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2001 in review

oil

- 4 Reserves
- 6 Production
- 9 Consumption
- 12 Regional consumption – by product group
- 14 Prices
- 15 Stocks
- 16 Refining
- 18 Trade movements

natural gas

- 20 Reserves
- 22 Production
- 25 Consumption
- 28 Trade movements
- 29 Prices

coal

- 30 Reserves
- 30 Prices
- 32 Production
- 33 Consumption

nuclear energy

- 34 Consumption

hydroelectricity

- 35 Consumption

primary energy

- 37 Consumption
- 38 Consumption by fuel
- 40 Fossil fuel reserves-to-production ratios
- 40 Energy consumption – per capita

appendices

- Conversion factors
- Definitions

The BP Statistical Review of World Energy on bp.com

Our website contains all data found in the printed edition, plus a number of additions, including the historical series from 1965 for many sections. This year we have extra tables for coal, hydroelectricity and nuclear energy. The website provides additional tools and energy topics, including renewable energy, to assist researchers. All data can be downloaded.

foreword

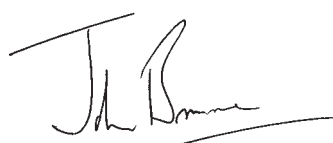
The volatility of energy markets in recent years and the current geopolitical situation have led to a renewed focus on energy policy and the central issue of energy security. An informed debate on this important subject requires a sound understanding of current energy markets and how those markets have evolved over time. This in turn requires ready access to a consistent and objective set of historical energy data.

It is therefore my pleasure to introduce the 51st edition of the BP Statistical Review of World Energy. Throughout its life, the Review has aimed to provide a comprehensive source of high-quality data for analysts, policy makers and all those with an interest in energy matters. Over time, the Review has tracked major changes in the structure of the energy business, the response of the markets to shocks such as the oil crises of the 1970s and the changing pattern of energy trade. I hope that it will continue to inform the ongoing energy debate.

As the data shows, 2001 was a volatile year in the world's energy markets, as a result both of the economic downturn and the horrific events of 11 September. Despite all the volatility, however, markets continued to operate effectively, demonstrating once again the value that flows from the maintenance of diverse sources of supply, particularly for oil and natural gas.

Production of a printed document such as this inevitably places limitations on the volume of data that can be shown. Electronic media impose fewer constraints. We have therefore made a more comprehensive data set available at www.bp.com/centres/energy/, with many of the series going back as far as 1965.

I would like to thank all those who have helped produce this Review and I hope that readers find it both useful and interesting.



The Lord Browne of Madingley
Group Chief Executive
June 2002

bp statistical review of world energy

2001 in review



World consumption of primary energy increased only marginally in 2001, growing by 0.3%. 2001 was the third year since 1998 in which primary energy consumption increased by less than 0.5% year-on-year. The main cause of demand weakness in 2001 was the downturn in the world economy: world economic growth dropped to 1.5%, well below the 10-year (1991-2001) annual trend of 2.7%.

Energy developments

Analysed by fuel, coal and nuclear energy showed some relative strength in 2001, growing by 1.7% and 2.8% respectively, while hydroelectric power fell by a steep 3.7%. Oil and natural gas consumption was broadly flat, possibly reflecting the impact of continued high prices.

Analysed by region, energy demand was especially weak in the Americas and in most of Asia. This reflected economic developments during the year as the sharp deceleration in the US economy also affected that country's main trading partners. North American consumption fell year-on-year for the first time in a decade, declining by a sizeable 2.4%. Consumption in South and Central America decreased by 0.3%, compared with a 10-year annual trend growth of 3.2%. Asia (excluding China) recorded some growth in energy use, at 1.3%, but this was well below the 10-year annual trend rate of 3.4%.

China and the Former Soviet Union bucked the trend of relative demand weakness. Chinese energy use grew by a robust 4.3% as the recent trend of declining coal demand came to an abrupt end. Former Soviet Union consumption rose for a third consecutive year as economic recovery continued.

Oil

Brent oil prices averaged \$24.77 per barrel in 2001. This was lower than the \$28.98 recorded in 2000 but still well above the post-1986 average of around \$19 per barrel. Through a series of quota reductions, OPEC was successful in keeping prices (for the OPEC crude basket) within its \$22-28 target range through late September. However, the market could not sustain prices at these levels following the 11 September terrorist attacks on the

USA, which had a severe negative impact on oil demand. Brent prices hit a low point of \$16.54 per barrel in mid-November and averaged well under \$20 per barrel in the fourth quarter.

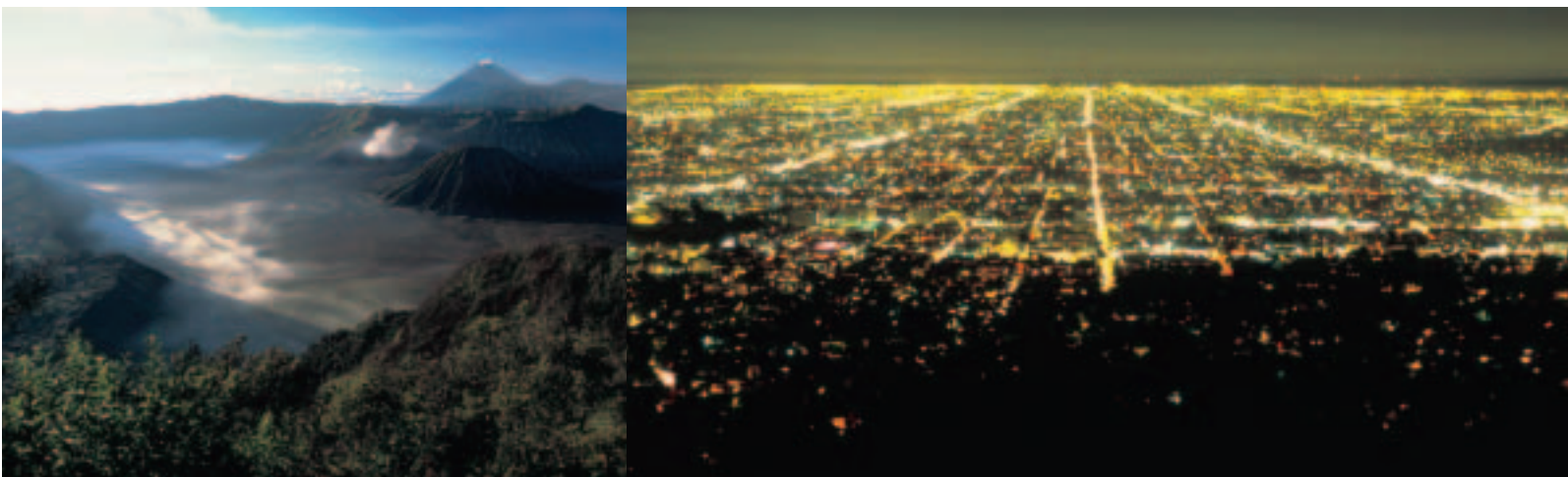
In total, OPEC oil production fell by 720,000 barrels per day (b/d) or 2.7% year-on-year. In percentage terms, the largest decrease was of 8.4% in Iraq, where UN-sanctioned exports were disrupted severely in January, June and December, following rollovers of the UN's 'Oil for Food' programme. In absolute terms, the largest fall was in Saudi Arabia, whose 350,000 b/d cut accounted for almost half the OPEC total.

