

4

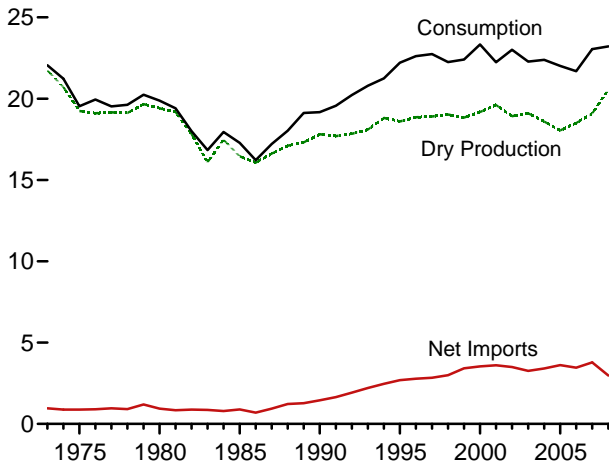
Natural Gas



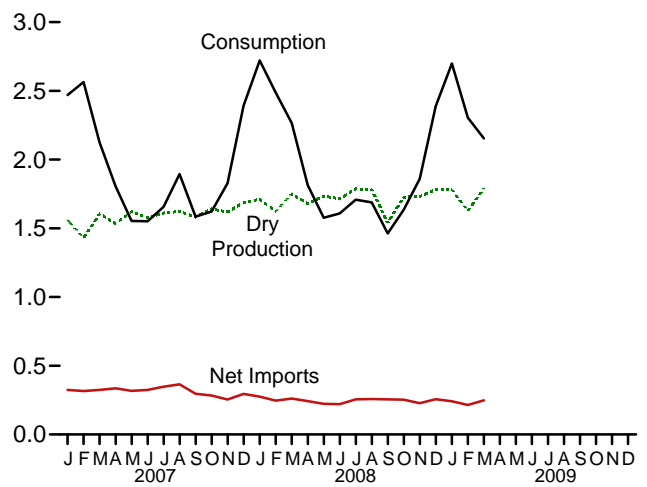
Natural gas pipeline, El Paso County, Texas. Source: U.S. Department of Energy.

