 2000*, Series CBP/00-1. See also <<http://www.census.gov/prod/2003pubs/01cbp/cbp01-1.pdf>> (issued April 2003).

## No. 854. Gross Domestic Product of Natural Resource-Related Industries in Current and Real (1996) Dollars by Industry: 1990 to 2001

[In billions of dollars (5,803.2 represents 5,803,200,000,000). Data are based on the 1987 SIC. 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 (1996) dollars			
	1990	1995	2000	2001	1990	1995	2000	2001
<b>All industries, total</b> <sup>1</sup> . . . . .	<b>5,803.2</b>	<b>7,400.5</b>	<b>9,824.6</b>	<b>10,082.2</b>	<b>6,707.9</b>	<b>7,543.8</b>	<b>9,191.4</b>	<b>9,214.5</b>
<b>Industries covered</b> . . . . .	<b>297.3</b>	<b>306.7</b>	<b>369.7</b>	<b>374.8</b>	<b>321.9</b>	<b>329.9</b>	<b>363.6</b>	<b>359.4</b>
Percent of all industries . . . . .	5.12	4.14	3.76	3.72	4.80	4.37	3.96	3.90
Agriculture, forestry, and fishing . . . . .	108.3	109.8	134.3	140.7	118.5	123.1	166.7	163.9
Farms . . . . .	79.6	73.2	77.8	80.6	84.2	85.5	120.5	114.3
Agricultural services . . . . .	28.7	36.7	56.5	60.1	34.6	37.6	47.6	49.1
Mining . . . . .	111.9	95.7	133.1	139.0	105.8	113.0	101.9	106.8
Metal mining . . . . .	5.2	6.5	5.2	5.7	4.4	5.5	8.0	9.6
Coal mining . . . . .	11.8	10.7	9.2	10.5	7.5	10.1	11.9	13.9
Oil and gas extraction . . . . .	87.1	69.3	106.5	110.3	87.5	88.6	70.5	72.9
Nonmetallic minerals, except fuels . . . . .	7.8	9.1	12.2	12.6	8.1	9.1	12.2	12.4
Timber-related manufacturing . . . . .	77.2	101.3	102.3	95.1	97.6	93.8	94.9	88.7
Lumber and wood products . . . . .	32.2	42.3	42.1	39.2	45.1	41.6	41.8	39.0
Paper and allied products . . . . .	45.0	58.9	60.2	55.9	52.5	52.2	53.1	49.7

<sup>1</sup> For additional industry detail, see Table 660.

Source: U.S. Bureau of Economic Analysis, *National Income and Product Accounts, 1929-97*; and Survey of Current Business, November 2002. See also <<http://www.bea.doc.gov/bea/ARTICLES/2002/11November/1102GDPbyIndustry.pdf>> (released 28 October 2002).

## No. 855. National Forest System Land—State and Other Area: 2002

[In thousands of acres (232,436 represents 232,436,000). As of Sept. 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>232,436</b>	<b>192,462</b>	KS . . . . .	116	108	OH . . . . .	834	234
<b>U.S.</b> . . . . .	<b>232,380</b>	<b>192,434</b>	KY . . . . .	2,212	806	OK . . . . .	772	398
AL . . . . .	1,288	666	LA . . . . .	1,025	604	OR . . . . .	17,502	15,662
AK . . . . .	24,355	21,982	ME . . . . .	93	53	PA . . . . .	743	513
AZ . . . . .	11,891	11,263	MD . . . . .	-	-	RI . . . . .	-	-
AR . . . . .	3,540	2,587	MA . . . . .	-	-	SC . . . . .	1,379	620
CA . . . . .	24,430	20,734	MI . . . . .	4,894	2,865	SD . . . . .	2,369	2,013
CO . . . . .	16,015	14,485	MN . . . . .	5,467	2,839	TN . . . . .	1,276	700
CT . . . . .	-	-	MS . . . . .	2,320	1,169	TX . . . . .	1,998	755
DE . . . . .	-	-	MO . . . . .	3,060	1,487	UT . . . . .	9,209	8,190
DC . . . . .	-	-	MT . . . . .	19,110	16,913	VT . . . . .	817	386
FL . . . . .	1,434	1,153	NE . . . . .	442	352	VA . . . . .	3,224	1,661
GA . . . . .	1,858	867	NV . . . . .	6,275	5,835	WA . . . . .	10,111	9,261
HI . . . . .	-	-	NH . . . . .	828	731	WV . . . . .	1,869	1,034
ID . . . . .	21,652	20,465	NJ . . . . .	-	-	WI . . . . .	2,023	1,525
IL . . . . .	857	293	NM . . . . .	10,455	9,417	WY . . . . .	9,703	9,238
IN . . . . .	644	200	NY . . . . .	16	16	PR . . . . .	56	28
IA . . . . .	-	-	NC . . . . .	3,168	1,248	VI . . . . .	-	-
			ND . . . . .	1,106	1,106			

- 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.

## No. 856. Timber-Based Manufacturing Industries—Employees, Payroll, and Shipments: 2001

[Based on the Annual Survey of Manufactures; for description, see Appendix III]

Selected industries	1997 NAICS code <sup>1</sup>	All employees			Value added by manufactures			
		Payroll			Production workers, total (1,000)	Total (mil. dol.)	Per production worker (dol.)	Value of shipments (mil. dol.)
		Number (1,000)	Total (mil. employee dol.)	Per employee (dol.)				
<b>Manufacturing, all industries . . . . .</b>	<b>31-33</b>	<b>15,879</b>	<b>593,051</b>	<b>37,347</b>	<b>11,235</b>	<b>1,853,929</b>	<b>165,012</b>	<b>3,970,500</b>
<b>Timber-based manufacturing, total . . . . .</b>	<b>321-322</b>	<b>1,086</b>	<b>37,619</b>	<b>34,636</b>	<b>867</b>	<b>106,166</b>	<b>122,495</b>	<b>243,096</b>
Percent of total manufacturing . . . . .	(X)	6.84	6.34	(X)	7.71	5.73	(X)	6.12
Wood product manufacturing . . . . .	321	556	15,431	27,759	459	33,130	72,191	87,250
Sawmills & wood preservation . . . . .	3211	124	3,481	27,978	106	7,484	70,853	25,924
Sawmills . . . . .	321113	114	3,169	27,899	97	6,781	69,814	21,694
Wood preservation . . . . .	321114	11	313	28,805	9	704	82,724	4,231
Veneer, plywood, & engineered wood product . . . . .	3212	115	3,515	30,463	95	7,586	79,638	19,636
Other wood product . . . . .	3219	316	8,435	26,685	258	18,060	69,990	41,689
Millwork . . . . .	32191	146	4,167	28,559	119	9,166	76,752	22,149
Wood container & pallet . . . . .	32192	49	1,097	22,324	41	2,169	52,756	4,687
All other wood product . . . . .	32199	121	3,171	26,197	97	6,724	68,974	14,854
Paper . . . . .	322	530	22,188	41,845	408	73,036	179,108	155,846
Pulp, paper, & paperboard mills . . . . .	3221	171	9,179	53,783	134	37,279	277,782	71,987
Pulp mills . . . . .	32211	7	414	57,419	6	1,413	253,647	3,239
Paper mills . . . . .	32212	115	6,163	53,745	91	24,837	273,804	46,853
Paperboard mills . . . . .	32213	49	2,601	53,335	38	11,029	290,842	21,896
Converted paper product . . . . .	3222	360	13,010	36,180	274	35,757	130,703	83,859
Paperboard container . . . . .	32221	205	7,483	36,502	157	17,534	111,575	45,817
Paper bag & coated & treated paper . . . . .	32222	71	2,665	37,741	51	8,443	164,924	18,390
Stationery product . . . . .	32223	45	1,452	32,175	35	3,485	100,021	8,075
Other converted paper product . . . . .	32229	39	1,410	36,296	30	6,295	207,137	11,576

X Not applicable. <sup>1</sup> North American Industry Classification System, 1997; see text, Section 15.

Source: U.S. Census Bureau, Annual Survey of Manufactures, 2001, Series M01(AS)-1. See also <<http://www.census.gov/prod/2003pubs/m01-as1.pdf>> (issued January 2003).

## No. 857. Timber Products—Production, Foreign Trade, and Consumption by Type of Product: 1990 to 2002

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

Type of product	1990	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>Industrial roundwood:</b>											
Domestic production <sup>1</sup> . . . . .	15,577	15,011	15,306	15,537	15,413	15,703	15,620	15,632	15,436	14,634	14,902
Softwoods . . . . .	10,968	10,090	10,268	10,191	10,153	10,180	10,097	10,381	10,201	9,859	10,124
Hardwoods . . . . .	4,609	4,921	5,038	5,347	5,260	5,523	5,523	5,251	5,235	4,775	4,778
Imports . . . . .	3,091	3,465	3,632	3,907	3,885	4,008	4,157	4,370	4,529	4,605	4,505
Exports . . . . .	2,307	2,143	2,139	2,282	2,264	2,290	1,951	1,964	1,996	1,759	1,769
Consumption <sup>2</sup> . . . . .	16,361	16,334	16,800	17,161	17,034	17,421	17,827	18,038	17,969	17,481	17,637
Softwoods . . . . .	11,779	11,539	11,906	11,961	11,996	12,072	12,339	12,754	12,659	12,552	12,790
Hardwoods . . . . .	4,582	4,795	4,894	5,200	5,038	5,349	5,488	5,284	5,310	4,929	4,847
<b>Lumber:</b>											
Domestic production . . . . .	7,317	6,887	7,052	6,815	6,886	7,103	7,093	7,379	7,199	6,820	7,060
Imports . . . . .	1,909	2,240	2,395	2,522	2,616	2,619	2,721	2,807	2,845	2,903	3,036
Exports . . . . .	589	532	512	460	449	452	350	404	428	354	353
Consumption . . . . .	8,637	8,595	8,935	8,877	9,053	9,270	9,463	9,782	9,616	9,369	9,744
<b>Plywood and veneer:</b>											
Domestic production . . . . .	1,423	1,293	1,320	1,303	1,281	1,213	1,201	1,208	1,187	1,067	1,074
Imports . . . . .	97	100	94	107	97	114	131	160	155	173	205
Exports . . . . .	109	100	86	89	87	103	55	45	42	32	31
Consumption . . . . .	1,410	1,293	1,328	1,321	1,291	1,224	1,277	1,323	1,300	1,208	1,249
<b>Pulp products:</b>											
Domestic production . . . . .	5,313	5,423	5,576	6,079	5,908	6,097	6,114	5,813	5,881	5,691	5,708
Imports . . . . .	1,038	1,065	1,102	1,248	1,144	1,249	1,269	1,355	1,459	1,458	1,180
Exports . . . . .	646	724	758	905	891	929	818	768	842	801	810
Consumption . . . . .	5,704	5,764	5,920	6,422	6,161	6,417	6,565	6,400	6,498	6,348	6,078
<b>Logs:</b>											
Imports . . . . .	4	15	18	13	18	20	30	47	68	70	81
Exports . . . . .	674	460	429	451	422	384	316	326	331	307	309
Pulpwood chips, exports . . . . .	288	326	354	377	416	422	412	422	353	265	265
<b>Fuelwood consumption . . . . .</b>	<b>3,019</b>	<b>3,084</b>	<b>3,134</b>	<b>2,937</b>	<b>2,739</b>	<b>2,542</b>	<b>2,523</b>	<b>2,542</b>	<b>2,561</b>	<b>2,571</b>	<b>2,581</b>

<sup>1</sup> Includes log exports. <sup>2</sup> Includes log imports.

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/fplrp/fplrp595.pdf>>.

## No. 858. Selected Timber Products—Imports and Exports: 1990 to 2002

Product	Unit	1990	1995	1996	1997	1998	1999	2000	2001	2002
<b>IMPORTS</b> <sup>1</sup>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	13,063	17,524	18,363	18,237	19,012	19,576	19,906	20,443	21,434
From Canada	Percent	91.3	97.1	97.2	96.3	96.0	93.0	92.0	93.0	90.4
Logs, total	Mil. bd. ft. <sup>3</sup>	23	80	115	128	185	294	435	452	525
From Canada	Percent	84	70	82	83	91	95	96	97	97
Paper and board <sup>4</sup>	1,000 tons	12,195	14,292	13,023	14,525	14,538	16,917	17,555	18,513	19,433
Woodpulp	1,000 tons	4,893	5,969	5,692	6,398	5,984	6,660	7,227	7,348	7,247
Plywood	Mil. sq. ft. <sup>5</sup>	1,687	1,951	1,780	2,111	2,429	2,987	2,917	3,246	3,868
<b>EXPORTS</b>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	4,614	2,958	2,898	2,933	2,189	2,549	2,700	2,190	2,186
To: Canada	Percent	14	22	23	24	26	26	26	26	27
Japan	Percent	28	33	33	27	16	14	12	10	7
Europe	Percent	15	17	17	20	26	21	19	18	16
Logs, total	Mil. bd. ft. <sup>3</sup>	4,213	2,820	2,636	2,398	1,978	2,038	2,068	1,918	1,934
To: Canada	Percent	9	25	20	30	39	39	41	46	50
Japan	Percent	62	61	69	56	51	49	45	39	34
China: Mainland	Percent	9	1	1	1	1	-	-	1	2
Paper and board <sup>4</sup>	1,000 tons	5,163	7,621	9,118	10,368	9,103	9,477	10,003	11,504	11,564
Woodpulp	1,000 tons	5,905	8,261	7,170	6,990	6,025	5,936	6,409	6,167	6,254
Plywood	Mil. sq. ft. <sup>5</sup>	1,766	1,517	1,499	1,802	970	797	754	580	563

- 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 hardwood. <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/flpr/flpr595.pdf>>.

## No. 859. Lumber Consumption by Species Group and End Use: 1995 to 2002

[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	1999	2000	2001	2002	End-use	1995	1999	2000	2001	2002
<b>Total</b>	<b>59.3</b>	<b>68.3</b>	<b>66.1</b>	<b>64.6</b>	<b>67.5</b>	New housing	<b>15.9</b>	<b>22.1</b>	<b>20.6</b>	<b>20.1</b>	<b>20.0</b>
Per capita	225	240	234	227	235	Residential upkeep and improvements	12.4	15.1	16.4	17.0	17.3
Species group:						New nonresidential construction	5.5	5.5	5.6	5.6	5.5
Softwoods	47.6	54.5	54.0	53.7	56.4	Manufacturing	5.5	(NA)	(NA)	(NA)	(NA)
Hardwoods	11.7	13.8	12.2	11.0	11.1	Shipping	7.4	8.2	8.1	8.2	8.0
						Other <sup>2</sup>	6.2	7.3	7.3	7.4	7.5

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/flpr/flpr595.pdf>>.