The decline in OPEC oil production during 2001 was almost exactly offset by the increase in production outside OPEC. For the second consecutive year, Former Soviet Union production grew strongly, taking the two-year production increase to over one million b/d. Outside the Former Soviet Union, non-OPEC production grew by less than 100,000 b/d. Modest gains in Mexico, Brazil, Norway and Equatorial Guinea were largely offset by falls in Colombia, Australia and the UK.

World oil consumption in 2001 was down marginally on the year before: the first decline since 1993. Europe and Africa were the only regions to register consumption increases. Demand weakness was especially pronounced in Asia, where consumption fell 0.5% compared with a 10-year trend of 3.6% annual growth.

Natural gas

Consumption of natural gas grew by only 0.3% in 2001, a marked change from the 4.3% increase registered in 2000. The global picture was heavily influenced by developments in North America, where record high gas prices and the economic



downturn resulted in a sharp 5% consumption decrease. Consumption in all other regions increased, with Asia Pacific especially strong, up by 5%.

The decline in North American gas consumption was not matched on the production side. North American production rose 1.6%, stimulated by high prices. The rise in production allowed a rebuilding of US and Canadian gas inventories, which began the year at record lows but ended 2001 well above seasonal norms. The Middle East was the fastest-growing gas production region in 2001, driven by the expansion of Qatari and Omani liquefied natural gas exports.

Other fuels

World coal consumption increased by 1.7% in 2001, as Chinese demand grew strongly, following four years of decline, and strong increases were recorded in some other Asian countries. European coal use resumed its trend decline, falling 1.2%. US coal consumption fell 1.7%, reversing much of the strong growth seen during 2000.

Consumption of nuclear power rose in all regions except Africa, expanding by 2.8% globally, despite a very limited increase in nuclear generation capacity. Hydroelectric generation contracted by a sizeable 3.7%, reflecting sharp drops of 14.1% in North America and 11.7% in Brazil.

Methodological changes

Two major methodological changes have been made to this year's Review.

- The primary energy values of both nuclear and hydroelectric power generation have been derived by calculating the equivalent amount of fossil fuel required to generate the same volume of electricity in a thermal power station, assuming a conversion efficiency of 38% (the average for OECD thermal power generation). Previously, thermal equivalence was calculated for nuclear power only, using a lower conversion efficiency of 33%.
- Refinery gain and loss is no longer deducted from the US oil consumption figure, bringing the country into line with the rest of the world.

Acknowledgements

We express our gratitude to our numerous contacts worldwide who provide the basic data for this publication.

oil

proved reserves

	At end 1981 Thousand million barrels	At end 1991 Thousand million barrels	At end 2000 Thousand million barrels	Thousand million barrels	Thousand million tonnes	Share of total	R/P ratio
USA	36.5	33.7	30.1	30.4	3.7	2.9%	10.7
Canada	8.5	8.0	6.4	6.6	0.8	0.6%	8.8
Mexico	57.0	51.3	28.3	26.9	3.8	2.6%	21.7
Total North America	102.0	93.0	64.8	63.9	8.4	6.1%	13.5
Argentina	2.7	1.6	3.1	3.0	0.4	0.3%	10.1
Brazil	1.3	2.8	8.1	8.5	1.2	0.8%	17.5
Colombia	0.5	1.9	2.0	1.8	0.2	0.2%	7.7
Ecuador	0.9	1.6	2.1	2.1	0.3	0.2%	14.0
Peru	0.8	0.4	0.3	0.3	†	♦	8.9
Trinidad & Tobago	0.6	0.5	0.7	0.7	0.1	0.1%	15.7
Venezuela	20.3	59.1	76.9	77.7	11.2	7.4%	63.5
Other S. & Cent. America	0.9	0.6	1.4	1.9	0.3	0.2%	38.6
Total S. & Cent. America	28.0	68.5	94.5	96.0	13.7	9.1%	38.8
Denmark	0.5	0.8	1.1	1.1	0.2	0.1%	8.9
Italy	0.6	0.7	0.6	0.6	0.1	0.1%	21.7
Norway	7.6	7.6	9.4	9.4	1.3	0.9%	7.8
Romania	n/a	1.2	1.4	1.0	0.1	0.1%	20.4
United Kingdom	14.8	4.0	5.0	4.9	0.7	0.5%	5.6
Other Europe	4.3	2.1	1.6	1.6	0.2	0.2%	13.7
Total Europe	27.9	16.3	19.2	18.7	2.5	1.8%	7.8
Azerbaijan	n/a	n/a	6.9	7.0	1.0	0.7%	64.3
Kazakhstan	n/a	n/a	8.0	8.0	1.1	0.8%	27.6
Russian Federation	n/a	n/a	48.6	48.6	6.7	4.6%	19.1
Turkmenistan	n/a	n/a	0.5	0.5	0.1	0.1%	9.3
Uzbekistan	n/a	n/a	0.6	0.6	0.1	0.1%	11.2
Other Former Soviet Union	n/a	n/a	0.7	0.7	0.1	0.1%	15.2
Total Former Soviet Union	63.0	57.0	65.3	65.4	9.0	6.2%	21.1
Iran	57.0	92.9	89.7	89.7	12.3	8.5%	67.4
Iraq	29.7	100.0	112.5	112.5	15.2	10.7%	*
Kuwait	67.7	96.5	96.5	96.5	13.3	9.2%	*
Oman	2.6	4.3	5.5	5.5	0.7	0.5%	15.8
Qatar	3.4	3.7	13.2	15.2	2.0	1.4%	55.5
Saudi Arabia	167.9	260.3	261.7	261.8	36.0	24.9%	85.0
Syria	1.9	1.7	2.5	2.5	0.3	0.2%	12.5
United Arab Emirates	32.2	98.1	97.8	97.8	13.0	9.3%	*
Yemen	–	4.0	4.0	4.0	0.5	0.4%	24.2
Other Middle East	0.2	0.1	0.2	0.1	†	♦	7.8
Total Middle East	362.6	661.6	683.5	685.6	93.4	65.3%	86.8
Algeria	8.1	9.2	9.2	9.2	1.2	0.9%	17.6
Angola	1.5	1.8	5.4	5.4	0.7	0.5%	20.3
Cameroon	0.5	0.4	0.4	0.4	0.1	♦	13.7
Republic of Congo (Brazzaville)	1.3	0.8	1.5	1.5	0.2	0.1%	15.2
Egypt	2.9	4.5	2.9	2.9	0.4	0.3%	11.1
Gabon	0.5	0.7	2.5	2.5	0.3	0.2%	22.8
Libya	22.6	22.8	29.5	29.5	3.8	2.8%	57.3
Nigeria	16.5	17.9	22.5	24.0	3.2	2.3%	30.8
Tunisia	1.7	1.7	0.3	0.3	†	♦	11.6
Other Africa	0.7	0.6	0.6	0.9	0.1	0.1%	5.4
Total Africa	56.2	60.5	74.9	76.7	10.2	7.3%	27.4
Australia	1.7	1.5	2.9	3.5	0.4	0.3%	14.0
Brunei	1.6	1.4	1.4	1.4	0.2	0.1%	19.4
China	19.9	24.0	24.0	24.0	3.3	2.3%	19.9
India	2.7	6.1	4.7	4.8	0.6	0.5%	17.8
Indonesia	9.8	6.6	5.0	5.0	0.7	0.5%	10.1
Malaysia	2.8	3.0	3.9	3.0	0.4	0.3%	11.2
Papua New Guinea	–	0.2	0.4	0.2	†	♦	11.5
Thailand	–	0.3	0.4	0.5	0.1	♦	9.5
Vietnam	–	0.5	0.6	0.6	0.1	0.1%	4.7
Other Asia Pacific	0.5	0.5	0.8	0.7	0.1	0.1%	14.7
Total Asia Pacific	39.0	44.1	44.0	43.8	5.9	4.2%	15.6
TOTAL WORLD	678.7	1000.9	1046.2	1050.0	143.0	100.0%	40.3
of which: OECD#	128.9	109.5	85.3	85.0	11.2	8.1%	11.5
OPEC	435.2	767.1	814.4	818.8	111.8	78.0%	76.6
Non-OPEC‡	180.5	176.8	166.5	165.8	22.2	15.8%	13.3