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

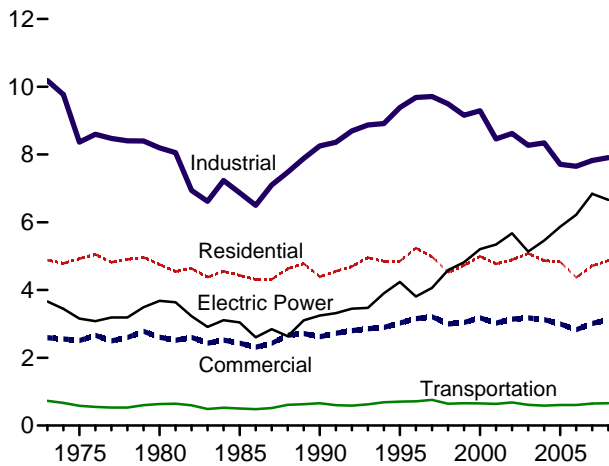
Overview, 1973-2008



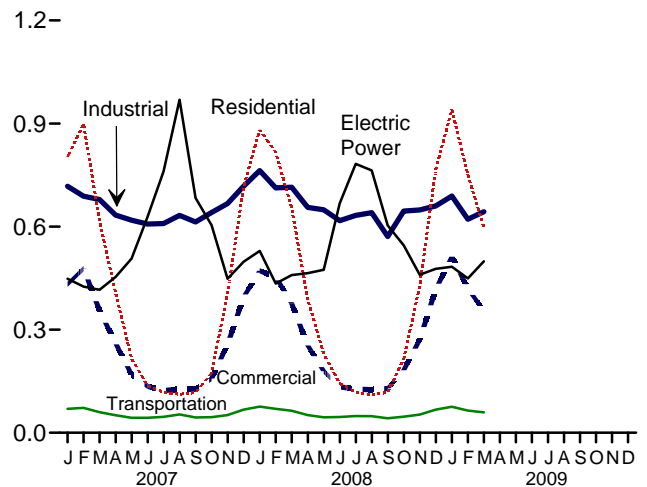
Overview, Monthly



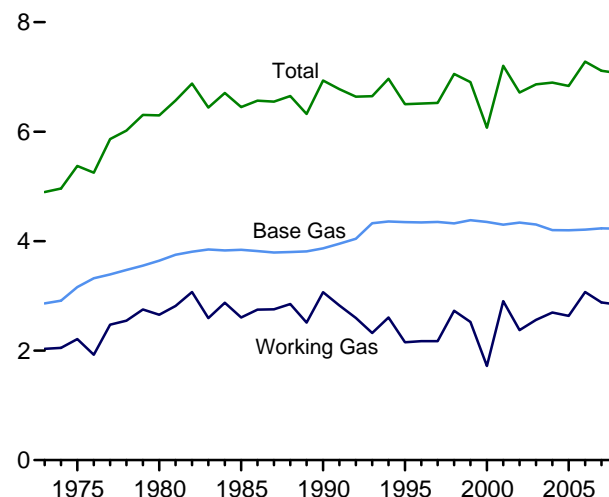
Consumption by Sector, 1973-2008



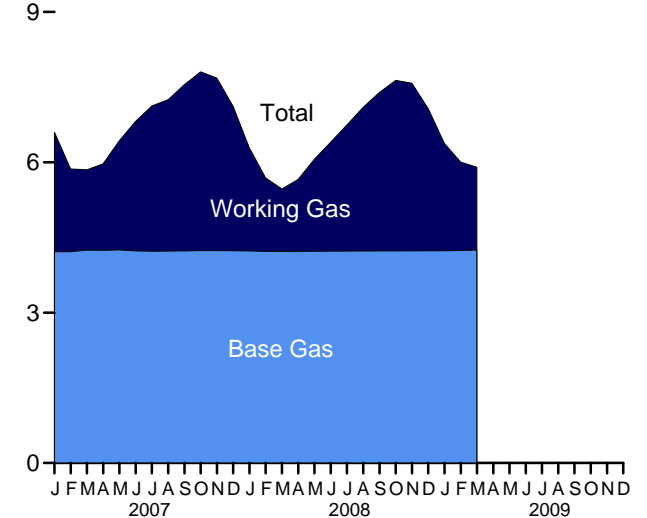
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2008



Underground Storage, End of Month



Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.
Sources: Tables 4.1, 4.3, and 4.4.

Table 4.1 Natural Gas Overview
(Billion Cubic Feet)