## No. 860. Selected Timber Products—Producer Price Indexes: 1990 to 2002

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

Product	1990	1995	1996	1997	1998	1999	2000	2001	2002
<b>INDEX</b>									
<b>Lumber and wood products</b>	129.7	178.1	176.1	183.8	179.1	183.6	178.2	174.4	173.3
Lumber	124.6	173.4	179.8	194.5	179.5	188.2	178.8	171.6	170.6
Softwood lumber	123.8	178.5	189.5	206.5	182.7	196.0	178.6	170.1	170.8
Hardwood lumber	131.0	167.0	163.9	174.1	178.7	177.3	185.9	181.3	178.3
Millwork	130.4	163.8	166.6	170.9	171.1	174.7	176.4	179.2	179.8
General millwork	132.0	165.4	167.9	171.1	172.4	175.6	178.0	181.8	183.3
Prefabricated structural members	122.3	163.5	167.5	177.8	170.1	178.1	175.1	173.5	168.5
Plywood	114.2	165.3	156.4	159.3	157.3	176.4	157.6	154.3	151.7
Softwood plywood	119.6	188.1	173.7	175.5	174.9	207.0	173.3	167.8	164.1
Hardwood plywood and related products	102.7	122.2	124.9	127.1	126.9	128.6	130.2	130.4	131.5
Other wood products	114.7	143.7	127.5	128.4	135.2	131.1	130.5	130.5	127.2
Boxes	119.1	145.0	147.1	149.2	150.7	152.3	155.2	154.5	154.3
Pulp, paper, and allied products	141.2	172.2	168.7	167.9	171.7	174.1	183.7	184.8	185.9
Pulp, paper, and prod, ex bldg paper	132.9	163.4	149.7	144.7	147.0	147.9	161.4	157.7	155.3
Woodpulp	151.3	183.2	133.1	128.6	122.6	119.7	145.3	125.8	116.2
Wastepaper	138.9	371.1	141.6	163.3	145.4	183.6	282.5	148.6	173.1
Paper	128.8	159.0	149.4	143.9	145.4	141.8	149.8	150.6	144.7
Writing and printing papers	129.1	158.4	144.6	140.0	139.9	137.8	146.6	146.4	143.8
Newsprint	119.6	161.8	159.5	133.9	143.4	(NA)	127.5	138.6	105.7
Paperboard	135.7	183.1	155.1	144.4	151.6	153.2	176.7	172.1	164.3
Converted paper and paperboard products	135.2	157.0	153.4	148.4	152.2	153.5	162.7	164.5	163.8
Office supplies and accessories	121.4	134.9	132.9	131.0	131.2	129.5	133.8	136.9	135.7
Building paper & building board mill prods	112.2	144.9	137.2	129.6	132.9	141.6	138.8	129.3	129.3

NA Not available.

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

## No. 861. Selected Species—Stumpage Prices In Current and Constant (1996) Dollars: 1990 to 2002

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

Species	1990	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>CURRENT DOLLARS</b>											
<b>Softwoods:</b>											
Douglas fir <sup>1</sup> . . . . .	466	318	652	454	436	331	254	315	433	258	185
Southern pine <sup>2</sup> . . . . .	127	217	266	248	241	307	288	269	258	168	166
Sugar pine <sup>3</sup> . . . . .	285	598	625	397	318	234	200	229	187	192	209
Ponderosa pine <sup>3 4</sup> . . . . .	218	535	291	150	274	270	205	181	155	143	118
Western hemlock <sup>5</sup> . . . . .	203	364	335	297	248	211	161	96	46	34	73
<b>Hardwoods:</b>											
All eastern hardwoods <sup>6</sup> . . . . .	146	264	352	309	259	287	241	195	341	264	384
Oak, white, red, and black <sup>6</sup> . . . . .	188	195	317	297	237	265	270	317	258	153	207
Maple, sugar . . . . .	135	220	313	286	238	357	395	448	314	271	485
<b>CONSTANT (1996) DOLLARS <sup>8</sup></b>											
<b>Softwoods:</b>											
Douglas fir <sup>1</sup> . . . . .	428	292	598	417	436	304	233	289	397	237	170
Southern pine <sup>2</sup> . . . . .	117	199	244	228	241	282	264	247	237	154	153
Sugar pine <sup>3</sup> . . . . .	262	549	574	364	318	215	183	210	172	176	191
Ponderosa pine <sup>3 4</sup> . . . . .	200	491	267	138	274	248	188	166	142	131	108
Western hemlock <sup>5</sup> . . . . .	186	334	307	272	248	194	148	88	42	31	67
<b>Hardwoods:</b>											
All eastern hardwoods <sup>6</sup> . . . . .	134	242	323	283	259	263	221	179	313	242	353
Oak, white, red, and black <sup>6</sup> . . . . .	172	179	291	272	237	243	248	291	237	140	190
Maple, sugar . . . . .	124	202	287	262	238	328	362	411	288	249	445

<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.

## No. 862. Paper and Paperboard—Production and New Supply: 1990 to 2001

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

Item	1990	1994	1995	1996	1997	1998	1999	2000	2001, prel.
<b>Production, total . . . . .</b>	<b>80.45</b>	<b>90.90</b>	<b>91.33</b>	<b>92.25</b>	<b>96.92</b>	<b>96.40</b>	<b>98.84</b>	<b>96.31</b>	<b>90.73</b>
Paper, total . . . . .	39.36	43.36	42.87	42.48	44.70	44.76	45.98	45.52	42.10
Paperboard, total . . . . .	39.32	45.72	46.64	47.95	50.40	49.83	51.04	48.97	46.81
Unbleached kraft . . . . .	20.36	22.47	22.70	22.23	23.22	23.20	23.11	21.80	20.44
Semichemical . . . . .	5.64	5.94	5.66	5.62	6.05	5.89	6.01	5.95	5.58
Bleached kraft . . . . .	4.40	5.03	5.30	5.24	5.55	5.49	5.71	5.44	5.30
Recycled . . . . .	8.92	12.28	12.98	14.87	15.58	15.25	16.21	15.79	15.50
Wet machine board E . . . . .	0.15	0.15	0.15	0.10	0.10	0.10	0.10	0.10	0.10
Building paper E . . . . .	0.81	0.81	0.81	0.79	0.79	0.79	0.79	0.79	0.79
Insulating board E . . . . .	0.86	0.86	0.86	0.93	0.93	0.93	0.93	0.93	0.93
<b>New supply, all grades, excluding products . . . . .</b>	<b>87.68</b>	<b>97.45</b>	<b>98.16</b>	<b>98.34</b>	<b>101.27</b>	<b>103.01</b>	<b>107.08</b>	<b>105.38</b>	<b>99.51</b>
Paper, total . . . . .	49.49	53.08	52.77	50.69	54.15	55.13	57.30	57.22	53.27
Newsprint . . . . .	13.41	12.89	12.76	11.77	12.61	12.80	13.09	13.01	11.51
Printing/writing papers . . . . .	25.46	29.44	29.55	28.30	30.75	31.38	32.53	32.99	30.39
Packaging and ind. conv. papers . . . . .	4.72	4.64	4.24	4.33	4.27	4.29	4.71	4.27	4.31
Tissue . . . . .	5.90	6.11	6.22	6.29	6.52	6.66	6.98	6.95	7.07
Paperboard, total . . . . .	36.30	42.44	43.45	43.67	45.13	45.67	47.59	46.02	44.09
Construction and other . . . . .	1.90	1.94	1.95	1.99	1.99	2.20	2.19	2.14	2.15

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

## No. 863. Fishery Products—Domestic Catch, Imports, and Disposition: 1990 to 2001

[Live weight, in millions of pounds (16,349 represents 16,349,000,000). For data on commercial catch for selected countries, see Table 1354, Section 30]

Item	1990	1994	1995	1996	1997	1998	1999	2000	2001
<b>Total</b> . . . . .	<b>16,349</b>	<b>19,309</b>	<b>16,484</b>	<b>16,474</b>	<b>17,131</b>	<b>16,897</b>	<b>17,378</b>	<b>17,338</b>	<b>18,118</b>
For human food . . . . .	12,662	13,714	13,584	13,625	13,739	14,175	14,462	14,738	15,306
For industrial use . . . . .	3,687	5,595	2,900	2,848	3,392	2,722	2,916	2,599	2,812
<b>Domestic catch</b> . . . . .	<b>9,404</b>	<b>10,461</b>	<b>9,788</b>	<b>9,565</b>	<b>9,845</b>	<b>9,194</b>	<b>9,339</b>	<b>9,068</b>	<b>9,492</b>
For human food . . . . .	7,041	7,936	7,667	7,476	7,248	7,174	6,832	6,912	7,314
For industrial use . . . . .	2,363	2,525	2,121	2,090	2,597	2,020	2,507	2,157	2,178
<b>Imports</b> <sup>1</sup> . . . . .	<b>6,945</b>	<b>8,848</b>	<b>6,696</b>	<b>6,909</b>	<b>7,286</b>	<b>7,703</b>	<b>8,039</b>	<b>8,269</b>	<b>8,626</b>
For human food . . . . .	5,621	5,778	5,917	6,150	6,491	7,001	7,630	7,827	7,992
For industrial use . . . . .	1,324	3,070	779	759	795	702	409	442	634
<b>Disposition of domestic catch</b> . . . . .	<b>9,404</b>	<b>10,461</b>	<b>9,788</b>	<b>9,565</b>	<b>9,846</b>	<b>9,194</b>	<b>9,339</b>	<b>9,069</b>	<b>9,495</b>
Fresh and frozen . . . . .	6,501	7,475	7,099	7,054	6,877	6,870	6,416	6,657	7,085
Canned . . . . .	751	622	769	678	648	516	712	530	536
Cured . . . . .	126	95	90	93	108	129	133	119	123
Reduced to meal, oil, etc. . . . .	2,026	2,269	1,830	1,740	2,213	1,679	2,078	1,763	1,748

<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.

## No. 864. Fisheries—Quantity and Value of Domestic Catch: 1980 to 2001

Year	Quantity (mil. lb. <sup>1</sup> )				Average price per lb. (cents)	Year	Quantity (mil. lb. <sup>1</sup> )				Average price per lb. (cents)
	Total	For human food	For industrial products <sup>2</sup>	Value (mil. dol.)			Total	For human food	For industrial products <sup>2</sup>	Value (mil. dol.)	
1980 . . . . .	6,482	3,654	2,828	2,237	34.5	1991 . . . . .	9,484	7,031	2,453	3,308	34.9
1981 . . . . .	5,977	3,547	2,430	2,388	40.0	1992 . . . . .	9,637	7,618	2,019	3,678	38.2
1982 . . . . .	6,367	3,285	3,082	2,390	37.5	1993 . . . . .	10,467	8,214	2,253	3,471	33.2
1983 . . . . .	6,439	3,238	3,201	2,355	36.6	1994 . . . . .	10,461	7,936	2,525	3,807	36.8
1984 . . . . .	6,438	3,320	3,118	2,350	36.5	1995 . . . . .	9,788	7,667	2,121	3,770	38.5
1985 . . . . .	6,258	3,294	2,964	2,326	37.2	1996 . . . . .	9,565	7,474	2,091	3,487	36.5
1986 . . . . .	6,031	3,393	2,638	2,763	45.8	1997 . . . . .	9,842	7,244	2,598	3,448	35.0
1987 . . . . .	6,896	3,946	2,950	3,115	45.2	1998 . . . . .	9,194	7,173	2,021	3,128	34.0
1988 . . . . .	7,192	4,588	2,604	3,520	48.9	1999 . . . . .	9,339	6,832	2,507	3,467	37.1
1989 . . . . .	8,463	6,204	2,259	3,238	38.3	2000 . . . . .	9,069	6,912	2,157	3,549	39.1
1990 . . . . .	9,404	7,041	2,363	3,522	37.5	2001 . . . . .	9,492	7,314	2,178	3,228	34.0

<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.

## No. 865. Domestic Fish and Shellfish Catch and Value by Major Species Caught: 1990 to 2001

Species	Quantity (1,000 lb.)				Value (\$1,000)			
	1990	1995	2000	2001	1990	1995	2000	2001
<b>Total</b> . . . . .	<b>9,403,571</b>	<b>9,787,554</b>	<b>9,068,985</b>	<b>9,494,863</b>	<b>3,521,995</b>	<b>3,735,615</b>	<b>3,549,481</b>	<b>3,228,285</b>
<b>Fish, total</b> <sup>1</sup> . . . . .	<b>8,091,068</b>	<b>8,520,086</b>	<b>7,689,661</b>	<b>8,242,490</b>	<b>1,900,097</b>	<b>1,915,642</b>	<b>1,594,815</b>	<b>1,479,988</b>
Cod: Atlantic . . . . .	95,881	29,631	25,060	33,211	61,329	28,184	26,384	32,086
Pacific . . . . .	526,396	591,399	530,505	471,711	91,384	109,680	142,330	118,071
Flounder . . . . .	254,519	423,443	412,723	352,363	112,921	150,239	109,910	105,240
Halibut . . . . .	70,454	44,796	75,190	77,978	96,700	66,781	143,826	115,169
Herring, sea: Atlantic . . . . .	113,095	147,181	160,269	209,191	5,746	8,654	9,972	12,717
Herring, sea: Pacific . . . . .	108,120	117,479	74,835	91,297	32,178	49,245	12,043	13,213
Menhaden . . . . .	1,962,160	1,846,959	1,760,498	1,741,430	93,896	99,131	112,403	102,690
Pollock, Alaska . . . . .	3,108,031	2,852,618	2,606,802	3,179,407	268,344	259,614	160,525	230,723
Salmon . . . . .	733,146	1,020,765	628,638	722,832	612,367	486,107	270,213	208,926
Tuna . . . . .	62,393	63,864	50,779	51,854	105,040	102,638	95,176	93,497
Whiting (Atlantic, silver) . . . . .	44,500	33,548	26,855	28,479	11,281	14,632	11,370	13,232
Whiting (Pacific, hake) . . . . .	21,232	390,302	452,718	379,304	1,229	18,002	18,809	16,147
<b>Shellfish, total</b> <sup>1</sup> . . . . .	<b>1,312,503</b>	<b>1,267,468</b>	<b>1,379,324</b>	<b>1,249,373</b>	<b>1,621,898</b>	<b>1,819,973</b>	<b>1,954,666</b>	<b>1,748,297</b>
Clams . . . . .	139,198	134,224	118,482	122,764	130,194	140,414	153,973	161,992
Crabs . . . . .	499,416	363,639	299,006	272,246	483,837	511,987	405,006	381,667
Lobsters: American . . . . .	61,017	66,406	83,180	73,637	154,677	214,838	301,300	254,334
Oysters . . . . .	29,193	40,380	41,146	32,673	93,718	101,574	90,667	80,946
Shrimp . . . . .	39,917	18,316	32,747	46,958	153,966	92,826	164,609	175,349
Squid . . . . .	346,494	306,869	332,486	324,481	491,433	570,034	690,453	568,547
Squid, Pacific . . . . .	36,082	155,280	259,508	191,532	2,636	22,660	27,077	17,834

<sup>1</sup> Includes other types of fish and shellfish, not shown separately. Source of Tables 863-865: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <<http://www.st.nmfs.gov/st1/fus/fus01/2001-fus.pdf>> (released September 2002).