*Over 100 years.

†Less than 0.05.

♦Less than 0.05%.

‡Excludes Former Soviet Union.

#1981 excludes Central European members.

n/a not available.

Notes:

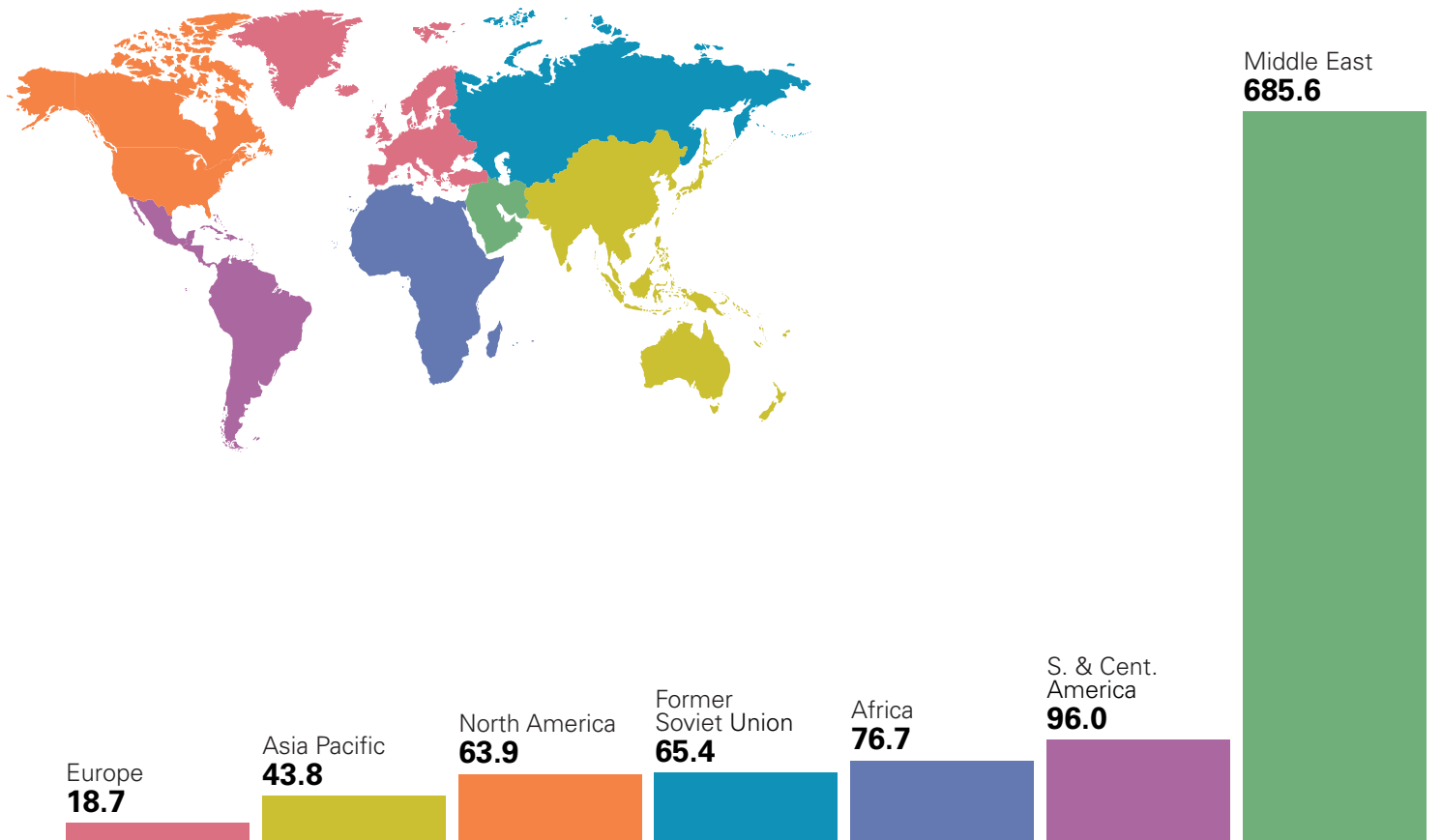
Proved reserves of oil – Generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions.

Reserves/Production (R/P) ratio – If the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that level.

Source of data – With the exception of Azerbaijan and Kazakhstan, the estimates contained in this table are those published by the Oil and Gas Journal, plus an estimate of natural gas liquids for USA and Canada. Reserves of shale oil and oil sands are not included.