	Gross Withdrawals ^a	Marketed Production (Wet) ^b	Extraction Loss ^c	Dry Gas Production ^d	Supplemental Gaseous Fuels ^e	Trade			Net Storage Withdrawals ^f	Balancing Item ^g	Consumption ^h
						Imports	Exports	Net Imports			
1973 Total	24,067	22,648	917	21,731	NA	1,033	77	956	-442	-196	22,049
1975 Total	21,104	20,109	872	19,236	NA	953	73	880	-344	-235	19,538
1980 Total	21,870	20,180	777	19,403	155	985	49	936	23	-640	19,877
1985 Total	19,607	17,270	816	16,454	126	950	55	894	235	-428	17,281
1990 Total	21,523	18,594	784	17,810	123	1,532	86	1,447	-513	307	19,174
1995 Total	23,744	19,506	908	18,599	110	2,841	154	2,687	415	396	22,207
1996 Total	24,114	19,812	958	18,854	109	2,937	153	2,784	2	860	22,610
1997 Total	24,213	19,866	964	18,902	103	2,994	157	2,837	24	871	22,737
1998 Total	24,108	19,961	938	19,024	102	3,152	159	2,993	-530	657	22,246
1999 Total	23,823	19,805	973	18,832	98	3,586	163	3,422	172	-119	22,405
2000 Total	24,174	20,198	1,016	19,182	90	3,782	244	3,538	829	-305	23,333
2001 Total	24,501	20,570	954	19,616	86	3,977	373	3,604	-1,166	99	22,239
2002 Total	23,941	19,885	957	18,928	68	4,015	516	3,499	468	44	23,007
2003 Total	24,119	19,974	876	19,099	68	3,944	680	3,264	-197	44	22,277
2004 Total	23,970	19,517	927	18,591	60	4,259	854	3,404	-114	448	22,389
2005 Total	23,457	18,927	876	18,051	64	4,341	729	3,612	52	232	22,011
2006 Total	23,535	19,410	906	18,504	66	4,186	724	3,462	-436	89	21,685
2007											
January	2,034	1,637	76	1,561	6	393	69	324	698	-120	2,470
February	1,870	1,498	70	1,429	5	373	57	316	748	65	2,564
March	2,084	1,684	78	1,606	6	402	77	325	56	133	2,125
April	1,984	1,609	75	1,534	5	387	51	336	-125	56	1,806
May	2,053	1,700	79	1,621	4	380	62	318	-470	81	1,554
June	2,017	1,654	77	1,577	5	381	57	324	-399	44	1,552
July	2,050	1,690	79	1,611	5	419	71	348	-322	14	1,656
August	2,074	1,701	79	1,622	5	427	62	365	-133	35	1,894
September	2,034	1,659	77	1,582	5	361	65	296	-306	8	1,585
October	2,118	1,720	80	1,640	5	347	64	284	-263	-44	1,622
November	2,094	1,697	79	1,619	6	341	86	254	127	-177	1,828
December	2,179	1,770	82	1,688	4	397	101	295	582	-178	2,392
Total	24,591	20,019	930	19,089	63	4,608	822	3,785	193	-83	23,047
2008											
January	2,198	E 1,785	75	E 1,711	2	388	113	275	824	-91	2,721
February	2,079	E 1,696	72	E 1,624	4	349	103	246	593	20	2,487
March	2,243	E 1,828	78	E 1,750	5	366	105	261	219	31	2,266
April	2,133	E 1,756	76	E 1,679	5	321	79	243	-190	78	R 1,815
May	2,188	E 1,814	80	E 1,734	4	296	73	223	-402	R 18	1,576
June	2,145	E 1,788	73	E 1,715	5	286	65	220	-339	7	1,608
July	2,218	E 1,864	77	E 1,787	4	322	66	256	-342	3	1,709
August	2,187	E 1,859	77	E 1,781	5	328	70	258	-350	-6	1,689
September	1,966	E 1,601	62	E 1,540	5	313	58	255	-300	-37	1,463
October	2,202	E 1,801	74	E 1,727	5	323	69	253	-242	-107	1,635
November	2,212	E 1,802	72	E 1,730	5	322	95	228	57	-161	1,859
December	2,261	E 1,849	66	E 1,783	6	368	110	257	505	-163	2,388
Total	26,032	E 21,442	881	E 20,561	55	3,981	1,006	2,975	32	-408	23,215
2009											
January	2,251	E 1,856	74	E 1,782	6	358	116	242	698	-29	2,700
February	R 2,073	RE 1,696	68	RE 1,627	5	R 322	R 107	R 215	371	R 85	R 2,304
March	2,282	E 1,868	78	E 1,790	6	E 335	E 87	E 248	98	12	2,154
3-Month Total	6,606	E 5,419	220	E 5,199	18	E 1,015	E 310	E 705	1,167	68	7,158
2008 3-Month Total	6,521	E 5,309	224	E 5,085	11	1,103	321	782	1,636	-40	7,474
2007 3-Month Total	5,988	4,820	224	4,596	18	1,168	203	965	1,502	78	7,159

^a Gas withdrawn from natural gas and crude oil wells; excludes lease condensate.

^b Gross withdrawals minus repressuring, nonhydrocarbon gases removed, and vented and flared. See Note 1, "Natural Gas Production," at end of section.

^c See Note 2, "Natural Gas Extraction Loss," at end of section.

^d Marketed production (wet) minus extraction loss.

^e See Note 3, "Supplemental Gaseous Fuels," at end of section.

^f Net withdrawals from underground storage. For 1980-2007, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 4, "Natural Gas Storage," at end of section.

^g See Note 5, "Natural Gas Balancing Item," at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

^h See Note 6, "Natural Gas Consumption," at end of section.

ⁱ May include unknown quantities of nonhydrocarbon gases.

^j For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector" on Table 4.3. See Note 7, "Natural Gas Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. NA=Not available.

Notes: • Totals may not equal sum of components due to independent rounding.

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: See <http://www.eia.doe.gov/emeu/mer/natgas.html> for all available data beginning in 1973.

Sources: • **Imports and Exports:** Table 4.2. • **Consumption:** Table 4.3.

• **Balancing Item:** Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals. • **All Other Data:** 1973-2003—Energy Information Administration (EIA), *Natural Gas Annual*, annual reports. 2004 forward—EIA, *Natural Gas Monthly*, May 2009, Table 1.