## No. 866. U.S. Private Aquaculture—Trout and Catfish Production and Value: 1990 to 2002

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

Item	Unit	1990	1995	1997	1998	1999	2000	2001	2002
<b>TROUT FOODSIZE</b>									
Number sold . . . . .	Millions . . . . .	67.8	60.2	59.3	57.6	61.0	58.5	54.5	50.2
Total weight . . . . .	Mil. lb . . . . .	56.8	55.6	56.9	57.9	60.2	59.2	56.9	54.5
Total value of sales . . . . .	Mil. dol. . . . .	64.6	60.8	60.7	60.3	64.7	63.7	64.4	58.3
Average price received . . . . .	Dol./lb . . . . .	1.14	1.09	1.07	1.04	1.07	1.08	1.13	1.07
Percent sold to processors . . . . .	Percent . . . . .	58	68	63	62	68	70	68	68
<b>CATFISH FOODSIZE</b>									
Number sold . . . . .	Millions . . . . .	272.9	321.8	391.8	409.8	424.5	420.1	406.9	405.8
Total weight . . . . .	Mil. lb . . . . .	392.4	481.5	569.6	601.4	635.2	633.8	647.5	673.7
Total value of sales . . . . .	Mil. dol. . . . .	305.1	378.1	406.8	445.4	464.7	468.8	410.7	378.5
Average price received . . . . .	Dol./lb . . . . .	0.78	0.79	0.71	0.74	0.73	0.74	0.63	0.56
Fish sold to processors . . . . .	Mil. lb . . . . .	360.4	446.9	524.9	564.4	596.6	593.6	597.1	630.6
Avg. price paid by processors . . . . .	Cents/lb . . . . .	75.8	78.6	71.2	74.3	73.7	75.1	64.7	56.8
Processor sales . . . . .	Mil. lb . . . . .	183.1	227.0	261.8	281.4	292.7	297.2	296.4	317.6
Avg. price received by processors . . . . .	Cents/lb . . . . .	224.1	240.3	226.0	229.0	234.0	236.0	226.0	207.0
Inventory (Jan. 1) . . . . .	Mil. lb . . . . .	9.4	10.9	11.9	10.8	12.6	13.6	15.0	12.3

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

## No. 867. Supply of Selected Fishery Items: 1990 to 2001

[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	1994	1995	1996	1997	1998	1999	2000	2001
Shrimp . . . . .	Heads-off weight . . . . .	734	847	832	842	923	1,002	1,084	1,172	1,312
Tuna, canned . . . . .	Canned weight . . . . .	856	850	875	859	829	912	1,020	980	796
Snow crab . . . . .	Round weight . . . . .	37	40	42	46	110	254	216	122	170
Clams . . . . .	Meat weight . . . . .	152	144	144	134	124	119	125	133	139
Salmon, canned . . . . .	Canned weight . . . . .	148	117	147	104	82	83	123	95	108
American lobster . . . . .	Round weight . . . . .	95	101	94	97	112	110	122	124	125
Spiny lobster . . . . .	Round weight . . . . .	89	76	89	81	76	100	91	99	79
Scallops . . . . .	Meat weight . . . . .	74	76	62	71	66	58	64	78	76
Sardines, canned . . . . .	Canned weight . . . . .	61	48	44	46	49	50	57	(NA)	(NA)
Oysters . . . . .	Meat weight . . . . .	56	50	63	58	58	61	55	71	58
King crab . . . . .	Round weight . . . . .	19	12	21	30	45	62	52	41	38
Crab meat, canned . . . . .	Canned weight . . . . .	9	9	12	13	15	22	26	29	35

NA Not available.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual.

## No. 868. Canned, Fresh, and Frozen Fishery Products—Production and Value: 1990 to 2001

[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	1999	2000	2001	1990	1995	1999	2000	2001
<b>Canned, total <sup>1</sup></b> . . . . .	<b>1,178</b>	<b>1,927</b>	<b>1,897</b>	<b>1,747</b>	<b>1,664</b>	<b>1,562</b>	<b>1,887</b>	<b>1,861</b>	<b>1,626</b>	<b>1,402</b>
Tuna . . . . .	581	667	664	671	507	902	939	946	856	658
Salmon . . . . .	196	244	234	171	212	366	419	393	288	259
Clam products . . . . .	110	129	123	127	126	76	110	110	120	125
Sardines, Maine . . . . .	13	14	12	(Z)	(Z)	17	24	20	(Z)	(Z)
Shrimp . . . . .	1	1	2	2	2	3	7	10	11	10
Crabs . . . . .	1	(Z)	(Z)	(Z)	(Z)	4	(Z)	(Z)	(Z)	(Z)
Oysters . . . . .	1	(Z)	(Z)	(Z)	1	1	(Z)	(Z)	1	1
<b>Fish fillets and steaks <sup>3</sup></b> . . . . .	<b>441</b>	<b>385</b>	<b>362</b>	<b>368</b>	<b>476</b>	<b>843</b>	<b>841</b>	<b>807</b>	<b>823</b>	<b>915</b>
Cod . . . . .	65	65	61	56	40	132	152	108	167	123
Flounder . . . . .	54	35	23	27	31	154	86	67	71	76
Haddock . . . . .	7	3	5	6	6	24	11	20	24	27
Ocean perch, Atlantic . . . . .	1	(Z)	1	(Z)	(Z)	1	1	2	1	1
Rockfish . . . . .	33	25	11	11	9	53	38	23	25	21
Pollock, Atlantic . . . . .	12	4	2	2	2	21	10	4	4	8
Pollock, Alaska . . . . .	164	135	144	160	271	174	184	169	178	296
Other . . . . .	105	118	115	106	117	284	359	414	353	363

Z 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/st1/fus/fus01/2001-fus.pdf>> (released September 2002).

## No. 869. Mining and Primary Metal Production Indexes: 1990 to 2002

[Index 1997=100]

Industry group	1990	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>Mining</b>	<b>98.7</b>	<b>96.6</b>	<b>96.4</b>	<b>98.1</b>	<b>100.0</b>	<b>98.2</b>	<b>94.0</b>	<b>96.0</b>	<b>96.6</b>	<b>93.8</b>
Coal	96.4	95.0	94.6	96.9	100.0	101.2	99.4	98.2	100.7	96.3
Oil and gas extraction	102.9	100.8	99.8	99.9	100.0	98.3	96.3	96.5	97.6	97.3
Crude oil and natural gas	104.4	101.4	100.1	99.9	100.0	98.5	96.1	95.9	97.3	97.0
Oil and gas drilling	92.9	83.5	81.3	87.2	100.0	98.3	82.0	110.3	125.0	91.0
Metal mining	84.8	91.9	92.8	94.9	100.0	99.2	90.7	90.3	82.0	74.0
Iron ore	89.2	91.9	98.9	98.1	100.0	99.3	91.3	99.2	72.7	81.8
Nonferrous ores	91.9	100.0	100.4	103.4	100.0	107.5	99.4	94.5	89.3	(NA)
Copper ore	89.4	104.7	104.7	108.7	100.0	105.4	90.7	81.4	76.9	(NA)
<b>Primary metals, manufacturing</b>	<b>85.5</b>	<b>92.6</b>	<b>93.7</b>	<b>95.9</b>	<b>100.0</b>	<b>102.3</b>	<b>101.7</b>	<b>98.8</b>	<b>88.2</b>	<b>85.6</b>
Nonferrous metals	89.4	98.8	98.7	100.8	100.0	109.1	101.4	88.2	90.0	77.3
Copper	60.6	102.6	112.0	95.1	100.0	122.6	107.8	46.7	63.4	50.5
Aluminum	97.6	97.6	93.4	94.9	100.0	104.5	105.0	99.4	86.0	87.3
Iron and steel	85.3	93.3	94.8	97.1	100.0	100.4	100.0	100.3	86.7	88.7

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.

## No. 870. Mineral Industries—Employment, Hours, and Earnings: 1990 to 2002

[Based on the Current Employment Statistics Program, see Appendix III]

Industry and item	Unit	1990	2000	2002	Industry and item	Unit	1990	2000	2002
All mining:					Avg. weekly hours	Number	44.4	41.3	39.5
All employees	1,000	765	599	581	Avg. weekly earnings	Dollars	591	802	761
Production workers	1,000	538	446	435	Metal mining:				
Avg. weekly hours	Number	45.0	44.4	43.2	All employees	1,000	53	38	29
Avg. weekly earnings	Dollars	603	735	743	Production workers	1,000	42	29	22
Coal mining:					Avg. weekly hours	Number	43	43.4	42.8
All employees	1,000	136	72	75	Avg. weekly earnings	Dollars	646	871	879
Production workers	1,000	110	59	64	Nonmetallic minerals, except fuels:				
Avg. weekly hours	Number	44.7	45.6	45.4	All employees	1,000	113	115	108
Avg. weekly earnings	Dollars	822	945	934	Production workers	1,000	85	87	80
Oil and gas extraction:					Avg. weekly hours	Number	45.0	46.1	45.2
All employees	1,000	190	125	123	Avg. weekly earnings	Dollars	532	722	749
Production workers	1,000	84	67	69					

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

## No. 871. Selected Mineral Products—Average Prices: 1980 to 2002

[Excludes Alaska and Hawaii, except as noted]

Year	Nonfuels						Fuels				
	Copper, electro-lytic (cents per lb.)	Plati-num <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)	Bitumi-nous coal <sup>3,4</sup> (dol./short ton)	Crude petro-leum <sup>3</sup> (dol./bbl.)	Natural gas <sup>3</sup> (dol./1,000 cu. ft.)
1980	101	677	613	20.63	43	846	37	89.06	29.17	21.59	1.59
1981	84	446	460	10.52	37	733	45	111.48	31.51	31.77	1.98
1982	73	327	376	7.95	26	654	39	108.27	32.15	28.52	2.46
1983	77	424	424	11.44	22	655	41	87.24	31.11	26.19	2.56
1984	67	357	361	8.14	26	624	49	94.31	30.63	25.88	2.66
1985	67	291	318	6.14	19	596	40	106.46	30.78	24.09	2.51
1986	66	461	368	5.47	22	383	38	105.22	28.84	12.51	1.94
1987	83	553	478	7.01	36	419	42	89.78	28.19	15.40	1.67
1988	121	523	438	6.53	37	441	60	85.95	27.66	12.58	1.69
1989	131	507	383	5.50	39	520	82	86.62	27.40	15.86	1.69
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	360	345	3.94	35	402	58	48.14	26.78	15.99	1.74
1993	92	375	361	4.30	32	350	46	31.86	26.15	14.25	2.04
1994	111	411	385	5.29	37	369	49	28.60	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	54	37.81	23.92	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	10.11	25.36	21.84	4.02
2002	75	559	305	4.52	44	298	40	25.00	26.35	22.51	2.95

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*.

## No. 872. Mineral Production: 1990 to 2002

[Data represent production as measured by mine shipments, mine sales or marketable production]