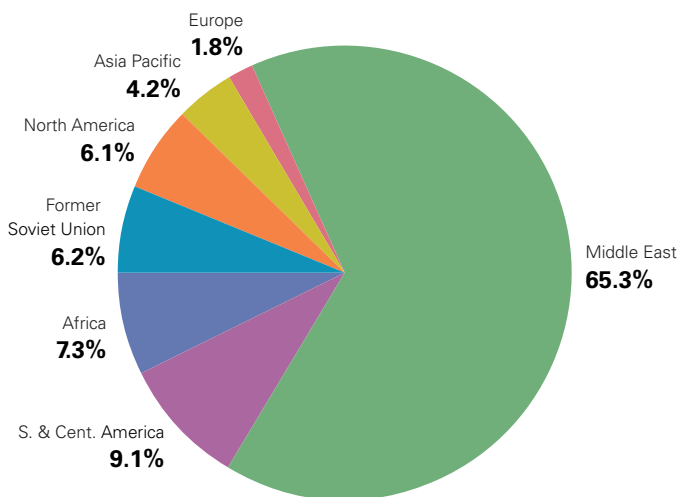
proved reserves at end 2001

Thousand million barrels



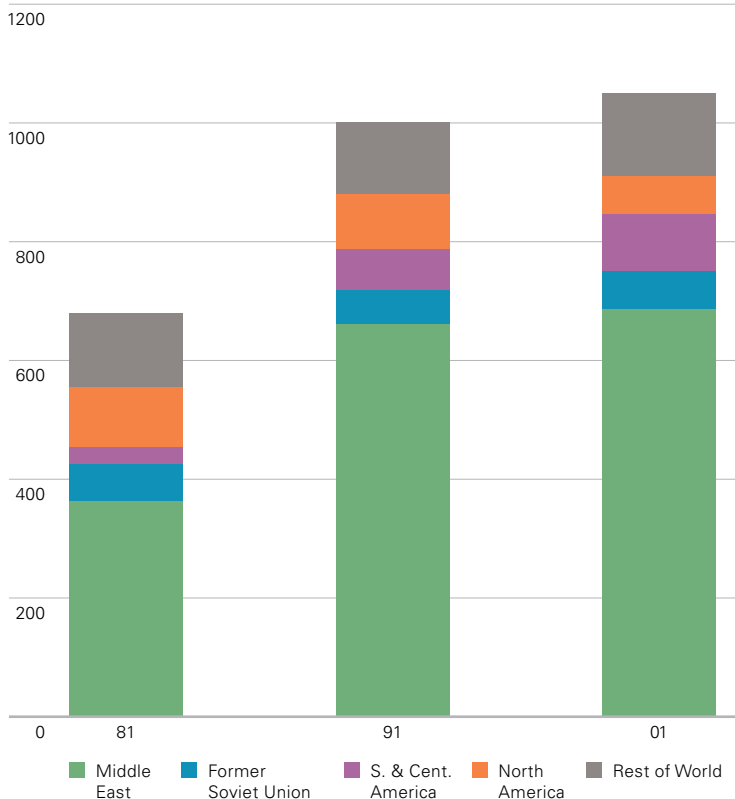
distribution of proved reserves 2001

Thousand million barrels %



proved reserves

Thousand million barrels





production*

Thousand barrels daily	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	9076	8868	8583	8389	8322	8295	8269	8011	7731	7733	7717	-0.3%	9.8%
Canada	1980	2062	2184	2276	2402	2480	2588	2672	2604	2721	2763	1.7%	3.6%
Mexico	3126	3120	3132	3142	3065	3277	3410	3499	3343	3450	3560	3.1%	4.9%
Total North America	14182	14050	13899	13807	13789	14052	14267	14182	13678	13904	14040	1.0%	18.3%
Argentina	526	587	630	695	758	823	877	889	843	811	822	1.1%	1.1%
Brazil	643	652	664	693	718	807	868	1003	1133	1268	1337	5.0%	1.9%
Colombia	430	442	458	460	591	635	667	775	838	711	627	-12.1%	0.9%
Ecuador	307	328	353	388	395	393	397	384	382	409	416	1.4%	0.6%
Peru	116	117	127	128	123	121	120	119	117	100	102	0.5%	0.1%
Trinidad & Tobago	149	144	134	141	142	141	135	134	141	139	135	-4.3%	0.2%
Venezuela	2501	2499	2592	2752	2959	3137	3321	3512	3249	3321	3418	2.7%	4.9%
Other S. & Cent. America	77	76	83	90	96	98	107	122	127	134	144	7.1%	0.2%
Total S. & Cent. America	4749	4845	5040	5347	5782	6155	6492	6938	6830	6894	7001	1.3%	9.9%
Denmark	141	156	167	184	185	204	229	231	296	359	342	-4.9%	0.5%
Italy	83	86	89	94	101	104	114	108	96	88	79	-10.7%	0.1%
Norway	1923	2198	2359	2692	2889	3234	3279	3136	3132	3347	3414	1.0%	4.5%
Romania	146	142	144	145	145	142	141	137	133	131	130	-0.7%	0.2%
United Kingdom	1919	1981	2119	2675	2749	2735	2713	2805	2903	2667	2503	-6.6%	3.3%
Other Europe	505	494	462	471	442	411	387	372	344	336	341	0.8%	0.5%
Total Europe	4718	5057	5341	6261	6511	6831	6863	6788	6905	6927	6808	-2.4%	9.0%
Azerbaijan	238	226	209	193	185	183	185	230	278	281	300	6.6%	0.4%
Kazakhstan	569	549	490	430	434	474	536	537	631	744	828	12.4%	1.1%
Russian Federation	9326	8038	7173	6419	6288	6114	6227	6169	6178	6536	7056	7.7%	9.7%
Turkmenistan	113	109	92	87	84	90	108	129	143	144	162	12.0%	0.2%
Uzbekistan	69	79	94	124	172	174	182	191	191	177	172	-3.2%	0.2%
Other Former Soviet Union	157	147	139	138	134	137	139	135	131	131	134	2.3%	0.2%
Total Former Soviet Union	10472	9149	8196	7391	7297	7171	7377	7391	7551	8013	8652	7.8%	11.8%
Iran	3500	3523	3683	3692	3695	3709	3726	3803	3552	3772	3688	-2.6%	5.1%
Iraq	279	526	465	522	575	625	1201	2162	2581	2624	2414	-8.4%	3.3%
Kuwait	185	1097	1966	2100	2135	2126	2139	2199	2038	2169	2142	-1.7%	2.9%
Oman	716	748	785	819	868	897	909	905	911	961	959	-0.5%	1.3%
Qatar	420	495	460	451	461	568	694	747	724	796	783	-2.3%	1.0%
Saudi Arabia	8820	9098	8962	8873	8890	9036	9213	9219	8549	9115	8768	-4.2%	11.8%
Syria	472	518	570	568	603	591	582	581	584	555	551	-1.1%	0.8%
United Arab Emirates	2639	2510	2443	2482	2410	2495	2490	2556	2299	2491	2422	-3.2%	3.2%
Yemen	197	184	209	346	351	357	375	382	396	438	458	4.2%	0.6%
Other Middle East	53	54	53	52	52	50	50	49	48	49	49	-0.3%	0.1%
Total Middle East	17280	18754	19597	19905	20040	20454	21378	22603	21681	22970	22233	-3.6%	30.0%
Algeria	1351	1323	1329	1324	1327	1386	1421	1461	1515	1579	1563	-1.6%	1.8%
Angola	498	550	504	557	633	716	741	731	745	736	731	-1.0%	1.0%
Cameroon	143	134	130	115	106	110	124	105	95	88	80	-9.3%	0.1%
Republic of Congo (Brazzaville)	156	167	185	185	180	200	225	264	293	275	271	-1.8%	0.4%
Egypt	896	906	941	921	924	894	873	857	827	781	758	-3.8%	1.0%
Equatorial Guinea	-	2	5	5	7	17	60	83	100	113	181	60.1%	0.3%
Gabon	295	289	305	337	356	365	364	337	340	327	301	-8.2%	0.4%
Libya	1439	1473	1402	1431	1439	1452	1489	1480	1425	1475	1425	-3.7%	1.9%
Nigeria	1890	1950	1985	1988	1998	2138	2303	2163	2028	2103	2148	1.9%	2.9%
Tunisia	110	110	99	93	90	89	81	85	86	80	73	-9.1%	0.1%
Other Africa	33	29	38	44	53	68	73	75	120	238	284	19.0%	0.4%
Total Africa	6810	6933	6922	7001	7112	7435	7753	7640	7574	7795	7814	-0.1%	10.3%
Australia	606	598	566	611	583	610	668	644	577	812	733	-10.1%	0.9%
Brunei	164	182	175	179	175	165	163	157	182	193	195	0.8%	0.3%
China	2828	2841	2888	2930	2989	3170	3211	3212	3213	3252	3308	1.4%	4.6%
India	703	643	620	707	794	782	800	800	788	778	782	*	1.0%
Indonesia	1669	1579	1588	1589	1578	1580	1557	1520	1408	1456	1410	-4.1%	1.9%
Malaysia	660	670	662	674	724	736	764	815	791	791	788	-1.1%	1.0%
Papua New Guinea	-	53	126	121	100	106	76	81	88	69	57	-17.6%	0.1%
Thailand	75	83	87	87	87	97	116	121	132	164	178	6.7%	0.2%
Vietnam	80	111	128	144	155	179	205	245	296	328	350	5.4%	0.5%
Other Asia Pacific	148	159	156	143	136	145	158	143	137	136	143	5.2%	0.2%
Total Asia Pacific	6933	6918	6996	7185	7320	7570	7718	7739	7612	7980	7943	-0.9%	10.6%
TOTAL WORLD	65144	65705	65990	66897	67851	69668	71848	73280	71832	74482	74493	-0.3%	100.0%
of which: OECD	19354	19549	19650	20526	20726	21350	21675	21487	21039	21523	21462	-0.5%	28.1%
OPEC	24692	26074	26875	27204	27466	28252	29553	30821	29368	30901	30181	-2.7%	40.7%
Non-OPEC‡	29980	30483	30919	32301	33088	34245	34918	35068	34913	35569	35660	*	47.4%