Table 4.2 Natural Gas Trade by Country
(Billion Cubic Feet)

	Imports										Exports			
	Algeria ^a	Canada ^b	Egypt ^a	Mexico ^b	Nigeria ^a	Oman ^a	Qatar ^a	Trinidad and Tobago ^a	Other ^{a,c}	Total	Canada ^b	Japan ^a	Mexico ^b	Total
1973 Total	3	1,028	0	2	0	0	0	0	0	1,033	15	48	14	77
1975 Total	5	948	0	0	0	0	0	0	0	953	10	53	9	73
1980 Total	86	797	0	102	0	0	0	0	0	985	(s)	45	4	49
1985 Total	24	926	0	0	0	0	0	0	0	950	(s)	53	2	55
1990 Total	84	1,448	0	0	0	0	0	0	0	1,532	17	53	16	86
1995 Total	18	2,816	0	7	0	0	0	0	0	2,841	28	65	61	154
1996 Total	35	2,883	0	14	0	0	0	0	5	2,937	52	68	34	153
1997 Total	66	2,899	0	17	0	0	0	0	12	2,994	56	62	38	157
1998 Total	69	3,052	0	15	0	0	0	0	17	3,152	40	66	53	159
1999 Total	76	3,368	0	55	0	0	20	51	17	3,586	39	64	61	163
2000 Total	47	3,544	0	12	13	10	46	99	11	3,782	73	66	106	244
2001 Total	65	3,729	0	10	38	12	23	98	2	3,977	167	66	141	373
2002 Total	27	3,785	0	2	8	3	35	151	5	4,015	189	63	263	516
2003 Total	53	3,437	0	0	50	9	14	378	3	3,944	271	66	343	680
2004 Total	120	3,607	0	0	12	9	12	462	36	4,259	395	62	397	854
2005 Total	97	3,700	73	9	8	2	3	439	9	4,341	358	65	305	729
2006 Total	17	3,590	120	13	57	0	0	389	0	4,186	341	61	322	724
2007 January	3	336	9	4	5	0	0	37	0	393	41	5	24	69
February	0	321	6	8	6	0	0	33	0	373	34	5	17	57
March	9	309	15	6	9	0	0	54	0	402	53	5	19	77
April	24	279	14	9	9	0	0	51	0	387	32	4	15	51
May	24	283	15	3	15	0	3	38	0	380	35	4	24	62
June	12	291	15	4	20	0	6	30	3	381	28	3	26	57
July	0	315	12	5	12	0	3	62	9	419	38	4	29	71
August	3	335	12	4	15	0	6	46	6	427	28	4	30	62
September	3	318	12	2	3	0	0	24	0	361	33	4	28	65
October	0	314	3	2	0	0	0	29	0	347	31	2	29	^d 64
November	0	311	3	3	0	0	0	24	0	341	58	3	26	86
December	0	372	0	4	0	0	0	21	0	397	72	4	25	101
Total	77	3,783	115	54	95	0	18	448	18	4,608	482	47	292	^d 822
2008 January	0	359	3	1	0	0	0	25	0	388	70	3	40	113
February	0	325	0	0	0	0	0	21	3	349	63	3	37	103
March	0	341	0	1	0	0	0	21	3	366	70	4	31	105
April	0	289	3	(s)	3	0	0	26	0	321	47	4	28	79
May	0	260	3	4	0	0	0	25	3	296	43	5	25	73
June	0	250	6	3	3	0	3	21	0	286	30	5	30	65
July	0	287	6	4	0	0	0	25	0	322	31	5	30	66
August	0	288	3	4	3	0	0	24	5	328	29	6	35	70
September	0	274	9	7	3	0	0	20	0	313	27	4	27	58
October	0	289	3	6	0	0	0	24	0	323	37	4	28	69
November	0	294	9	6	0	0	0	14	0	322	65	4	26	95
December	0	330	9	7	0	0	0	19	3	368	79	4	28	110
Total	0	3,586	55	43	12	0	3	264	17	3,981	590	50	365	1,006
2009 January	0	325	5	6	0	0	0	19	3	358	86	3	28	116
February	0	^R 294	6	(s)	0	0	0	16	6	^R 322	^R 78	3	^R 25	^R 107
March	0	^E 304	12	^E (s)	0	0	0	17	3	^E 335	^E 58	4	^E 25	^E 87
3-Month Total	0	^E 923	23	^E 6	0	0	0	52	12	^E 1,015	^E 222	10	^E 78	^E 310
2008 3-Month Total	0	1,024	3	3	0	0	0	67	6	1,103	203	10	108	321
2007 3-Month Total	11	965	29	18	20	0	0	124	0	1,168	128	15	60	203

^a As liquefied natural gas.