Minerals and metals	Unit	1990	1995	2000	2001	2002, est.
<b>FUEL MINERALS</b>						
Coal, total	Mil. sh. tons	1,029.1	1,033.0	1,073.6	1,127.7	1,093.8
Bituminous	Mil. sh. tons	693.2	613.8	574.3	611.3	565.7
Subbituminous	Mil. sh. tons	244.3	328.0	409.2	434.4	444.7
Lignite	Mil. sh. tons	88.1	86.5	85.6	80.0	82.1
Anthracite	Mil. sh. tons	3.5	4.7	4.6	1.9	1.3
Natural gas (marketed production)	Tril. cu. ft.	18.59	19.51	20	20.63	19.97
Petroleum (crude)	Mil. bbl. <sup>1</sup>	2,686	2,394	2,125	2,118	2,097
Uranium (recoverable content)	Mil. lb.	8.9	6.0	4.0	2.6	(NA)
<b>NONFUEL MINERALS</b>						
Asbestos (sales)	1,000 metric tons	(D)	9	5	5	3
Barite, primary, sold/used by producers	1,000 metric tons	430	543	392	400	400
Boron minerals, sold or used by producers	1,000 metric tons	1,090	1,190	1,070	(NA)	(NA)
Bromine, sold or used by producers	1,000 metric tons	177	218	228	212	225
Cement:						
Portland	Mil. metric tons	67	73	84	(NA)	(NA)
Masonry	Mil. metric tons	3	4	4	(NA)	(NA)
Clays	1,000 metric tons	42,900	43,100	40,800	40,000	40,700
Diatomite	1,000 metric tons	631	722	677	644	700
Feldspar <sup>2</sup>	1,000 metric tons	630	880	790	800	820
Fluorspar, finished shipments	1,000 metric tons	64	51	-	(NA)	(NA)
Garnet (industrial)	1,000 metric tons	47	46	60	53	47
Gypsum, crude	Mil. metric tons	15	17	20	16	16
Helium <sup>3</sup>	Mil. cu. meters	85	101	98	87	85
Lime, sold or used by producers	Mil. metric tons	16	19	20	19	18
Mica, scrap & flake, sold/used by producers	1,000 metric tons	109	108	101	98	84
Peat, sales by producers	1,000 metric tons	721	660	755	870	760
Perlite, processed, sold or used	1,000 metric tons	576	700	672	588	548
Phosphate rock (marketable)	Mil. metric tons	46	44	39	32	36
Potash (K <sub>2</sub> O equivalent) sales	1,000 metric tons	1,710	1,480	1,300	1,200	1,200
Pumice & pumicite, producer sales	1,000 metric tons	443	529	697	920	950
Salt, common, sold/used by producers	Mil. metric tons	37	41	46	45	44
Sand & gravel, sold/used by producer	Mil. metric tons	855	935	1,148	1,158	1,158
Construction	Mil. metric tons	829	907	1,120	1,130	1,130
Industrial	Mil. metric tons	26	28	28	28	28
Sodium carbonate (natural) (soda ash)	1,000 metric tons	9,100	10,100	10,200	10,300	10,300
Sodium sulfate (natural)	1,000 metric tons	349	327	491	512	500
Stone <sup>4</sup>	Mil. metric tons	1,110	2,420	2,810	2,820	2,890
Crushed and broken	Mil. metric tons	1,110	1,260	1,560	1,600	1,590
Dimension <sup>5</sup>	1,000 metric tons	1,120	1,160	1,250	1,220	1,300
Sulfur: Total shipments	1,000 metric tons	11,500	12,100	10,300	9,250	9,280
Sulfur: Frasch mines (shipments)	1,000 metric tons	3,680	(D)	10,500	9,100	-
Talc, and pyrophyllite, crude	1,000 metric tons	1,270	1,060	851	853	830
Vermiculite concentrate	1,000 metric tons	209	171	150	(D)	(D)
<b>METALS</b>						
Antimony ore and concentrate	Metric tons	(D)	262	(D)	300	-
Aluminum	1,000 metric tons	4,048	3,375	3,668	2,637	2,700
Bauxite (dried)	1,000 metric tons	(D)	(D)	(NA)	(NA)	(NA)
Copper (recoverable content)	1,000 metric tons	1,590	1,850	1,440	1,340	1,130
Gold (recoverable content)	Metric tons	294	317	353	335	300
Iron ore (gross weight) <sup>6</sup>	Mil. metric tons	57	61	63	46	50
Lead (recoverable content)	1,000 metric tons	484	394	468	466	450
Magnesium metal	1,000 metric tons	139	142	(D)	45	45
Manganiferous ore (gross weight) <sup>7</sup>	1,000 metric ton	(D)	(D)	-	(NA)	(NA)
Mercury <sup>8</sup>	Metric tons	562	(D)	(NA)	(NA)	(NA)
Molybdenum (concentrate)	1,000 metric tons	62	61	41	38	33
Nickel	1,000 metric tons	-	2	-	-	-
Palladium metal	Kilograms	5,930	5,260	10,300	12,100	13,000
Platinum metal	Kilograms	1,810	1,590	3,110	3,610	3,900
Silicon (silicon content)	1,000 metric tons	418	396	367	282	270
Silver (recoverable content)	Metric tons	2,120	1,560	1,860	1,740	1,470
Titanium concentrate: Ilmenite (gross weight)	1,000 metric tons	(D)	(D)	(NA)	(NA)	(NA)
Tungsten ore and concentrate <sup>9</sup>	Metric tons	(D)	(D)	-	(NA)	(NA)
Zinc (recoverable content)	1,000 metric tons	515	614	829	842	740

- Represents zero. D Withheld to avoid disclosing individual company data. NA Not available. <sup>1</sup> 42 gal. bbl. <sup>2</sup> Beginning 1995, includes apatite. <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 byproduct ores. <sup>7</sup> 5 to 35 percent manganiferous ore. <sup>8</sup> Covers mercury recovered as a byproduct 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*.

# No. 873. Nonfuel Mineral Commodities—Summary: 2001

[Preliminary estimates. Average price in dollars per metric tons except as noted]

Mineral	Unit	Mineral disposition				Average price per unit (dollars)	Employment (number)
		Production	Exports	Net import reliance <sup>1</sup> (percent)	Consumption, apparent		
Aluminum . . . . .	1,000 metric tons.	2,700	1,500	39	6,400	265.00	13,700
Antimony (contained) . . . . .	Metric tons . . . . .	<sup>3</sup> 20,000	7,000	41	18,000	279.00	-
Asbestos . . . . .	1,000 metric tons.	3	8	100	(NA)	160.00	15
Barite . . . . .	1,000 metric tons.	400	35	76	1,670	428.80	320
Bauxite and alumina . . . . .	1,000 metric tons.	(NA)	1,270	100	3,300	421.00	(NA)
Beryllium (contained) . . . . .	Metric tons . . . . .	100	60	55	220	<sup>2</sup> 6 (NA)	(NA)
Bismuth (contained) . . . . .	Metric tons . . . . .	-	200	95	(NA)	23.20	-
Boron (B <sub>2</sub> O <sub>3</sub> content) . . . . .	1,000 metric tons.	620	245	( <sup>5</sup> )	559	<sup>4</sup> 7376.00	1,300
Bromine (contained) . . . . .	1,000 metric tons.	225	10	-	225	<sup>8</sup> 99.20	1,700
Cadmium (contained) . . . . .	Metric tons . . . . .	<sup>3</sup> 700	300	( <sup>5</sup> )	560	<sup>2</sup> 10.30	(NA)
Cement . . . . .	1,000 metric tons.	89,000	900	19	110,000	477.00	18,000
Chromium . . . . .	1,000 metric tons.	<sup>11</sup> 153	10	61	413	<sup>4</sup> 12 (NA)	(NA)
Clays . . . . .	1,000 metric tons.	40,700	4,990	( <sup>5</sup> )	35,900	(NA)	6,550
Cobalt (contained) . . . . .	Metric tons . . . . .	<sup>11</sup> 2,700	2,100	75	11,800	26.90	(NA)
Copper (Mine, contained) . . . . .	1,000 metric tons.	1,130	450	37	2,700	75.00	7
Diamond (industrial) . . . . .	Million carats . . . . .	318	81	89	432	<sup>10</sup> 0.34	(NA)
Diatomite . . . . .	1,000 metric tons.	700	148	( <sup>5</sup> )	554	<sup>4</sup> 256.00	1,000
Feldspar . . . . .	1,000 metric tons.	820	8	( <sup>5</sup> )	817	<sup>4</sup> 56.00	400
Fluorspar . . . . .	1,000 metric tons.	126	25	189	472	(NA)	5
Garnet (industrial) . . . . .	Metric tons . . . . .	46,900	10,400	28	58,900	<sup>4</sup> 50-2000	220
Germanium (contained) . . . . .	Kilograms . . . . .	20,000	(NA)	(NA)	(NA)	(NA)	85
Gold (contained) . . . . .	Metric tons . . . . .	300	165	( <sup>5</sup> )	(NA)	<sup>17</sup> 305.00	9,000
Gypsum (crude) . . . . .	1,000 metric tons.	44,900	380	25	31,800	7.33	5,900
Iron . . . . .	Metric tons . . . . .	1,700	790	76	7,020	<sup>8</sup> 21 12.78	30
Iron ore (usable) . . . . .	Million metric tons.	50	6	11	56	<sup>4</sup> 2223.00	5,000
Iron and steel slag (metal) . . . . .	1,000 metric tons.	16,500	(Z)	6	19,000	8.10	2,700
Lead (contained) . . . . .	1,000 metric tons.	1,750	120	18	1,580	244.00	2,820
Lime . . . . .	1,000 metric tons.	18,400	101	(Z)	18,500	60.60	5,400
Magnesium compounds . . . . .	1,000 metric tons.	395	65	35	610	(NA)	450
Magnesium metal . . . . .	1,000 metric tons.	(NA)	27	54	120	(NA)	375
Mercury . . . . .	Metric tons . . . . .	<sup>11</sup> (NA)	300	(NA)	(NA)	<sup>26</sup> 140.00	(NA)
Mica, scrap and flake . . . . .	1,000 metric tons.	160	11	24	111	<sup>4</sup> 100.00	(NA)
Molybdenum (contained) . . . . .	Metric tons . . . . .	32,600	23,100	( <sup>5</sup> )	19,900	8.30	360
Nickel (contained) . . . . .	Metric tons . . . . .	-	15,920	43	114,000	<sup>22</sup> 3.07	-
Nitrogen (fixed)-ammonia . . . . .	1,000 metric tons.	9,500	650	29	13,500	<sup>4</sup> 28 140.00	1,700
Peat . . . . .	1,000 metric tons.	760	34	50	1,540	424.60	800
Perlite . . . . .	1,000 metric tons.	548	45	23	713	43.74	145
Phosphate rock . . . . .	1,000 metric tons.	35,800	-	6	(NA)	427.69	6,000
Platinum-group metals . . . . .	Kilograms . . . . .	16,900	72,326	162	(NA)	<sup>17</sup> 29 (NA)	1,400
Potash (K <sub>2</sub> O equivalent) . . . . .	1,000 metric tons.	1,200	400	80	5,600	<sup>4</sup> 30 155.00	1,185
Pumice and pumicite . . . . .	1,000 metric tons.	950	30	28	1,320	424.00	100
Salt . . . . .	1,000 metric tons.	43,900	1,000	18	50,200	<sup>4</sup> 31 122.00	4,000
Silicon (contained) . . . . .	1,000 metric tons.	270	21	47	509	52.00	(NA)
Silver (contained) . . . . .	Metric tons . . . . .	1,470	885	61	5,340	<sup>17</sup> 4.52	1,100
Sodium carbonate (soda ash) . . . . .	1,000 metric tons.	10,300	4,100	( <sup>5</sup> )	6,240	<sup>33</sup> 105.00	2,600
Sodium sulfide . . . . .	1,000 metric tons.	500	100	( <sup>5</sup> )	440	<sup>34</sup> 114.00	225
Stone (crushed) . . . . .	Million metric tons.	1,590	4	(Z)	1,600	5.72	79,000
Sulfur (all forms) . . . . .	1,000 metric tons.	9,280	550	15	10,900	<sup>4</sup> 35 25.00	2,700
Talc . . . . .	1,000 metric tons.	830	160	8	900	4112.00	530
Thallium (contained) . . . . .	Kilograms . . . . .	-	(NA)	100	(NA)	<sup>8</sup> 1 250.00	(NA)
Tin (contained) . . . . .	Metric tons . . . . .	<sup>11</sup> 13,500	3,500	79	54,000	<sup>2</sup> 188.00	(NA)
Titanium dioxide . . . . .	1,000 metric tons.	1,380	470	( <sup>5</sup> )	1,160	<sup>2</sup> 36 1.05	4,500
Tungsten (contained) . . . . .	Metric tons . . . . .	4,500	3,590	70	12,900	<sup>37</sup> 55.00	(NA)
Vermiculite . . . . .	1,000 metric tons.	(D)	5	(D)	(D)	143.00	100
Zinc (contained) . . . . .	1,000 metric tons.	1,080	711	60	1,500	20.40	2,900
Zirconium (Zr <sub>2</sub> O <sub>2</sub> ) content . . . . .	Metric tons . . . . .	100,000	25,387	(NA)	(D)	<sup>4</sup> 39 350.00	(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> Turkish, chromite price. <sup>13</sup> Columbite price. <sup>14</sup> Value of imports, dollars per carat. <sup>15</sup> Reported consumption. <sup>16</sup> Zone refined. <sup>17</sup> Dollars per troy ounce. <sup>18</sup> Price of flake imports. <sup>19</sup> Includes employment at calcining plants. <sup>20</sup> 99.97% indium. <sup>21</sup> C.i.f. value, crude, per kilogram. <sup>22</sup> Price of eastern Canadian ore. <sup>23</sup> Delivered, No. 1 Heavy. Melting composite price. <sup>24</sup> Year-end price. <sup>25</sup> 46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports. <sup>26</sup> Dollars per 76-pound flask. <sup>27</sup> London Metal Exchange cash price. <sup>28</sup> F.o.b. gulf coast. <sup>29</sup> Dealer price of platinum. <sup>30</sup> Price of K<sub>2</sub>O, muriate. <sup>31</sup> Vacuum and open pan, bulk, pellets and packaged, f.o.b. mine and plant. <sup>32</sup> Ferrosilicon, 50% Si. <sup>33</sup> Quoted year-end price, dense, bulk, f.o.b. Green River, WY, dollars per short ton. <sup>34</sup> Quoted price, bulk, f.o.b. works, East, dollars per short ton. <sup>35</sup> Elemental sulfur, f.o.b. mine and/or plant. <sup>36</sup> Rutile, list, year-end. <sup>37</sup> Dollars per unit W03 (7.93 kilograms of contained tungsten per unit). <sup>38</sup> All forms. <sup>39</sup> Price for imported zircon, f.o.b. U.S. east coast.