*Includes crude oil, shale oil, oil sands and NGLs (natural gas liquids – the liquid content of natural gas where this is recovered separately).

Excludes liquid fuels from other sources such as coal derivatives.

*Less than 0.05%.

‡Excludes Former Soviet Union.

Note: Annual changes and shares of total are calculated using million tonnes per annum figures rather than thousand barrels daily. Because of rounding some totals may not agree exactly with the sum of their component parts.

production*

Million tonnes	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	422.9	413.0	397.0	387.5	383.6	382.1	380.0	368.1	352.6	352.6	351.7	-0.3%	9.8%
Canada	93.0	97.0	102.0	106.4	111.9	115.5	120.7	125.1	121.0	126.9	129.1	1.7%	3.6%
Mexico	153.7	153.7	153.8	154.4	150.5	162.6	169.7	173.5	165.2	171.2	176.6	3.1%	4.9%
Total North America	669.6	663.7	652.9	648.3	646.0	660.1	670.4	666.7	638.8	650.8	657.4	1.0%	18.3%
Argentina	25.9	29.0	31.1	34.5	37.5	40.8	43.4	44.0	41.7	40.2	40.6	1.1%	1.1%
Brazil	31.9	32.3	32.9	34.3	35.5	40.2	43.1	49.8	56.3	63.2	66.3	5.0%	1.9%
Colombia	21.5	22.2	22.9	23.0	29.5	31.8	33.2	38.5	41.6	35.3	31.0	-12.1%	0.9%
Ecuador	15.6	16.7	17.9	19.7	20.1	20.0	20.2	19.5	19.4	20.9	21.2	1.4%	0.6%
Peru	5.7	5.8	6.3	6.3	6.1	6.0	5.9	5.8	5.7	4.9	4.9	0.5%	0.1%
Trinidad & Tobago	7.6	7.3	6.8	7.1	7.0	7.0	6.7	6.7	7.0	6.8	6.5	-4.3%	0.2%
Venezuela	129.3	129.6	134.0	142.0	152.4	162.2	171.4	181.0	167.1	171.6	176.2	2.7%	4.9%
Other S. & Cent. America	3.6	3.6	3.9	4.3	4.6	4.8	5.3	6.0	6.4	6.8	7.3	7.1%	0.2%
Total S. & Cent. America	241.0	246.5	255.7	271.2	292.8	312.7	329.1	351.4	345.1	349.6	354.0	1.3%	9.9%
Denmark	7.0	7.8	8.3	9.1	9.2	10.1	11.4	11.4	14.7	17.8	16.9	-4.9%	0.5%
Italy	4.3	4.5	4.6	4.9	5.2	5.5	6.0	5.6	5.0	4.6	4.1	-10.7%	0.1%
Norway	93.3	106.9	114.1	129.4	138.5	155.5	156.9	150.0	149.4	160.5	162.1	1.0%	4.5%
Romania	7.0	6.8	6.9	7.0	7.0	6.9	6.8	6.6	6.4	6.3	6.2	-0.7%	0.2%
United Kingdom	91.3	94.3	100.2	126.5	129.9	129.7	128.2	132.5	137.1	126.2	117.9	-6.6%	3.3%
Other Europe	24.7	24.1	22.4	22.9	21.4	20.0	18.8	18.0	16.7	16.3	16.5	0.8%	0.5%
Total Europe	227.5	244.4	256.6	299.8	311.2	327.6	327.9	324.2	329.2	331.8	323.7	-2.4%	9.0%
Azerbaijan	11.7	11.1	10.3	9.6	9.2	9.1	9.2	11.4	13.8	14.0	14.9	6.6%	0.4%
Kazakhstan	26.6	25.8	23.0	20.3	20.6	23.0	25.8	25.9	30.1	35.3	39.7	12.4%	1.1%
Russian Federation	461.9	398.8	354.9	317.6	310.8	302.9	307.4	304.3	304.8	323.3	348.1	7.7%	9.7%
Turkmenistan	5.4	5.2	4.4	4.2	4.1	4.4	5.4	6.4	7.1	7.2	8.0	12.0%	0.2%
Uzbekistan	2.8	3.3	4.0	5.5	7.6	7.6	7.9	8.2	8.1	7.5	7.3	-3.2%	0.2%
Other Former Soviet Union	7.4	7.0	6.6	6.5	6.2	6.4	6.4	6.2	6.1	6.1	6.2	2.3%	0.2%
Total Former Soviet Union	515.8	451.2	403.2	363.7	358.4	353.3	362.0	362.5	369.9	393.3	424.2	7.8%	11.8%
Iran	174.4	175.7	183.2	183.6	183.7	184.8	185.1	188.9	176.2	187.7	182.9	-2.6%	5.1%
Iraq	13.7	26.0	22.7	25.3	27.4	30.0	58.3	105.6	126.1	128.6	117.9	-8.4%	3.3%
Kuwait	9.2	54.6	97.2	103.8	105.0	105.0	105.2	107.9	99.5	106.0	104.2	-1.7%	2.9%