^b By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 8, "Natural Gas Imports and Exports," at end of section.

^c Australia in 1997-2001 and 2004; Brunei in 2002; Equatorial Guinea in 2007; Indonesia in 1986 and 2000; Malaysia in 1999 and 2002-2005; Norway in 2008 and 2009; United Arab Emirates in 1996-2000; and Other (unassigned) in 2004.

^d Includes 2 billion cubic feet to Russia.

R=Revised. E=Estimate. (s)=Less than 500 million cubic feet.

Notes: • See Note 8, "Natural Gas Imports and Exports," at end of section. •

Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: See <http://www.eia.doe.gov/emeu/mer/natgas.html> for all available data beginning in 1973.

Sources: • **1973-1987:** Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1988-2006:** EIA, *Natural Gas Annual*, annual reports. • **2007 forward:** EIA, *Natural Gas Monthly*, May 2009, Table 4; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Table 4.3 Natural Gas Consumption by Sector
(Billion Cubic Feet)

	End-Use Sectors										Electric Power Sector ^{f,9}	Total
	Residential	Commercial ^a	Lease and Plant Fuel	Industrial			Total	Transportation				
				Other Industrial				Pipelines ^d and Distribution ^e	Vehicle Fuel	Total		
				CHP ^b	Non-CHP ^c	Total						
1973 Total	4,879	2,597	1,496	(h)	8,689	8,689	10,185	728	NA	728	3,660	22,049
1975 Total	4,924	2,508	1,396	(h)	6,968	6,968	8,365	583	NA	583	3,158	19,538
1980 Total	4,752	2,611	1,026	(h)	7,172	7,172	8,198	635	NA	635	3,682	19,877
1985 Total	4,433	2,432	966	(h)	5,901	5,901	6,867	504	NA	504	3,044	17,281
1990 Total	4,391	2,623	1,236	1,055	5,963	7,018	8,255	660	(s)	660	3,245	19,174
1995 Total	4,850	3,031	1,220	1,258	6,906	8,164	9,384	700	5	705	4,237	22,207
1996 Total	5,241	3,158	1,250	1,289	7,146	8,435	9,685	711	6	718	3,807	22,610
1997 Total	4,984	3,215	1,203	1,282	7,229	8,511	9,714	751	8	760	4,065	22,737
1998 Total	4,520	2,999	1,173	1,355	6,965	8,320	9,493	635	9	645	4,588	22,246
1999 Total	4,726	3,045	1,079	1,401	6,678	8,079	9,158	645	12	657	4,820	22,405
2000 Total	4,996	3,182	1,151	1,386	6,757	8,142	9,293	642	13	655	5,206	23,333
2001 Total	4,771	3,023	1,119	1,310	6,035	7,344	8,463	625	15	640	5,342	22,239
2002 Total	4,889	3,144	1,113	1,240	6,267	7,507	8,620	667	15	682	5,672	23,007
2003 Total	5,079	3,179	1,122	1,144	6,007	7,150	8,273	591	18	610	5,135	22,277
2004 Total	4,869	3,129	1,098	1,191	6,052	7,243	8,341	566	21	587	5,464	22,389
2005 Total	4,827	2,999	1,112	1,084	5,514	6,597	7,709	584	23	607	5,869	22,011
2006 Total	4,368	2,832	1,142	1,115	5,398	6,512	7,654	584	24	608	6,222	21,685
2007 January	802	432	99	96	523	619	717	68	E 2	70	448	2,470
February	899	478	91	79	518	598	688	70	E 2	72	425	2,564
March	616	355	101	81	496	577	679	58	E 2	60	416	2,125
April	408	261	97	80	457	537	633	49	E 2	51	453	1,806
May	216	169	101	84	434	518	619	41	E 2	44	507	1,554
June	137	135	99	85	424	509	607	41	E 2	43	628	1,552
July	118	123	100	90	418	508	609	44	E 2	46	761	1,656
August	112	127	101	101	431	531	633	51	E 2	53	969	1,894
September	116	128	99	89	425	514	614	42	E 2	44	683	1,585
October	174	158	103	89	448	538	641	43	E 2	45	604	1,622
November	404	257	102	85	480	565	667	49	E 2	51	448	1,828
December	715	395	106	90	521	611	717	65	E 2	67	498	2,392
Total	4,717	3,017	1,199	1,050	5,574	6,625	7,823	623	E 25	648	6,841	23,047
2008 January	881	471	E 107	88	568	656	763	RE 74	E 3	E 76	529	2,721
February	816	454	E 102	79	532	611	713	E 67	E 2	E 70	434	2,487
March	653	376	E 109	81	524	605	714	E 61	E 3	E 64	459	2,266
April	389	254	E 105	74	476	551	656	E 49	E 2	RE 52	464	R 1,815
May	229	179	E 109	79	461	540	649	E 43	E 3	E 45	474	1,576
June	143	134	E 107	76	434	510	617	E 43	E 2	E 46	668	1,608
July	118	127	E 112	84	437	521	633	E 46	E 3	E 49	783	1,709
August	110	126	E 111	85	445	529	641	E 46	E 3	E 48	763	1,689
September	117	129	E 96	68	408	475	571	RE 40	E 2	E 42	603	1,463
October	215	182	E 108	80	457	537	645	E 44	E 3	E 47	546	1,635
November	427	272	E 108	75	466	541	648	E 50	E 2	E 53	460	1,859
December	766	418	E 111	77	473	549	660	E 65	E 3	E 67	477	2,388
Total	4,866	3,122	E 1,284	946	5,680	6,626	7,909	E 627	E 30	RE 658	6,661	23,215
2009 January	940	512	E 111	80	498	578	689	E 73	E 3	E 76	483	2,700
February	750	419	E 102	72	448	520	621	RE 62	E 2	RE 65	449	R 2,304
March	598	355	E 112	80	451	531	643	E 56	E 3	E 59	499	2,154
3-Month Total	2,288	1,286	E 324	233	1,396	1,629	1,953	E 192	E 8	E 200	1,431	7,158
2008 3-Month Total	2,351	1,301	E 318	248	1,624	1,872	2,190	E 202	E 7	E 209	1,423	7,474
2007 3-Month Total	2,317	1,266	291	256	1,537	1,793	2,084	196	E 6	202	1,290	7,159