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

## No. 874. Value of Domestic Nonfuel Mineral Production by State: 1990 to 2002

[In millions of dollars (33,445 represents 33,445,000,000), except as indicated. For similar data on fuels, see Table 881]

State						2002		
	1990	1995	1999	2000	2001	Total (mil. dol.)	Rank	Percent of U.S.
<b>United States<sup>1</sup> . . . . .</b>	<b>33,445</b>	<b>38,506</b>	<b>39,100</b>	<b>40,100</b>	<b>38,900</b>	<b>38,000</b>	<b>(X)</b>	<b>100.00</b>
Alabama . . . . .	559	706	1,080	1,070	938	968	16	2.55
Alaska . . . . .	577	538	1,090	1,140	1,060	1,030	13	2.72
Arizona . . . . .	3,085	4,190	2,510	2,550	2,110	1,920	5	5.05
Arkansas . . . . .	381	492	518	506	491	543	25	1.43
California . . . . .	2,771	2,760	3,200	3,350	3,250	3,440	1	9.07
Colorado . . . . .	377	570	555	566	676	619	23	1.63
Connecticut . . . . .	122	93	<sup>3</sup> 103	<sup>3</sup> 100	104	142	42	0.37
Delaware <sup>2</sup> . . . . .	10	9	310	312	13	17,500	49	0.05
Florida . . . . .	1,574	1,540	1,930	1,920	1,750	2,020	4	5.32
Georgia . . . . .	1,504	1,690	1,840	1,660	1,610	1,450	7	3.82
Hawaii . . . . .	106	114	89	91	70	75	45	0.02
Idaho . . . . .	375	510	420	398	344	307	35	0.81
Illinois . . . . .	667	828	913	907	911	950	17	2.50
Indiana . . . . .	428	589	717	729	718	740	18	1.95
Iowa . . . . .	310	456	537	510	487	487	26	1.28
Kansas . . . . .	349	498	566	624	640	661	21	1.74
Kentucky . . . . .	359	432	483	497	531	372	32	0.98
Louisiana . . . . .	368	434	374	404	274	294	36	0.77
Maine . . . . .	65	68	101	<sup>3</sup> 102	91	106	43	0.28
Maryland . . . . .	368	324	336	357	356	375	31	0.99
Massachusetts . . . . .	128	190	204	210	209	235	38	0.62
Michigan . . . . .	1,440	1,520	1,660	1,670	1,620	1,580	6	4.16
Minnesota . . . . .	1,482	1,530	1,580	1,570	1,440	1,090	11	2.86
Mississippi . . . . .	111	131	190	157	177	176	40	0.46
Missouri . . . . .	1,105	1,140	1,380	1,320	1,340	1,290	8	3.39
Montana . . . . .	573	574	491	582	514	442	30	1.16
Nebraska . . . . .	90	146	163	170	163	89	44	0.23
Nevada . . . . .	2,621	3,060	2,780	<sup>3</sup> 2,800	2,900	2,900	2	7.63
New Hampshire . . . . .	36	50	<sup>3</sup> 64	59	60	68	47	0.18
New Jersey . . . . .	229	243	300	286	348	285	37	0.75
New Mexico . . . . .	1,103	1,130	671	812	615	571	24	1.50
New York . . . . .	773	886	935	970	1,050	1,010	15	2.67
North Carolina . . . . .	586	735	761	779	744	708	19	1.86
North Dakota . . . . .	25	31	38	42	39	39	48	0.10
Ohio . . . . .	733	891	1,040	1,060	1,070	1,060	12	2.78
Oklahoma . . . . .	259	357	475	453	530	462	27	1.22
Oregon . . . . .	205	239	303	<sup>3</sup> 439	326	320	34	0.84
Pennsylvania . . . . .	1,031	1,080	<sup>3</sup> 1,270	<sup>3</sup> 1,250	1,270	1,270	9	3.35
Rhode Island . . . . .	18	31	<sup>3</sup> 25	24	28	17	50	0.05
South Carolina . . . . .	450	447	574	560	531	460	28	1.21
South Dakota . . . . .	319	332	226	260	255	186	39	0.49
Tennessee . . . . .	663	665	710	770	708	629	22	1.66
Texas . . . . .	1,459	1,680	1,780	2,050	2,210	2,180	3	5.74
Utah . . . . .	1,335	1,850	1,260	<sup>3</sup> 1,420	1,310	1,240	10	3.26
Vermont . . . . .	87	60	<sup>3</sup> 83	43	69	71	46	0.19
Virginia . . . . .	507	515	667	692	751	697	20	1.83
Washington . . . . .	483	582	631	691	545	450	29	1.18
West Virginia . . . . .	133	181	180	<sup>3</sup> 182	185	173	41	0.45
Wisconsin . . . . .	215	416	<sup>3</sup> 334	349	368	340	33	0.89
Wyoming . . . . .	911	973	956	922	986	1,010	14	2.67

X Not applicable. <sup>1</sup> Includes undistributed not shown separately. <sup>2</sup> Includes District of Columbia. <sup>3</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/2003/mcs2003.pdf>> (released 31 January 2003).

## No. 875. Principal Fuels, Nonmetals, and Metals—World Production and the U.S. Share: 1980 to 2001

Mineral	Unit	World production				Percent U.S. of world			
		1980	1990	1995	2001	1980	1990	1995	2001
<b>Fuels:</b> <sup>1</sup>									
Coal	Mil. sh. ton	4,193	5,386	5,157	5,266	19.8	19.1	20.0	21.3
Petroleum (crude)	Bil. bbl.	21.8	22.1	22.8	24.8	14.4	12.2	10.5	8.5
Natural gas (dry, marketable)	Tril. cu. ft.	53.5	73.6	78.0	90.72	36.3	24.2	23.9	21.3
Natural gas plant liquids	Bil. bbl.	1.3	1.7	2.0	2.4	45.7	33.7	32.1	28.3
<b>Nonmetals:</b>									
Asbestos	1,000 metric tons	4,699	4,003	2,420	2,050	2	(D)	(Z)	(Z)
Barite	1,000 metric tons	7,495	5,633	4,300	6,700	27	8	13	6
Feldspar	1,000 metric tons	3,202	5,456	6,780	9,500	20	12	13	8
Fluorspar	1,000 metric tons	5,006	5,131	4,050	4,530	2	1	1	-
Gypsum	Mil. metric tons	78	100	97	104	14	15	17	16
Mica (incl. scrap)	1,000 metric tons	228	215	253	300	46	51	43	33
Nitrogen, (fixed) ammonia	Mil. metric tons	74	97	96	106	20	13	14	9
Phosphate rock, gross wt.	Mil. metric tons	144	162	130	126	38	29	33	25
Potash (K <sub>2</sub> O equivalent)	Mil. metric tons	28	28	25	26	8	6	6	5
Sulfur, elemental	Mil. metric tons	55	58	53	57	22	20	22	16
<b>Metals, mine basis:</b>									
Bauxite	Mil. metric tons	89	109	107	138	2	(D)	(D)	39
Columbian concentrates (Nb content)	1,000 metric tons	15	15	18	26	-	-	-	-
Copper	1,000 metric tons	7,405	9,017	10,100	13,700	16	18	18	10
Gold	Metric tons	1,219	2,133	2,220	2,570	2	14	14	13
Iron ore	Mil. metric tons	891	982	1,027	1,060	8	6	6	4
Lead <sup>2</sup>	1,000 metric tons	3,470	3,353	2,780	3,100	17	15	14	15.0
Mercury	Metric tons	6,806	4,523	3,160	1,400	16	12	(D)	(D)
Molybdenum	1,000 metric tons	111	128	141	130	62	48	43	29
Nickel	1,000 metric tons	779	965	1,030	1,330	2	(Z)	(Z)	(Z)
Silver	1,000 metric tons	11	16	15	19	9	13	10	9
Tantalum concentrates	Metric tons	544	400	362	1,300	-	-	-	-
Titanium concentrates:									
Ilmenite	1,000 metric tons	3,726	4,072	3,970	4,600	14	(D)	(D)	7
Rutile	1,000 metric tons	436	481	416	410	(D)	(D)	(D)	-
Tungsten <sup>2</sup>	1,000 metric tons	52	43	39	44	5	14	-	-
Vanadium <sup>2</sup>	1,000 metric tons	37	31	35	58	12	(D)	(D)	-
Zinc <sup>2</sup>	1,000 metric tons	5,954	7,184	7,240	8,850	6	8	9	10
<b>Metals, smelter basis:</b>									
Aluminum	1,000 metric tons	15,383	19,292	19,900	24,400	30	21	17	11
Cadmium	1,000 metric tons	18	20	19	18	9	8	7	4
Copper	1,000 metric tons	7,649	9,472	10,200	13,700	14	15	16	10
Iron, pig	Mil. metric tons	514	532	533	581	12	9	10	7
Lead <sup>3</sup>	1,000 metric tons	5,430	5,763	5,590	3,100	23	23	25	15
Magnesium <sup>4</sup>	1,000 metric tons	316	354	389	426	49	39	37	(NA)
Raw Steel	Mil. metric tons	717	771	755	851	14	12	13	11
Tin <sup>5</sup>	1,000 metric tons	251	223	201	222	1	-	-	-
Zinc	1,000 metric tons	6,049	7,060	7,550	8,850	6	5	5	10

- Represents or rounds to zero. D Withheld to avoid disclosing company data. NA Not available. Z Less than half the unit of measure. <sup>1</sup> Source: Energy Information Administration, *International Energy Annual*. <sup>2</sup> Content of ore and concentrate. <sup>3</sup> Refinery production. <sup>4</sup> Primary production; no smelter processing necessary. <sup>5</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 Commodities Summaries*, annual; fuels, U.S. Energy Information Administration, *International Energy Annual*. See also <<http://minerals.er.usgs.gov/minerals/pubs/mcs/2003/mcs2003.pdf>>.

## No. 876. Federal Strategic and Critical Materials Inventory: 1990 to 2001

[As of Dec. 31. Covers strategic and critical materials essential to military and industrial requirements in time of national emergency]

Mineral	Unit	Quantity <sup>1</sup>				Value (mil. dol.) <sup>2</sup>			
		1990	1995	2000	2001	1990	1995	2000	2001
Bauxite <sup>3</sup>	1,000 lg. ton	18,033	16,032	6,267	2,032	888	203	49	22
Chromium <sup>4</sup>	1,000 sh. ton	1,074	1,192	937	902	917	839	606	599
Cobalt	Mil. lb.	53	44	23	16	443	1,121	313	187
Diamonds: Stones	Carat 1,000	7,777	5,135	1,509	1,006	267	52	15	10
Industrial, bort	Carat 1,000	17,353	1,967	-	-	16	9	-	-
Lead	1,000 sh. ton	(NA)	465	226	197	(NA)	263	103	86
Manganese <sup>5</sup>	1,000 sh. ton	4,017	2,817	2,146	2,052	962	464	255	249
Palladium	1,000 troy oz.	(NA)	1,265	842	523	(NA)	143	326	286
Platinum	1,000 troy oz.	453	453	217	108	186	154	84	44
Silver	1,000 troy oz.	92,151	46,667	15,942	6,817	374	158	61	25
Tantalum Group	1,000 lb.	(NA)	3,031	2,282	2,120	(NA)	127	94	86
Tin	1,000 metric ton	169	130	60	54	962	908	323	282
Titanium	1,000 sh. ton	37	37	30	21	402	221	96	64
Tungsten <sup>6</sup>	Mil. lb.	82	82	74	69	253	253	156	140
Zinc	1,000 sh. ton	379	301	151	125	483	281	152	123

- Represents or rounds to zero. NA Not available. <sup>1</sup> Consists of stockpile and nonstockpile grades and reflects uncommitted balances. <sup>2</sup> Market values are estimated trade values of similar materials and not necessarily amounts that would be realized at time of sale. <sup>3</sup> Consists of abrasive grade, metallic grade Jamaica, metallic grade Suriname, and refractory. <sup>4</sup> Consists of ferro-high carbon, ferro-low carbon, ferro-silicon, and metal. <sup>5</sup> Consists of chemical grade, dioxide battery natural, dioxide battery synthetic, electrolytic, ferro-high carbon, ferro-med. carbon, ferro-silicon, and metal. <sup>6</sup> Consists of carbide powder, ferro, metal powder, and ores and concentrates.

Source: U.S. Defense Logistics Agency, *Statistical Supplement, Stockpile Report to the Congress* (AP-3).

## No. 877. Net U.S. Imports of Selected Minerals and Metals as Percent of Apparent Consumption: 1980 to 2002

[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	1997	1998	1999	2000	2001	2002
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	(D)	78	80	(NA)	100	100
Tin	79	71	84	86	85	85	86	88	79
Barite	44	71	65	76	80	67	71	87	76
Potash	65	68	75	80	80	80	70	80	80
Tantalum	90	71	80	75	80	80	80	80	80
Chromium	91	84	80	75	80	80	78	78	63
Cobalt	93	86	79	76	73	73	74	78	75
Zinc <sup>2</sup>	60	41	35	35	35	30	60	60	60
Tungsten	53	81	90	84	77	81	68	59	70
Nickel	76	64	60	56	64	63	58	56	43
Silver	7	(NA)	(NA)	( <sup>3</sup> )	14	14	52	44	61
Aluminum	( <sup>3</sup> )	36	23	23	27	30	33	35	39
Copper	16	15	27	13	14	27	37	31	37
Gypsum	35	46	30	28	28	29	22	25	25
Iron and steel	13	13	21	20	27	22	17	15	14
Iron ore	25	3	14	14	12	17	19	15	11
Sulfur	14	21	21	13	18	17	22	12	15
Cadmium	55	( <sup>3</sup> )	23	16	20	19	6	3	-
Mercury	27	(D)	(NA)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
Platinum group	87	88	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Selenium	59	46	31	(D)	(D)	(D)	(NA)	(NA)	(NA)

- Represents zero. D Withheld to avoid disclosure. NA 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-only basis, reliance would be about the same as pre-1990 level; 1990, 64 percent; 1991, 61 percent; 1992, 61 percent; 1993, 67 percent; 1994, 70 percent; 1995, 71 percent; and 1996 and 1997, 70 percent; 1998, 69 percent; and 1999, 71 percent. <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.

## No. 878. Federal Offshore Leasing, Exploration, Production, and Revenue: 1990 to 2002

[See source for explanation of terms and for reliability statement]

Item	Unit	1990	1995	1997	1998	1999	2000	2001	2002
Tracts offered	Number	10,459	10,995	9,870	8,205	7,453	7,992	8,790	8,548
Tracts leased	Number	825	835	1,780	1,157	333	553	942	804
Acres offered	Millions	56.79	59.70	26.24	44.10	40.22	42.89	49.15	45.69
Acres leased	Millions	4.30	4.34	9.62	6.34	1.77	2.92	5.00	4.20
Bonus paid for leased tracts	Bil. dol.	0.6	0.4	(NA)	1.3	0.3	0.3	1.0	0.1
New wells being drilled:									
Active	Number	120	124	186	173	219	224	213	119
Suspended	Number	266	247	244	122	110	146	97	72
Cumulative wells (since 1953):									
Wells completed	Number	13,167	13,475	13,546	13,702	13,676	13,718	13,921	13,282
Wells plugged and abandoned	Number	14,677	18,008	18,728	21,050	22,115	22,814	24,218	25,232
Revenue, total <sup>1</sup>	Bil. dol.	3.4	2.7	5.3	4.3	3.2	5.2	<sup>4</sup> 5.8	<sup>5</sup> 5.0
Bonuses	Bil. dol.	0.8	0.4	1.4	1.3	0.2	0.4	<sup>4</sup> 0.5	<sup>5</sup> 0.1
Oil and gas royalties <sup>1</sup>	Bil. dol.	2.6	2.1	3.4	2.7	2.6	4.1	<sup>4</sup> 4.8	<sup>5</sup> 4.7
Rentals	Bil. dol.	0.09	0.09	0.23	0.26	0.21	0.21	<sup>4</sup> 0.13	<sup>5</sup> 0.4
Sales value <sup>2</sup>	Bil. dol.	17.0	13.8	22.3	17.6	17.4	27.4	<sup>4</sup> 31.4	<sup>5</sup> 31.0
Oil	Bil. dol.	7.0	6.3	9.0	6.2	6.5	11.5	<sup>4</sup> 11.3	<sup>5</sup> 12.1
Natural gas	Bil. dol.	9.5	7.5	13.3	11.4	10.9	15.9	<sup>4</sup> 20.1	<sup>5</sup> 18.9
Sales volume: <sup>3</sup>									
Oil	Mil. bbls.	324	409	479	477	513	566	<sup>4</sup> 463	<sup>5</sup> 612
Natural gas	Bil. cu. ft.	5,093	4,692	5,077	4,836	4,992	4,723	<sup>4</sup> 3,470	<sup>5</sup> 4,971

<sup>1</sup> NA Not available. <sup>2</sup> Includes condensate royalties. <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. <sup>5</sup> Covers January through September 2001 only. <sup>6</sup> Estimated.