Oman	35.3	37.0	38.8	40.5	42.8	44.4	44.9	44.7	45.0	47.6	47.4	-0.5%	1.3%
Qatar	19.7	22.8	21.1	20.6	21.1	26.2	32.2	34.6	33.4	36.8	36.0	-2.3%	1.0%
Saudi Arabia	428.4	442.4	432.8	427.7	428.3	436.3	443.8	444.5	411.9	441.4	422.9	-4.2%	11.8%
Syria	23.5	25.8	28.3	28.2	29.9	29.4	28.9	28.8	29.0	27.6	27.3	-1.1%	0.8%
United Arab Emirates	125.0	118.9	114.8	116.6	114.0	117.9	117.0	119.9	107.6	117.0	113.2	-3.2%	3.2%
Yemen	9.4	8.7	9.9	16.4	16.7	16.9	17.7	18.1	18.7	20.8	21.7	4.2%	0.6%
Other Middle East	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.3	2.2	2.3	2.3	-0.3%	0.1%
Total Middle East	841.0	914.4	951.2	965.1	971.2	993.2	1035.4	1095.2	1049.6	1115.8	1075.6	-3.6%	30.0%
Algeria	57.7	56.6	56.7	56.4	56.6	59.3	60.3	61.8	63.9	66.8	65.8	-1.6%	1.8%
Angola	24.5	27.2	24.8	27.4	31.2	35.4	36.5	36.0	36.7	36.4	36.0	-1.0%	1.0%
Cameroon	7.2	6.8	6.6	5.8	5.4	5.6	6.3	5.3	4.8	4.5	4.1	-9.3%	0.1%
Republic of Congo (Brazzaville)	8.1	8.6	9.5	9.6	9.3	10.4	11.6	13.6	15.1	14.2	14.0	-1.8%	0.4%
Egypt	45.4	46.0	47.5	46.5	46.6	45.1	43.8	43.0	41.4	38.8	37.3	-3.8%	1.0%
Equatorial Guinea	-	0.1	0.2	0.2	0.3	0.9	3.0	4.1	5.0	5.6	9.0	60.1%	0.3%
Gabon	14.7	14.5	15.2	16.8	17.8	18.3	18.2	16.9	17.0	16.4	15.0	-8.2%	0.4%
Libya	67.9	69.7	66.1	67.5	67.9	68.6	70.0	69.6	67.0	69.5	67.0	-3.7%	1.9%
Nigeria	93.1	96.3	97.1	97.0	97.5	104.7	112.7	105.9	99.2	103.3	105.2	1.9%	2.9%
Tunisia	5.2	5.2	4.7	4.4	4.3	4.2	3.8	4.0	4.1	3.8	3.4	-9.1%	0.1%
Other Africa	1.7	1.5	1.8	2.1	2.6	3.3	3.6	3.6	5.9	11.7	13.9	19.0%	0.4%
Total Africa	325.5	332.4	330.4	333.8	339.3	355.7	369.7	363.7	360.0	370.9	370.7	-0.1%	10.3%
Australia	26.9	26.5	24.9	26.9	25.4	26.6	28.8	27.4	24.5	35.4	31.8	-10.1%	0.9%
Brunei	7.9	8.9	8.5	8.7	8.5	8.0	7.9	7.6	8.9	9.4	9.5	0.8%	0.3%
China	141.0	142.0	144.0	146.1	149.0	158.5	160.1	160.2	160.2	162.6	164.9	1.4%	4.6%
India	33.1	30.2	29.0	33.2	37.3	36.5	37.3	37.0	36.5	36.1	36.1	♦	1.0%
Indonesia	81.0	76.7	76.9	76.9	76.5	76.7	75.7	74.2	68.6	71.5	68.6	-4.1%	1.9%
Malaysia	31.2	31.7	31.1	31.7	34.0	34.4	35.1	36.9	35.6	35.5	35.1	-1.1%	1.0%
Papua New Guinea	-	2.5	5.9	5.7	4.7	5.0	3.5	3.8	4.1	3.2	2.7	-17.6%	0.1%
Thailand	3.0	3.3	3.4	3.5	3.4	3.8	4.5	4.7	5.2	6.6	7.1	6.7%	0.2%
Vietnam	4.0	5.5	6.3	7.1	7.7	8.9	10.1	12.1	14.6	16.2	17.1	5.4%	0.5%
Other Asia Pacific	6.9	7.4	7.3	6.6	6.3	6.7	7.3	6.6	6.3	6.3	6.6	5.2%	0.2%
Total Asia Pacific	334.9	334.7	337.1	346.3	352.6	365.2	370.3	370.5	364.4	382.9	379.4	-0.9%	10.6%
TOTAL WORLD	3155.5	3187.3	3187.0	3228.0	3271.6	3367.8	3464.9	3534.1	3457.0	3595.0	3584.9	-0.3%	100.0%
of which: OECD	916.5	926.8	926.6	967.3	974.9	1007.3	1020.9	1011.9	986.5	1011.9	1006.9	-0.5%	28.1%
OPEC	1199.3	1269.3	1302.5	1317.5	1330.3	1371.7	1431.8	1493.8	1420.5	1500.2	1459.7	-2.7%	40.7%
Non-OPEC‡	1440.4	1466.8	1481.3	1546.9	1582.8	1642.8	1671.1	1677.8	1666.6	1701.5	1701.0	♦	47.4%

*Includes crude oil, shale oil, oil sands and NGLs (natural gas liquids – the liquid content of natural gas where this is recovered separately).