^a All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Table 7.4c for CHP fuel use.

^b Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants.

^c All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."

^d Natural gas consumed in the operation of pipelines, primarily in compressors.

^e Natural gas used as fuel in the delivery of natural gas to consumers.

^f The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^g Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

^h Included in "Non-CHP."

ⁱ For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector." See Note 7, "Natural Gas Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. NA=Not available. (s)=Less than 500 million cubic feet.

Notes: • Data are for natural gas, plus a small amount of supplemental gaseous fuels. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See <http://www.eia.doe.gov/emeu/mer/natgas.html> for all available data beginning in 1973.

Sources: • Residential, Commercial, Lease and Plant Fuel, Other Industrial Total and Pipelines and Distribution: 1973-2003—Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports. 2004 forward—EIA, *Natural Gas Monthly (NGM)*, May 2009, Table 2. • Industrial CHP: Table 7.4c. • Vehicle Fuel: 1990 and 1991—EIA, *NGA 2000*, (November 2001), Table 95. 1992-1998—"Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). 1999-2003—EIA, *NGA*, annual reports. 2004 forward—EIA, *NGM*, May 2009, Table 2. • Electric Power Sector: Table 7.4b.

Table 4.4 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			Change in Working Gas From Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^a	Volume	Percent	Withdrawals	Injections	Net ^{b,c}
1973 Total	2,864	2,034	4,898	305	17.6	1,533	1,974	-442
1975 Total	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
1980 Total	3,642	2,655	6,297	-99	-3.6	1,910	1,896	14
1985 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
1990 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
1995 Total	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
1996 Total	4,341	2,173	6,513	19	.9	2,911	2,906	6
1997 Total	4,350	2,175	6,525	2	.1	2,824	2,800	24
1998 Total	4,326	2,730	7,056	554	25.5	2,379	2,905	-526
1999 Total	4,383	2,523	6,906	-207	-7.6	2,772	2,598	174
2000 Total	4,352	1,719	6,071	-806	-31.9	3,498	2,684	814
2001 Total	4,301	2,904	7,204	1,185	68.9	2,309	3,464	-1,156
2002 Total	4,340	2,375	6,715	-528	-18.2	3,138	2,670	468
2003 Total	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
2004 Total	4,201	2,696	6,897	133	5.2	3,037	3,150	-113
2005 Total	4,200	2,635	6,835	-61	-2.3	3,057	3,002	55
2006 Total	4,211	3,070	7,281	435	16.5	2,493	2,924	-431
2007 January	4,216	2,383	6,599	12	.5	740	57	683
February	4,216	1,652	5,867	-235	-12.4	782	51	732
March	4,247	1,603	5,850	-89	-5.3	270	219	50
April	4,246	1,723	5,969	-223	-11.4	154	273	-120
May	4,250	2,181	6,432	-129	-5.6	38	498	-460
June	4,231	2,583	6,814	-34	-1.3	47	437	-389
July	4,227	2,896	7,123	117	4.2	84	397	-314
August	4,229	3,021	7,250	52	1.7	167	294	-127
September	4,233	3,315	7,549	-8	-.2	73	371	-298
October	4,238	3,565	7,804	113	3.3	75	332	-257
November	4,238	3,442	7,680	35	1.0	262	141	121
December	4,234	2,879	7,113	-191	-6.2	632	63	569
Total	4,234	2,879	7,113	-191	-6.2	3,325	3,133	192
2008 January	4,232	2,055	6,287	-324	-13.6	892	68	824