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

## No. 879. Petroleum Industry—Summary: 1980 to 2001

[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	1996	1997	1998	1999	2000	2001
Crude oil producing wells (Dec. 31)	1,000	548	602	574	574	573	562	546	534	(NA)
Daily output per well	Bbl.	15.9	12.2	11.4	11.3	11.3	11.1	10.8	10.9	(NA)
Completed wells drilled, total	1,000	57.73	31.56	21.06	22.90	27.47	24.08	18.18	25.14	(NA)
Crude oil	1,000	30.88	12.20	7.63	8.31	10.44	7.06	4.09	4.73	(NA)
Gas	1,000	15.25	11.04	8.35	9.30	11.33	12.11	10.51	15.21	(NA)
Dry	1,000	11.60	8.31	5.08	5.28	5.70	4.91	3.58	5.20	(NA)
Average depth per well <sup>1</sup>	Feet	4,171	4,871	5,596	5,636	5,704	6,213	5,944	5,308	5,184
Average cost per well <sup>1</sup>	\$1,000	368	384	513	496	604	769	856	755	943
Average cost per foot <sup>1</sup>	Dollars	77.02	76.07	87.22	88.92	107.83	128.97	152.02	142.16	181.94
Crude oil production, total	Mil. bbl	3,138	2,685	2,394	2,360	2,355	2,282	2,141	2,131	2,123
Value at wells	Bil. dol.	67.7	53.8	35.0	43.6	40.6	24.8	33.3	56.9	46.3
Average price per barrel	Dollars	21.59	20.03	14.62	18.46	17.23	10.87	15.56	26.72	21.84
Lower 48 states	Mil. bbl	2,548	2,037	1,853	1,851	1,882	1,853	1,764	1,775	1,766
Alaska	Mil. bbl	590	647	542	508	473	429	383	354	351
Onshore	Mil. bbl	2,760	2,290	1,838	1,789	1,753	1,664	1,508	1,494	(NA)
Offshore	Mil. bbl	377	395	557	570	602	618	639	635	(NA)
Imports: Crude oil	Mil. bbl	1,921	2,151	2,639	2,740	3,002	3,178	3,187	3,260	3,405
Refined petroleum products	Mil. bbl	601	775	586	719	707	731	775	789	636
Exports: Crude oil	Mil. bbl	104.8	39.8	34.7	40.2	39.4	40.2	43.1	18.3	7.4
Proved reserves	Bil. bbl.	29.8	26.3	22.4	22.0	22.5	21.0	21.8	22.0	22.4
Operable refineries	Number	319	205	175	170	164	163	159	158	(NA)
Capacity (Jan. 1)	Mil. bbl	6,566	5,683	5,632	5,595	5,639	5,734	5,935	6,026	(NA)
Refinery input, total	Mil. bbl	5,117	5,325	5,555	5,654	5,807	5,891	5,877	5,950	(NA)
Crude oil	Mil. bbl	4,920	4,895	5,099	5,179	5,351	5,435	5,402	5,504	(NA)
Natural gas plant liquids	Mil. bbl	168	172	172	164	153	146	135	135	(NA)
Other liquids	Mil. bbl	29	259	285	307	303	310	339	310	(NA)
Refinery output, total	Mil. bbl	5,336	5,574	5,836	5,957	6,117	6,216	6,201	6,296	(NA)
Motor gasoline	Mil. bbl	2,369	2,540	2,723	2,759	2,825	2,880	2,894	2,902	(NA)
Jet fuel	Mil. bbl	365	544	518	555	566	558	573	588	(NA)
Distillate fuel oil	Mil. bbl	971	1,066	1,153	1,212	1,237	1,248	1,241	1,307	(NA)
Residual fuel oil	Mil. bbl	577	347	288	266	259	277	256	259	(NA)
Liquefied petroleum gases	Mil. bbl	120	183	237	241	252	245	248	256	(NA)
Utilization rate	Percent	75.4	87.1	92.0	94.1	95.2	95.6	92.6	92.6	(NA)

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*.

## No. 880. U.S. Petroleum Balance: 1980 to 2002

[In millions of barrels (6,242 represents 6,242,000,000)]

Item	1980	1990	1995	1997	1998	1999	2000	2001	2002
<b>Petroleum products supplied for domestic use</b>	<b>6,242</b>	<b>6,201</b>	<b>7,087</b>	<b>6,796</b>	<b>6,905</b>	<b>7,125</b>	<b>7,211</b>	<b>7,172</b>	<b>7,213</b>
Production of products	5,765	5,934	6,940	6,671	6,733	6,774	6,903	6,942	6,925
Crude input to refineries	4,934	4,894	5,718	5,351	5,434	5,403	5,514	5,522	5,456
Oil, field production	3,138	2,685	2,406	2,355	2,282	2,147	2,125	2,118	2,097
Alaska	592	647	542	473	429	383	354	351	359
Lower 48 States	2,555	2,037	1,853	1,882	1,853	1,764	1,771	1,766	1,738
Net imports	1,821	2,112	2,604	2,963	3,137	3,144	3,301	3,398	3,333
Imports (gross excluding SPR) <sup>1</sup>	1,910	2,142	2,639	3,002	3,178	3,184	3,317	3,401	3,330
SPR <sup>1</sup> imports	16	10	-	-	-	3	3	4	5,767
Exports	-105	40	35	39	40	43	18	7	3,296
Other sources	33	98	102	34	15	113	82	7	26
Natural gas liquids (NGL), supply	577	574	708	721	717	757	799	801	798
Other liquids	253	465	514	599	582	614	589	619	671
Net imports of refined products	484	326	101	154	225	252	305	303	249
Imports	578	598	407	469	508	537	648	636	581
Exports	94	272	307	315	283	284	343	333	332
Stock withdrawal, refined products	-7	-59	46	-29	-53	98	2	-73	39
<b>TYPE OF PRODUCT SUPPLIED</b>									
<b>Total products supplied for domestic use</b>	<b>6,242</b>	<b>6,201</b>	<b>6,469</b>	<b>6,796</b>	<b>6,905</b>	<b>7,125</b>	<b>7,211</b>	<b>7,172</b>	<b>7,213</b>
Finished motor gasoline	2,407	2,641	2,843	2,926	3,012	3,077	3,101	3,143	3,229
Distillate fuel oil	1,049	1,103	1,170	1,254	1,263	1,304	1,362	1,404	1,378
Residual fuel oil	918	449	311	291	324	303	333	296	255
Liquefied petroleum gases <sup>2</sup>	414	568	693	744	713	801	816	746	789
Other	1,454	1,440	1,452	1,582	1,593	1,639	1,598	1,583	1,561
<b>ENDING STOCKS</b>									
<b>Ending stocks, all oils</b>	<b>1,392</b>	<b>1,621</b>	<b>1,563</b>	<b>1,560</b>	<b>1,647</b>	<b>1,493</b>	<b>1,468</b>	<b>1,586</b>	<b>1,548</b>
Crude oil and lease condensate	358	323	303	305	324	284	286	312	278
Strategic Petroleum Reserve (SPR)	108	586	592	563	571	567	541	550	599
Other	926	712	668	692	752	641	641	724	671

- Represents zero. <sup>1</sup> SPR=Strategic petroleum reserve. For more information, see Table 911. <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 2003).



## No. 881. Crude Petroleum and Natural Gas—Production and Value by Major Producing States: 1990 to 2002

[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	2001	1990	2000	2001	1990	2000	2001	1990	2000	2001
<b>Total <sup>2</sup></b>	<b>2,685</b>	<b>2,131</b>	<b>2,123</b>	<b>53,772</b>	<b>56,932</b>	<b>46,246</b>	<b>18,594</b>	<b>20,198</b>	<b>20,656</b>	<b>31,658</b>	<b>74,339</b>	<b>82,980</b>
AL	18	10	9	387	289	216	135	523	522	373	2,087	2,193
AK	658	355	351	10,086	8,439	6,448	403	459	471	554	807	939
AR	10	7	8	222	193	166	175	172	167	360	898	832
CA	322	271	261	5,732	6,729	5,242	363	377	378	857	1,812	2,619
CO	31	18	17	722	533	410	243	753	696	377	2,765	2,820
FL	6	5	4	(NA)	(NA)	(NA)	6	6	6	15	(NA)	(NA)
IL	20	12	10	467	343	240	1	-	-	1	(NA)	(NA)
IN	3	2	2	73	59	47	(Z)	1	1	1	3	3
KS	59	34	34	1,359	970	800	574	526	480	893	1,690	1,758
KY	5	3	3	124	92	67	75	82	82	169	258	391
LA	148	105	105	3,409	3,060	2,564	5,242	5,069	5,249	9,587	18,642	20,964
MI	20	8	7	458	222	167	140	297	275	420	724	953
MS	30	20	20	630	520	413	95	89	108	167	293	422
MT	20	15	16	429	429	369	50	70	81	90	198	254
NE	5	3	3	119	83	69	1	1	1	2	3	3
NM	66	67	68	1,472	1,935	1,613	965	1,687	1,689	1,629	5,790	6,564
NY	(Z)	-	-	9	6	4	25	18	28	55	67	139
ND	39	33	32	849	922	746	52	52	55	93	206	193
OH	8	7	6	196	181	136	155	105	100	393	426	454
OK	117	70	69	2,690	2,035	1,691	2,258	1,613	1,615	3,548	5,857	6,502
PA	2	2	2	54	43	40	178	201	157	417	(NA)	(NA)
TX	674	443	424	15,060	12,681	9,933	6,343	6,205	6,520	9,939	24,384	26,978
UT	23	16	15	524	446	367	146	269	284	249	883	998
WV	2	1	1	43	38	27	178	264	251	568	(NA)	(NA)
WY	103	61	57	2,169	1,633	1,238	736	1,088	1,364	856	3,640	4,757
Federal offshore	296	558	592	6,468	28,420	24,652	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available. Z Less than 500,000 barrels, 500 million cubic feet, or less than \$500,000. <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*.

## No. 882. Crude Oil, Natural Gas, and Natural Gas Liquids—Reserves by State: 1990 and 2001

[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. Indicated reserves of crude oil are quantities other than proved reserves, which may become economically recoverable from existing productive reservoirs through the application of improved recovery techniques using current technology. Based on a sample of operators of oil and gas wells]

Area	1990				2001			
	Crude oil		Natural gas liquids (bil. cu. ft.)	Natural gas liquids (mil. bbl.)	Crude oil		Natural gas liquids (bil. cu. ft.)	Natural gas liquids (mil. bbl.)
	Proved (mil. bbl.)	Indicated (mil. bbl.)			Proved (mil. bbl.)	Indicated (mil. bbl.)		
<b>United States <sup>1</sup></b>	<b>26,254</b>	<b>3,483</b>	<b>169,346</b>	<b>7,586</b>	<b>22,446</b>	<b>(NA)</b>	<b>183,460</b>	<b>7,993</b>
Lower 48 States	19,730	2,514	160,046	7,246	17,595	(NA)	174,660	7,588
Alabama	44	(Z)	4,125	170	42	(NA)	3,915	64
Alaska	6,524	969	9,300	340	4,851	(NA)	8,800	405
Arkansas	60	1	1,731	9	43	(NA)	1,616	5
California	2,465	21,425	23,185	2105	3,627	(NA)	2,681	76
Colorado	305	8	4,555	169	196	(NA)	12,527	345
Florida	(NA)	(NA)	(NA)	(NA)	75	(NA)	84	12
Illinois	(NA)	(NA)	(NA)	(NA)	92	(NA)	(NA)	(NA)
Indiana	131	-	(NA)	(NA)	12	(NA)	(NA)	(NA)
Kansas	(NA)	(NA)	(NA)	(NA)	216	(NA)	5,101	302
Kentucky	321	(Z)	9,614	313	17	(NA)	1,860	72
Louisiana	33	-	1,016	25	564	(NA)	9,811	391
Michigan	(NA)	(NA)	(NA)	(NA)	46	(NA)	2,976	43
Mississippi	(NA)	(NA)	(NA)	(NA)	167	(NA)	661	10
Montana	(NA)	(NA)	(NA)	(NA)	260	(NA)	898	5
Nebraska	221	-	899	15	15	(NA)	(NA)	(NA)
New Mexico	(NA)	(NA)	(NA)	(NA)	715	(NA)	17,414	873
New York	687	256	17,260	990	(NA)	(NA)	318	(NA)
North Dakota	285	-	586	60	328	(NA)	443	57
Ohio	65	-	1,214	(NA)	46	(NA)	970	(NA)
Oklahoma	734	37	16,151	657	556	(NA)	13,558	694
Pennsylvania	22	-	1,720	(NA)	10	(NA)	1,775	(NA)
Texas	2,710	618	23,192	2,575	4,944	(NA)	43,527	2,653
Utah	249	44	1,510	( <sup>3</sup> )	271	(NA)	4,579	( <sup>3</sup> )
Virginia	(NA)	-	138	(NA)	(NA)	(NA)	1,752	(NA)
West Virginia	31	42	2,207	86	8	(NA)	2,678	106
Wyoming	794	-	9,944	4812	489	(NA)	18,398	4947
Federal offshore	2,805	49	31,433	619	4,835	(NA)	27,036	1078

- Represents or rounds to zero. NA Not available. Z Less than 500,000 barrels. <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, 2001 Annual Report*, December 2002.