Excludes liquid fuels from other sources such as coal derivatives.

♦Less than 0.05%.

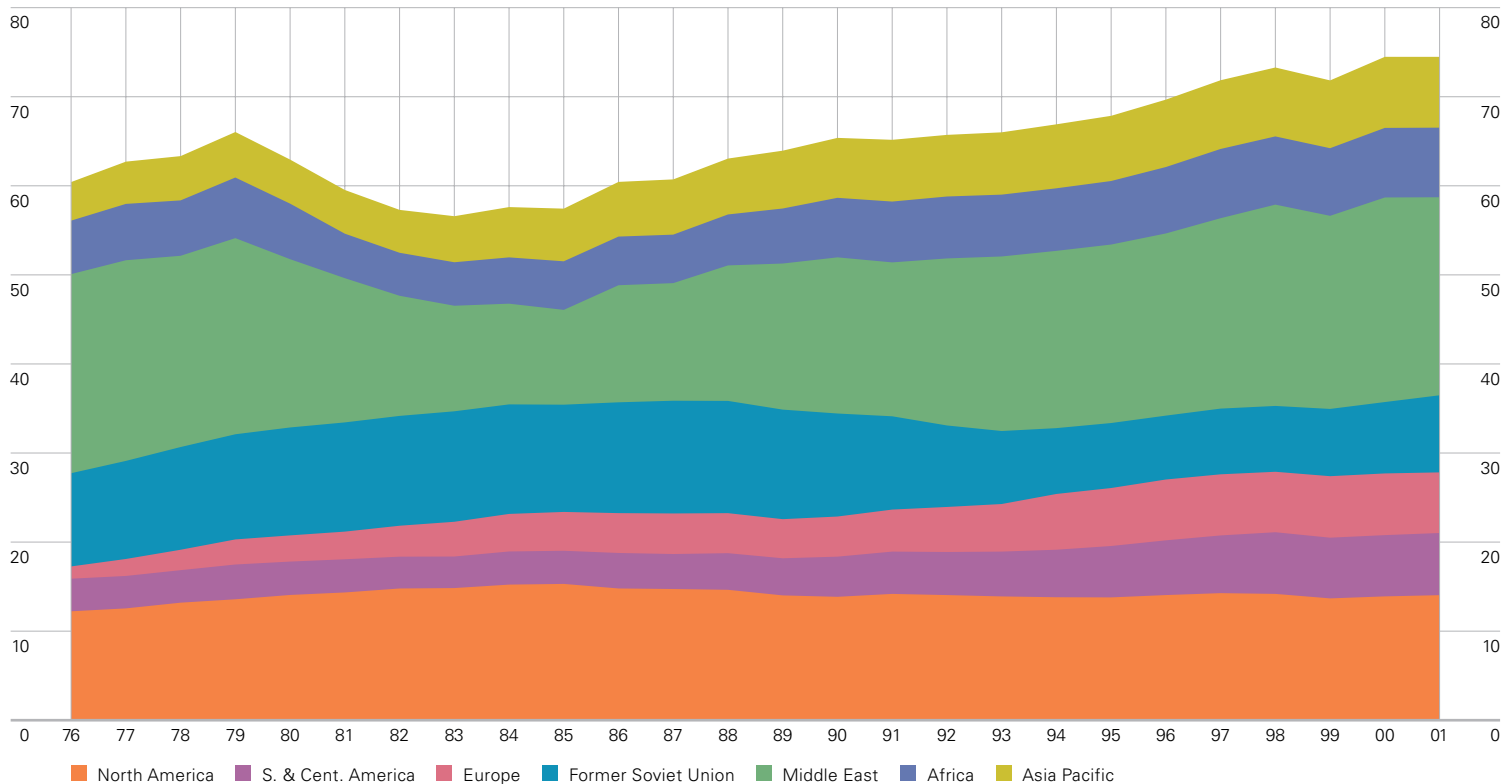
‡Excludes Former Soviet Union.

Note: Because of rounding some totals may not agree exactly with the sum of their component parts.