February	4,222	1,465	5,687	-184	-11.1	649	56	593
March	4,221	1,247	5,468	-356	-22.2	350	131	219
April	4,223	1,436	5,659	-284	-16.5	106	295	-190
May	4,226	1,836	6,062	-342	-15.7	56	458	-402
June	4,230	2,171	6,401	-409	-15.8	80	420	-339
July	4,228	2,516	6,745	-377	-13.0	88	430	-342
August	4,228	2,867	7,094	-151	-5.0	91	442	-350
September	4,231	3,163	7,394	-153	-4.6	98	398	-300
October	4,235	3,399	7,634	-168	-4.7	91	334	-242
November	4,231	3,346	7,578	-96	-2.8	251	194	57
December	4,229	2,840	7,069	-39	-1.4	615	110	505
Total	4,229	2,840	7,069	-39	-1.4	3,367	3,335	32
2009 January	4,236	2,141	6,377	86	4.2	778	79	698
February	4,242	1,761	6,003	296	20.2	472	100	371
March	4,246	1,656	5,902	408	32.7	296	199	98
3-Month Total	--	--	--	--	--	1,546	378	1,167
2008 3-Month Total	--	--	--	--	--	1,890	255	1,636
2007 3-Month Total	--	--	--	--	--	1,792	327	1,466

^a For total underground storage capacity at the end of each calendar year, see Note 4, "Natural Gas Storage," at end of section.

^b For 1980-2007, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period.

^c Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 4, "Natural Gas Storage," at end of section.

-- =Not applicable.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: See <http://www.eia.doe.gov/emeu/mer/natgas.html> for all available data beginning in 1973.

Sources: • **Storage Activity: 1973-1975**—Energy Information Administration (EIA), *Natural Gas Annual 1994, Volume 2*, Table 9. **1976-1979**—EIA, *Natural Gas*

Production and Consumption 1979, Table 1. **1980-1995**—EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 11. **1996-2003**—EIA, *Natural Gas Monthly (NGM)*, monthly issues. **2004 forward**—EIA, *NGM*, May 2009, Table 6.

• **All Other Data: 1973 and 1974**—American Gas Association (AGA), *Gas Facts, 1972 Data*, Table 57, *Gas Facts, 1973 Data*, Table 57, and *Gas Facts, 1974 Data*, Table 40. **1975 and 1976**—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." **1977 and 1978**—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." **1979-1995**—EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." **1996-2006**—EIA, *NGM*, monthly issues. **2007 forward**—EIA, *NGM*, May 2009, Table 6.

Natural Gas

Note 1. Natural Gas Production.

Annual data—Final annual data are from the Energy Information Administration (EIA) *Natural Gas Annual (NGA)*.

Estimated monthly data—Data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see the EIA *Natural Gas Monthly (NGM)*.

Preliminary monthly data—Monthly data are considered preliminary until after publication of the EIA *NGA*. Preliminary monthly data are gathered from reports to the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary, to a standard 14.73 psi pressure base. Unless there are major changes, data are not revised until after publication of the EIA *NGA*.

Final monthly data—Differences between annual data in the EIA *NGA* and the sum of preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data.

Note 2. Natural Gas Extraction Loss. Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Annual data are from the EIA *NGA*, where they are estimated on the basis of the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a detailed explanation of the calculations used to derive estimated extraction losses, see the EIA *NGA*.