## No. 883. World Daily Crude Oil Production by Major Producing Country: 1980 to 2001

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

Country	1980	1990	1995	1996	1997	1998	1999	2000	2001
<b>World, total</b> <sup>1</sup>	<b>59,600</b>	<b>60,566</b>	<b>62,335</b>	<b>63,711</b>	<b>65,690</b>	<b>66,921</b>	<b>65,848</b>	<b>68,342</b>	<b>68,057</b>
Algeria	1,106	1,175	1,202	1,242	1,277	1,246	1,202	1,254	1,270
Angola	150	475	646	709	714	735	745	746	742
Argentina	491	483	715	756	834	847	802	761	781
Australia	380	575	562	570	588	544	539	722	657
Brazil	182	631	695	795	841	969	1,132	1,269	1,295
Canada	1,435	1,553	1,805	1,837	1,922	1,981	1,907	1,977	2,029
China	2,114	2,774	2,990	3,131	3,200	3,198	3,195	3,249	3,300
Colombia	126	440	585	623	652	733	816	691	602
Egypt	595	873	920	922	856	834	852	748	698
India	182	660	703	651	675	661	653	646	642
Indonesia	1,577	1,462	1,503	1,547	1,520	1,518	1,472	1,423	1,369
Iran	1,662	3,088	3,643	3,686	3,664	3,634	3,557	3,696	3,724
Iraq	2,514	2,040	560	579	1,155	2,150	2,508	2,571	2,432
Kazakhstan	(X)	(X)	362	403	466	476	530	610	704
Kuwait	1,656	1,175	2,057	2,062	2,007	2,085	1,898	2,079	1,998
Libya	1,787	1,375	1,390	1,401	1,446	1,390	1,319	1,410	1,367
Malaysia	283	619	682	695	700	720	693	690	659
Mexico	1,936	2,553	2,618	2,855	3,023	3,070	2,906	3,012	3,157
Nigeria	2,055	1,810	1,993	2,001	2,132	2,153	2,130	2,165	2,256
Norway	528	1,704	2,768	3,104	3,143	3,017	3,018	3,197	3,117
Oman	282	685	851	883	904	900	910	970	960
Qatar	472	406	442	510	550	696	665	737	714
Russia	(X)	(X)	5,995	5,850	5,920	5,854	6,079	6,479	7,049
Saudi Arabia	9,900	6,410	8,231	8,218	8,362	8,389	7,833	8,404	8,031
Syria	164	388	575	582	561	553	538	523	518
United Arab Emirates	1,709	2,117	2,233	2,278	2,316	2,345	2,169	2,368	2,276
United Kingdom	1,622	1,820	2,489	2,568	2,518	2,616	2,684	2,275	2,282
<b>United States</b>	<b>8,597</b>	<b>7,355</b>	<b>6,560</b>	<b>6,465</b>	<b>6,452</b>	<b>6,252</b>	<b>5,881</b>	<b>5,822</b>	<b>5,801</b>
Venezuela	2,168	2,137	2,750	2,938	3,280	3,167	2,826	3,155	2,880
Yemen	(X)	193	345	340	362	388	409	440	438

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

Source: U.S. Energy Information Administration, *International Energy Annual, 2001*. See also <<http://tonto.eia.doe.gov/FTP/ROOT/international/021901.pdf>> (issued March 2003).

## No. 884. Liquefied Petroleum Gases—Summary: 1980 to 2002

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

Item	1980	1990	1995	1997	1998	1999	2000	2001	2002
<b>Production</b>	<b>561</b>	<b>638</b>	<b>760</b>	<b>799</b>	<b>775</b>	<b>814</b>	<b>845</b>	<b>813</b>	<b>813</b>
At natural gas plants	441	456	521	547	529	564	587	570	568
At refineries	121	182	234	252	246	250	258	243	245
Imports	79	68	53	62	71	66	79	75	67
Refinery input	85	107	105	96	92	87	87	88	90
Exports	9	14	21	18	15	18	27	16	24
Stocks, Dec. 31	116	98	93	89	115	89	83	121	106

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

## No. 885. Natural Gas Plant Liquids—Production and Value: 1980 to 2002

[Barrels of 42 gallons (576 barrels represents 576,000,000 barrels)]

Item	Unit	1980	1990	1995	1997	1998	1999	2000	2001	2002
Field production <sup>1</sup>	Mil. bbl . . .	576	566	643	663	642	675	699	682	686
Pentanes plus	Mil. bbl . . .	126	112	122	116	113	111	112	112	109
Liquefied petroleum gases	Mil. bbl . . .	441	454	521	547	529	564	587	570	577
Natural gas processed	Tril. cu. ft. . .	15	15	17	17	17	17	17	17	(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*.

## No. 886. Natural Gas—Supply, Consumption, Reserves, and Marketed Production: 1980 to 2000

[182 represents 182,000 wells]

Item	Unit	1980	1990	1994	1995	1996	1997	1998	1999	2000
Producing wells (year-end)	1,000	182	269	292	299	302	311	317	302	306
Production value at wells	Bil. dol.	32.1	31.8	36.5	30.2	43.0	46.1	38.2	43.4	73.6
Avg. per 1,000 cu. ft.	Dollars	1.59	1.71	1.85	1.55	2.17	2.32	1.96	2.19	3.68
Proved reserves <sup>1</sup>	Tril. cu. ft.	199	169	164	165	166	167	164	167	177
<b>Marketed production<sup>2</sup></b>	<b>Bil. cu. ft.</b>	<b>20,180</b>	<b>18,594</b>	<b>19,710</b>	<b>19,506</b>	<b>19,812</b>	<b>19,866</b>	<b>19,961</b>	<b>19,805</b>	<b>20,002</b>
Minus: Extraction losses <sup>3</sup>	Bil. cu. ft.	777	784	889	908	958	964	938	973	1,016
Equals: Dry production	Bil. cu. ft.	19,403	17,810	18,821	18,599	18,854	18,902	19,024	18,832	18,987
Plus: Supplemental gas supplies	Bil. cu. ft.	155	123	111	110	109	103	102	99	86
Equals: Dry production with supplemental gas	Bil. cu. ft.	19,558	17,932	18,932	18,709	18,964	19,005	19,126	18,931	19,073
Plus: Withdrawals from storage	Bil. cu. ft.	1,972	1,986	2,579	3,025	2,981	2,894	2,432	2,808	3,550
Plus: Imports <sup>4</sup>	Bil. cu. ft.	985	1,532	2,624	2,841	2,937	2,994	3,152	3,586	3,782
Plus: Balancing item	Bil. cu. ft.	-640	-152	-416	-230	217	61	-334	-897	-827
Equals: Total supply	Bil. cu. ft.	21,875	21,299	23,719	24,345	25,099	24,954	24,376	24,427	25,577
Minus: Exports	Bil. cu. ft.	49	86	162	154	153	157	159	163	244
Minus: Additions to storage <sup>5</sup>	Bil. cu. ft.	1,949	2,499	2,865	2,610	2,979	2,870	2,961	2,636	2,721
<b>Equals: Consumption, total</b>	<b>Bil. cu. ft.</b>	<b>19,877</b>	<b>18,715</b>	<b>20,708</b>	<b>21,581</b>	<b>21,967</b>	<b>21,959</b>	<b>21,277</b>	<b>21,620</b>	<b>22,547</b>
Lease and plant fuel	Bil. cu. ft.	1,026	1,236	1,124	1,220	1,250	1,203	1,173	1,079	1,130
Pipeline fuel	Bil. cu. ft.	635	660	685	700	711	751	635	645	644
Residential	Bil. cu. ft.	4,752	4,391	4,848	4,850	5,241	4,984	4,520	4,726	4,992
Commercial <sup>6</sup>	Bil. cu. ft.	2,611	2,623	2,895	3,031	3,158	3,215	2,999	3,045	3,218
Industrial	Bil. cu. ft.	7,172	7,018	8,167	8,580	8,870	8,832	8,686	9,006	9,512
Vehicle fuel	Bil. cu. ft.	(NA)	-	2	3	3	4	5	6	8
Electric utilities	Bil. cu. ft.	3,682	2,786	2,987	3,197	2,732	2,968	3,258	3,113	3,043
World production (dry)	Tril. cu. ft.	53.5	73.6	76.9	78.0	81.7	81.5	83.0	84.9	88.0
U.S. production (dry)	Tril. cu. ft.	19.4	17.8	18.8	18.6	18.9	18.9	19.0	18.8	19.0
Percent U.S. of world	Percent	36.3	24.2	24.5	23.9	23.1	23.2	22.9	22.2	21.6

- 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. For 1980 and thereafter, it excludes the 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.

<sup>7</sup> 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*.

## No. 887. World Natural Gas Production by Major Producing Country: 1980 to 2001

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

Country	1980	1990	1995	1996	1997	1998	1999	2000	2001
<b>World, total<sup>1</sup></b>	<b>53.35</b>	<b>73.57</b>	<b>77.96</b>	<b>81.65</b>	<b>81.52</b>	<b>83.03</b>	<b>84.91</b>	<b>88.09</b>	<b>90.72</b>
Russia (X)	(X)	(X)	21.01	21.23	20.17	20.87	20.83	20.63	20.51
<b>United States</b>	<b>19.40</b>	<b>17.81</b>	<b>18.60</b>	<b>18.85</b>	<b>18.90</b>	<b>19.02</b>	<b>18.83</b>	<b>18.99</b>	<b>19.36</b>
Canada	2.76	3.85	5.60	5.71	5.76	5.98	6.26	6.47	6.60
Algeria	0.41	1.79	2.05	2.19	2.43	2.60	2.88	2.94	2.84
Netherlands	3.40	2.69	2.98	3.37	2.99	2.84	2.67	2.56	2.75
Indonesia	0.63	1.53	2.24	2.35	2.37	2.27	2.51	2.36	2.44
Uzbekistan (X)	(X)	(X)	1.70	1.70	1.74	1.94	1.96	1.99	2.23
Iran	0.25	0.84	1.25	1.42	1.66	1.77	2.04	2.13	2.17
Norway	0.92	0.98	1.08	1.45	1.62	1.63	1.76	1.87	1.93
Malaysia	0.06	0.65	1.02	1.23	1.36	1.37	1.42	1.50	1.90
Saudi Arabia	0.33	1.08	1.34	1.46	1.60	1.65	1.63	1.76	1.90
Turkmenistan (X)	(X)	(X)	1.14	1.31	0.90	0.47	0.79	1.64	1.70
United Arab Emirates	0.20	0.78	1.11	1.19	1.28	1.31	1.34	1.36	1.59
Argentina	0.28	0.63	0.88	0.94	0.97	1.04	1.22	1.32	1.31
Mexico	0.90	0.90	0.96	1.06	1.17	1.27	1.29	1.31	1.30
Australia	0.31	0.72	1.03	1.06	1.06	1.10	1.10	1.16	1.17
Qatar	0.18	0.28	0.48	0.48	0.61	0.69	0.78	1.03	1.14
Venezuela	0.52	0.76	0.89	0.96	0.99	1.11	0.95	0.96	1.12
China	0.51	0.51	0.60	0.67	0.75	0.78	0.85	0.96	1.07
Pakistan	0.29	0.48	0.65	0.70	0.70	0.71	0.78	0.86	0.83
India	0.05	0.40	0.63	0.70	0.72	0.76	0.75	0.79	0.80
Germany	0.93	0.72	0.74	0.80	0.79	0.77	0.82	0.78	0.78
Egypt	0.03	0.29	0.44	0.47	0.48	0.49	0.52	0.65	0.75
Thailand (X)	(X)	(X)	0.37	0.43	0.54	0.57	0.63	0.66	0.66
Ukraine	(X)	(X)	0.62	0.64	0.64	0.64	0.63	0.64	0.64
Nigeria	0.04	0.13	0.18	0.19	0.21	0.21	0.25	0.44	0.55
Italy	0.44	0.61	0.72	0.71	0.68	0.67	0.62	0.59	0.55
Trinidad and Tobago	0.08	0.18	0.27	0.30	0.33	0.33	0.41	0.49	0.54
Romania	1.20	1.00	0.68	0.63	0.61	0.52	0.50	0.48	0.51
Oman	0.03	0.10	0.15	0.15	0.18	0.25	0.20	0.32	0.49
Brunei	0.32	0.32	0.33	0.33	0.32	0.32	0.33	0.35	0.37
Kazakhstan (X)	(X)	(X)	0.17	0.15	0.22	0.19	0.16	0.31	0.36
Bangladesh	0.05	0.16	0.26	0.27	0.27	0.29	0.32	0.34	0.35
Kuwait	0.24	0.19	0.21	0.33	0.33	0.32	0.31	0.34	0.34
Bahrain	0.10	0.21	0.23	0.23	0.28	0.29	0.30	0.30	0.31

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

Source: U. S. Energy Information Administration, *International Energy Annual*, 2001. See also <<http://tonto.eia.doe.gov/FTP/ROOT/international/021901.pdf>> (issued March 2003).

## No. 888. U.S. Coal Supply, Disposition, and Prices: 1997 to 2002

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

Item	1997	1998	1999	2000	2001	2002
<b>United States, total</b> . . . . .	1,089.9	1,117.5	1,100.4	1,073.6	1,127.7	1,093.8
Consumption by sector:						
Total . . . . .	1,030.1	1,038.3	1,045.3	1,084.1	1,060.8	1,071.9
Electric power . . . . .	922.0	937.8	946.8	985.8	965.1	981.9
Electric utilities . . . . .	900.4	910.9	894.1	(NA)	(NA)	(NA)
Other power producers <sup>1</sup> . . . . .	21.6	26.9	52.7	(NA)	(NA)	(NA)
Coke plants . . . . .	30.2	28.2	28.1	28.9	26.1	22.5
Other industrial plants . . . . .	71.5	67.4	65.5	65.2	65.3	63.1
Residential/commercial users . . . . .	6.5	4.9	4.9	4.1	4.4	4.4
Year-end coal stocks:						
Total . . . . .	140.4	164.6	183.0	140.0	181.9	181.9
Electric power . . . . .	98.8	120.5	136.0	102.0	138.5	143.0
Coke plants . . . . .	2.0	2.0	1.9	1.5	1.5	1.2
Other industrial plants . . . . .	5.6	5.5	5.6	4.6	6.0	5.8
Producers/distributors . . . . .	34.0	36.5	39.5	31.9	35.9	32.0
U.S. coal trade:						
Net exports . . . . .	76.1	69.3	49.4	46.0	28.9	22.7
Exports . . . . .	83.5	78.0	58.5	58.5	48.7	39.6
Steam coal . . . . .	31.4	31.0	28.3	25.7	23.3	18.1
Metallurgical coal . . . . .	52.2	47.1	32.1	32.8	25.4	21.5
Imports . . . . .	7.5	8.7	9.1	12.5	19.8	16.9
Average delivered price (dollars per short ton):						
Electric utilities . . . . .	26.16	25.64	24.72	24.28	24.68	24.84
Coke plants . . . . .	47.61	46.06	45.85	44.38	46.42	51.27
Other industrial plants . . . . .	32.41	32.26	31.59	31.46	32.26	33.39
Average free alongside ship (f.a.s.):						
Exports . . . . .	40.55	38.89	36.50	34.90	36.97	40.44
Steam coal . . . . .	32.42	30.24	29.91	29.67	31.88	34.51
Metallurgical coal . . . . .	45.45	44.58	41.91	38.99	41.63	45.41
Imports . . . . .	34.32	32.18	30.77	30.10	34.00	35.51

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: 2002 Review*, annual. See also <<http://tonto.eia.doe.gov/FTP/PROOT/coal/coalpubs.htm>>.