Preliminary monthly data are estimated on the basis of extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Monthly data are revised and considered final after the publication of the EIA *NGA*. Final monthly data are estimated by allocating annual extraction loss data to the months on the basis of total natural gas marketed production data from the EIA *NGA*.

Note 3. Supplemental Gaseous Fuels. Supplemental gaseous fuels are any substances that, introduced into or commingled with natural gas, increase the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Annual data beginning with 1980 are from the EIA, *NGA*.

Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years.

Monthly data are considered preliminary until after the publication of the EIA *NGA*. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Although the total amount of supplemental gaseous fuels consumed is known for 1980 forward, EIA estimates the amount consumed by each energy-use sector. It is assumed that supplemental gaseous fuels are commingled with natural gas consumed by the residential, commercial, other industrial, and electric power sectors, but are not commingled with natural gas used for lease and plant fuel, pipelines and distribution, or vehicle fuel. The estimated consumption of supplemental gaseous fuels by each sector (residential, commercial, other industrial, and electric power) is calculated as that sector's natural gas consumption (see Table 4.3) divided by the sum of natural gas consumption by the residential, commercial, other industrial, and electric power sectors (see Table 4.3), and then multiplied by total supplemental gaseous fuels consumption (see Table 4.1). For estimated sectoral consumption of supplemental gaseous fuels in Btu, the residential, commercial, and other industrial values in cubic feet are multiplied by the "End-Use Sectors" conversion factors (see Table A4), and the electric power values in cubic feet are multiplied by the "Electric Power Sector" conversion factors (see Table A4). Total supplemental gaseous fuels consumption in Btu is calculated as the sum of the Btu values for the sectors.

Note 4. Natural Gas Storage. Natural gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. The difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

Total underground storage capacity at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

1975	... 6,280	1987	... 8,124	1999	... 8,229
1976	... 6,544	1988	... 8,124	2000	... 8,241
1977	... 6,678	1989	... 8,120	2001	... 8,415
1978	... 6,890	1990	... 7,794	2002	... 8,207
1979	... 6,929	1991	... 7,993	2003	... 8,206
1980	... 7,434	1992	... 7,932	2004	... 8,255
1981	... 7,805	1993	... 7,989	2005	... 8,268
1982	... 7,915	1994	... 8,043	2006	... 8,330
1983	... 7,985	1995	... 7,953	2007	... 8,402
1984	... 8,043	1996	... 7,980	2008	... 8,447*
1985	... 8,087	1997	... 8,332		
1986	... 8,145	1998	... 8,179		

* Preliminary

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) Form

FERC-8 (interstate data) and EIA Form EIA-191 (intrastate data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *NGA*.

The final monthly and annual storage and withdrawal data for 1980–2006 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

Note 5. Natural Gas Balancing Item. The balancing item for natural gas represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition. The differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems that vary in scope, format, definitions, and type of respondents.

The increase of 0.2 trillion cubic feet (Tcf) in the “Balancing Item” category in 1983, followed by a decline of 0.5 Tcf in 1984, reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15 through the following December 14) consumption data in conjunction with calendar year supply data. Record cold temperatures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 EIA *NGM*, which was published in July 1985.

Note 6. Natural Gas Consumption. Consumption includes use for lease and plant fuel, pipelines and distribution, vehicle fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

Final data for series other than “Other Industrial CHP” and “Electric Power Sector” are from the EIA *NGA*. Monthly data are considered preliminary until after publication of the EIA *NGA*. For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *NGM*.

Note 7. Natural Gas Consumption, 1989-1992. Prior to 1993, deliveries to nonutility generators were not separately collected from natural gas companies on Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition.” As a result, for 1989 through 1992, those volumes are probably included in both the industrial and electric power sectors and double-counted in total consumption. In 1993, 0.28 trillion cubic feet was reported as delivered to nonutility generators.

Note 8. Natural Gas Imports and Exports. The United States imports natural gas via pipeline from Canada and Mexico and imports liquefied natural gas (LNG) via tanker from Algeria, Australia, Brunei, Egypt, Equatorial Guinea, Indonesia, Malaysia, Nigeria, Norway, Oman, Qatar, Trinidad and Tobago, and the United Arab Emirates. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and exports LNG via tanker to Japan. Also, small amounts of LNG have gone to Mexico since 1998.

Annual and final monthly data are from the annual EIA Form FPC-14, “Annual Report for Importers and Exporters of Natural Gas,” which requires data to be reported by month for the calendar year.

Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas*.