## No. 889. Coal and Coke—Summary: 1980 to 2000

[830 short tons represents 830,000,000 short tons. Includes coal consumed at mines. Demonstrated coal reserve base for United States on Jan. 1, 1997, was an estimated 508 billion tons. 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	1996	1997	1998	1999	2000
<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>1,064</b>	<b>1,090</b>	<b>1,118</b>	<b>1,100</b>	<b>1,074</b>
Value . . . . .	<b>Bil. dol. . . . .</b>	20.45	22.39	19.45	19.68	19.77	19.75	19.42	18.02
Anthracite production . . . . .	Mil. sh. tons . . . . .	6.1	3.5	4.7	4.8	4.7	5.3	4.8	4.6
Bituminous coal and lignite . . . . .	Mil. sh. tons . . . . .	824	1,026	1,028	1,059	1,085	1,112	1,096	1,069
Underground . . . . .	Mil. sh. tons . . . . .	337	425	396	410	421	417	392	374
Surface . . . . .	Mil. sh. tons . . . . .	487	605	637	654	669	700	709	700
Exports . . . . .	Mil. sh. tons . . . . .	92	106	89	90	84	78	59	59
Imports . . . . .	Mil. sh. tons . . . . .	1	3	9	8	8	9	9	13
Consumption <sup>2</sup> . . . . .	Mil. sh. tons . . . . .	703	896	941	1,006	1,030	1,038	1,045	1,081
Electric power utilities . . . . .	Mil. sh. tons . . . . .	569	774	829	875	900	911	894	859
Industrial . . . . .	Mil. sh. tons . . . . .	126	115	106	103	102	96	94	94
Number of mines . . . . .	Number . . . . .	5,598	3,243	2,104	1,903	1,828	1,726	1,591	707
Daily employment . . . . .	1,000 . . . . .	225	131	90	83	82	85	79	72
Production, by state:									
Alabama . . . . .	Mil. sh. tons . . . . .	26	29	25	25	24	23	20	19
Illinois . . . . .	Mil. sh. tons . . . . .	63	60	48	47	41	40	40	33
Indiana . . . . .	Mil. sh. tons . . . . .	31	36	26	30	35	37	34	28
Kentucky . . . . .	Mil. sh. tons . . . . .	150	173	154	152	156	150	140	131
Montana . . . . .	Mil. sh. tons . . . . .	30	38	39	38	41	43	41	38
Ohio . . . . .	Mil. sh. tons . . . . .	39	35	26	29	29	28	22	22
Pennsylvania . . . . .	Mil. sh. tons . . . . .	93	71	62	68	76	81	76	75
Virginia . . . . .	Mil. sh. tons . . . . .	41	47	34	36	36	34	32	33
West Virginia . . . . .	Mil. sh. tons . . . . .	122	169	163	170	174	171	158	158
Wyoming . . . . .	Mil. sh. tons . . . . .	95	184	264	278	282	314	337	339
Other states . . . . .	Mil. sh. tons . . . . .	140	187	192	192	195	196	200	197
World production . . . . .	Mil. sh. tons . . . . .	4,200	5,386	5,218	5,265	5,278	5,169	5,053	5,059
Percent U.S. of world . . . . .	Percent . . . . .	19.8	19.1	19.8	20.2	20.6	21.6	21.8	21.2
<b>COKE</b>									
Coke production <sup>3</sup> . . . . .	Mil. sh. tons . . . . .	46.13	27.62	23.75	23.08	22.12	20.04	20.02	20.81
Imports . . . . .	Mil. sh. tons . . . . .	0.66	0.77	3.82	2.54	3.14	3.83	3.22	3.78
Exports . . . . .	Mil. sh. tons . . . . .	2.07	0.57	1.36	1.62	1.27	1.13	0.90	1.15
Consumption . . . . .	Mil. sh. tons . . . . .	41.28	27.82	25.85	23.97	24.02	23.11	22.42	23.24

<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 *Quarterly Coal Report*. See also <<http://ftp.eia.doe.gov/pub/pdf/coal/nuclear/05842000.pdf>> (issued June 2002).

## No. 890. World Coal Production by Major Producing Country: 1980 to 2001

[In millions of short tons (4,188.6 represents 4,188,600,000)]

Country	1980	1990	1995	1996	1997	1998	1999	2000	2001
<b>World, total . . . . .</b>	<b>4,188.6</b>	<b>5,440.9</b>	<b>5,156.89</b>	<b>5,193.46</b>	<b>5,196.23</b>	<b>5,093.28</b>	<b>4,987.93</b>	<b>4,995.16</b>	<b>5,266.01</b>
China . . . . .	683.6	1,190.4	1,536.97	1,545.25	1,507.13	1,428.99	1,364.94	1,314.43	1,459.02
<b>United States . . . . .</b>	<b>829.7</b>	<b>1,029.1</b>	<b>1,032.97</b>	<b>1,063.86</b>	<b>1,089.93</b>	<b>1,117.53</b>	<b>1,100.43</b>	<b>1,073.61</b>	<b>1,121.33</b>
India . . . . .	125.9	233.4	297.77	314.85	326.06	322.17	326.83	342.65	338.62
Australia . . . . .	116.1	225.8	266.55	272.44	292.08	316.75	320.77	338.19	356.85
South Africa . . . . .	132.0	247.6	227.30	227.48	244.32	246.92	242.99	248.43	250.28
Russia . . . . .	(X)	(X)	296.35	304.04	257.89	241.03	259.22	279.18	299.50
Germany <sup>1</sup> . . . . .	532.2	513.7	274.15	264.99	251.74	233.00	225.97	225.26	225.66
Poland . . . . .	253.5	237.1	220.17	193.08	221.52	196.17	187.57	178.27	178.94
Korea, North . . . . .	39.7	99.2	106.92	105.71	104.72	99.48	100.48	105.68	105.27
Ukraine . . . . .	(X)	(X)	94.60	83.47	84.82	85.07	90.86	90.24	90.06
Kazakhstan . . . . .	(X)	(X)	91.88	84.69	80.08	76.91	64.35	79.65	88.52
Canada . . . . .	40.4	75.4	82.57	83.47	86.82	82.90	79.91	76.24	77.68
Turkey . . . . .	20.2	52.6	60.71	62.13	66.06	74.28	73.90	69.59	72.67
Indonesia . . . . .	0.6	11.6	45.66	55.48	60.20	66.49	79.37	84.44	99.54
Czech Republic . . . . .	(X)	(X)	81.94	84.02	81.04	74.44	65.18	71.83	72.87
Greece . . . . .	25.6	57.2	63.56	65.90	64.86	67.11	68.40	70.42	74.49
Colombia . . . . .	4.5	22.6	28.37	33.14	35.93	37.20	36.11	42.04	47.89
Yugoslavia . . . . .	(X)	(X)	44.10	42.38	44.82	48.59	36.72	37.85	39.46
United Kingdom . . . . .	143.8	104.1	52.48	53.50	51.79	44.14	39.86	33.73	34.74
Romania . . . . .	38.8	42.1	45.33	46.15	37.27	28.91	25.22	32.28	33.08
Bulgaria . . . . .	39.6	39.0	33.89	33.72	32.75	34.14	31.22	32.69	31.47
Spain . . . . .	40.9	39.6	31.28	30.75	29.16	28.74	26.77	25.87	25.00
Thailand . . . . .	1.6	13.7	20.31	23.92	25.84	22.04	20.13	19.61	21.61
Hungary . . . . .	28.3	19.7	16.08	16.74	17.18	17.05	16.82	16.16	15.95
Mexico . . . . .	4.0	8.6	10.26	11.14	11.48	12.38	11.38	12.50	12.81

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, 2001*. See also <<http://tonto.eia.doe.gov/FTP/ROOT/international/021901.pdf>> (issued March 2003).

## No. 891. Demonstrated Coal Reserves by Type of Coal and Major Producing State: 2001

[In millions of short tons. 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. For more information on the classification of coal resources and related terminology, see report cited below.]

State	Total reserves	Type of coal				Method of mining	
		Anthracite	Bituminous	Sub-bituminous	Lignite	Under ground	Surface
<b>United States . . . . .</b>	<b>501,059</b>	<b>7,465</b>	<b>266,629</b>	<b>183,160</b>	<b>43,805</b>	<b>338,525</b>	<b>162,534</b>
Alabama . . . . .	4,389	-	3,306	-	1,083	1,157	3,232
Alaska . . . . .	6,118	-	698	5,407	14	5,423	695
Colorado . . . . .	16,552	26	8,550	3,787	4,190	11,780	4,772
Illinois . . . . .	104,773	-	104,773	-	-	88,188	16,586
Indiana . . . . .	9,738	-	9,738	-	-	8,831	907
Iowa . . . . .	2,189	-	2,189	-	-	1,732	457
Kentucky . . . . .	31,053	-	31,053	-	-	17,797	13,257
Kentucky, Eastern . . . . .	11,326	-	11,326	-	-	1,727	9,598
Kentucky, Western . . . . .	19,728	-	19,728	-	-	16,069	3,658
Missouri . . . . .	5,992	-	5,992	-	-	1,479	4,513
Montana . . . . .	119,472	-	1,385	102,329	15,758	70,958	48,514
New Mexico . . . . .	12,324	2	3,658	8,664	-	6,203	6,121
North Dakota . . . . .	9,243	-	-	-	9,243	-	9,243
Ohio . . . . .	23,495	-	23,495	-	-	17,679	5,816
Oklahoma . . . . .	1,566	-	1,566	-	-	1,235	331
Pennsylvania . . . . .	28,101	7,208	20,893	-	-	23,769	4,332
Anthracite . . . . .	7,208	7,208	-	-	-	3,847	3,361
Bituminous . . . . .	20,893	-	20,893	-	-	19,922	971
Texas . . . . .	12,672	-	-	-	12,672	-	12,672
Utah . . . . .	5,639	-	5,638	1	-	5,371	268
Virginia . . . . .	1,960	125	1,835	-	-	1,332	628
Washington . . . . .	1,368	-	304	1,056	8	1,332	36
West Virginia . . . . .	34,244	-	34,244	-	-	30,097	4,147
Wyoming . . . . .	66,219	-	4,320	61,898	-	42,501	23,718
East of the MS River . . . . .	239,379	7,333	230,962	-	1,083	190,116	49,262
West of the MS River . . . . .	261,680	132	35,666	183,160	42,722	148,409	113,271

- Represents or rounds to zero.

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

**No. 892. Uranium Concentrate (U<sub>3</sub>O<sub>8</sub>) Industry—Summary: 1990 to 2002**

[See also Table 920 in Section 19]

Item	Unit	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Exploration and development, surface drilling . . . . .	Mil. ft. . . . .	1.7	1.8	1.1	1.1	0.7	1.3	3.0	4.9	4.6	2.5	1.0	0.7	(D)
Expenditures . . . . .	Mil. dol. . . . .	17.1	17.8	14.5	11.3	3.7	6.0	10.1	30.4	21.7	9.0	6.7	4.8	0.4
Number of mines operated . . . .	Number . . . . .	39	15	17	12	12	12	13	14	15	14	10	7	6
Underground . . . . .	Number . . . . .	27	6	4	-	-	-	1	1	4	3	1	-	-
Openpit . . . . .	Number . . . . .	2	2	1	-	-	-	-	-	-	-	-	-	-
In situ leaching . . . . .	Number . . . . .	7	6	4	5	5	5	6	7	6	6	4	3	3
Other sources . . . . .	Number . . . . .	3	1	8	7	7	7	6	6	5	5	5	4	3
Mine production . . . . .	1,000 pounds . .	5,876	5,182	986	2,050	2,526	3,528	4,705	4,710	4,782	4,548	3,123	2,647	2,405
Underground . . . . .	1,000 pounds . .	(D)	(D)	(D)	-	-	-	(D)	(D)	(D)	(D)	(D)	-	-
Openpit . . . . .	1,000 pounds . .	1,881	2,528	(D)	-	-	-	-	-	-	-	-	-	-
In situ leaching . . . . .	1,000 pounds . .	(D)	(D)	(D)	(D)	2,448	3,372	4,379	4,084	3,721	3,830	2,995	(D)	(D)
Other sources . . . . .	1,000 pounds . .	3,995	2,654	986	2,050	78	156	326	626	1,062	718	128	(D)	(D)
Uranium concentrate production <sup>1</sup> . . . . .	1,000 pounds . .	8,886	7,952	5,645	3,063	3,352	6,043	6,321	5,643	4,705	4,611	3,958	2,639	2,344
Concentrate shipments from mills and plants . . . . .	1,000 pounds . .	12,957	8,437	6,853	3,374	6,319	5,500	5,982	5,817	4,863	5,527	3,187	2,203	3,810
Employment . . . . .	Person-years . .	1,335	1,016	682	871	980	1,107	1,118	1,097	1,120	848	627	423	426

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. <sup>1</sup> U<sub>3</sub>O<sub>8</sub>.Source: U.S. Department of Energy, *Uranium Industry*, annual. See also <<http://www.eia.doe.gov/cneaf/nuclear/uia/uia.pdf>> (released May 2003) and <<http://www.eia.doe.gov/cneaf/nuclear/uia/contents.html>> (released May 2003).