oil

production by area

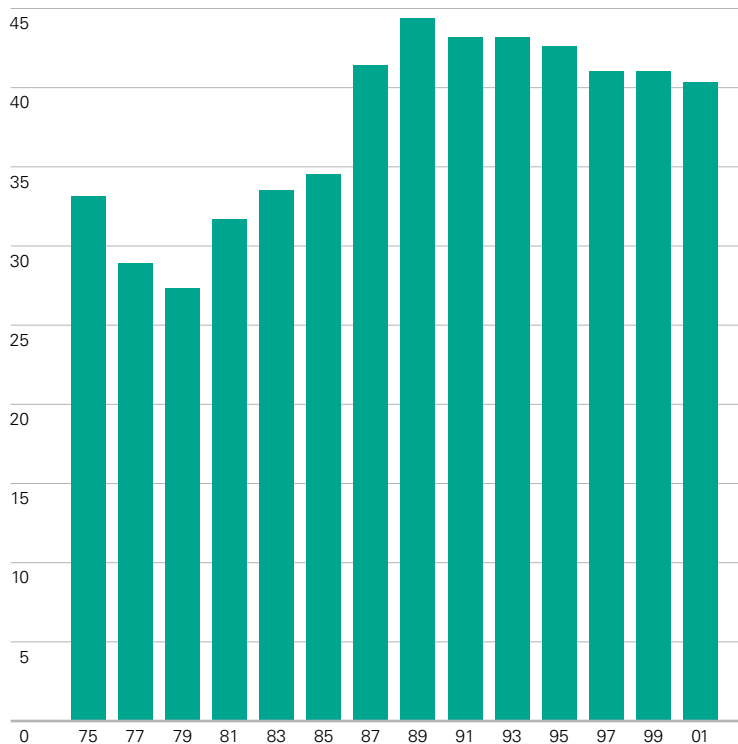
Million barrels daily



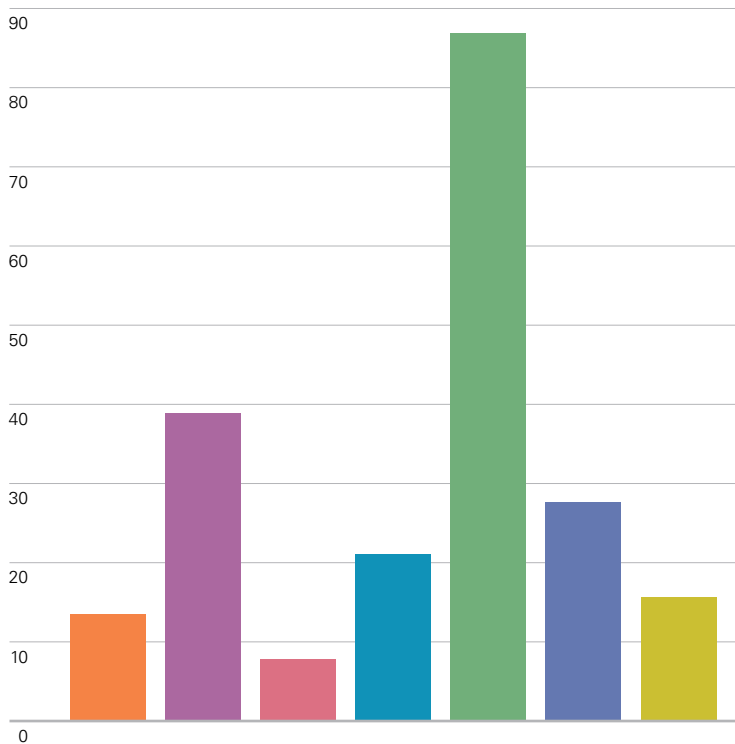
Oil production was broadly flat in 2001 compared with the previous year. Strong growth in the Former Soviet Union was offset by a decline in OPEC output.

R/P ratios

World – Reserves to production ratio



2001 by area – Reserves to production ratio



The world's oil R/P ratio increased in 2001 as global oil production fell slightly and reserves increased modestly. However, at 40.3, the R/P ratio was still somewhat down on the 43.2 years of a decade ago.

consumption*

Thousand barrels daily	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	16713	17033	17236	17719	17725	18309	18621	18917	19519	19701	19633	-0.2%	25.5%
Canada	1673	1703	1712	1742	1776	1818	1888	1913	1926	1937	1941	-0.1%	2.5%
Mexico	1522	1543	1549	1685	1561	1608	1682	1763	1765	1835	1813	-1.7%	2.4%
Total North America	19908	20279	20498	21145	21061	21736	22191	22593	23210	23473	23386	-0.3%	30.4%
Argentina	411	417	418	416	415	432	451	467	445	431	404	-6.2%	0.5%
Brazil	1289	1328	1354	1418	1498	1601	1729	1800	1879	1867	1865	-0.4%	2.4%
Chile	148	159	174	190	209	228	245	247	253	256	262	2.0%	0.3%
Colombia	213	233	238	246	260	268	272	266	238	232	220	-5.6%	0.3%
Ecuador	104	101	106	115	112	125	142	145	131	129	132	2.3%	0.2%
Peru	111	116	120	130	148	152	152	154	157	153	145	-5.8%	0.2%
Venezuela	405	431	430	436	446	426	452	475	474	496	491	-1.3%	0.6%
Other S. & Cent. America	915	936	963	1022	1073	1095	1125	1154	1168	1168	1175	0.2%	1.6%
Total S. & Cent. America	3596	3722	3801	3973	4162	4327	4568	4709	4745	4732	4693	-1.1%	6.2%
Austria	241	235	237	235	234	242	246	255	250	244	257	5.3%	0.4%
Belgium & Luxembourg	544	558	546	556	546	606	629	656	670	702	672	-4.6%	0.9%
Bulgaria	118	121	127	118	115	114	92	100	93	95	96	1.5%	0.1%
Czech Republic	145	140	142	149	169	177	170	174	174	169	178	5.1%	0.2%
Denmark	187	186	196	209	217	235	229	223	222	215	211	-2.4%	0.3%
Finland	221	216	206	216	208	216	213	221	224	224	222	-1.5%	0.3%
France	2018	2011	1940	1878	1893	1930	1948	2016	2044	2007	2032	0.9%	2.7%
Germany	2833	2849	2904	2880	2882	2921	2913	2915	2824	2763	2804	1.4%	3.7%
Greece	323	329	342	346	361	372	379	374	383	406	396	-2.8%	0.6%
Hungary	169	170	162	169	159	148	150	157	151	145	144	-1.2%	0.2%
Iceland	13	14	15	15	16	16	18	18	18	19	19	2.4%	♦
Republic of Ireland	100	105	106	116	118	124	136	152	172	170	181	6.3%	0.2%
Italy	1918	1950	1924	1920	1987	1956	1969	1974	1980	1956	1946	-0.8%	2.6%
Netherlands	767	793	788	792	828	810	856	854	880	899	948	5.3%	1.3%
Norway	193	196	210	212	212	218	223	215	216	201	213	2.9%	0.3%
Poland	313	288	296	314	321	368	391	424	431	427	407	-4.8%	0.5%
Portugal	239	265	252	253	270	256	290	315	321	312	318	1.7%	0.4%
Romania	309	258	242	226	274	260	276	242	195	203	207	1.4%	0.3%
Slovakia	89	81	67	70	69	71	72	80	73	73	73	-0.9%	0.1%
Spain	1056	1113	1079	1120	1177	1221	1290	1381	1423	1452	1508	3.9%	2.1%
Sweden	326	343	335	354	338	362	336	338	337	318	326	2.5%	0.4%
Switzerland	277	281	264	272	253	261	276	279	271	263	280	6.9%	0.4%
Turkey	469	499	574	553	610	635	646	640	638	695	662	-3.9%	0.9%
United Kingdom	1758	1775	1791	1777	1757	1798	1752	1745	1727	1684	1649	-2.3%	2.2%
Other Europe	349	264	276	267	282	314	340	347	345	336	346	2.8%	0.5%
Total Europe	14976	15038	15022	15019	15295	15633	15839	16092	16063	15975	16093	0.6%	21.7%
Azerbaijan	165	162	165	163	171	140	120	151	149	124	92	-25.8%	0.1%
Belarus	482	425	281	257	247	186	193	167	139	122	118	-3.3%	0.2%
Kazakhstan	436	407	315	247	242	204	207	165	133	140	155	10.0%	0.2%
Lithuania	165	90	78	72	64	66	66	76	63	49	57	15.9%	0.1%
Russian Federation	4888	4494	3788	3267	2934	2606	2593	2484	2534	2474	2456	-1.0%	3.5%
Turkmenistan	100	98	64	74	78	60	60	56	50	46	48	4.3%	0.1%
Ukraine	1155	853	498	398	380	284	277	287	255	240	255	5.8%	0.4%
Uzbekistan	221	182	163	145	134	148	135	141	143	128	131	1.6%	0.2%
Other Former Soviet Union	369	257	185	121	108	84	100	100	91	88	94	7.2%	0.1%
Total Former Soviet Union	7980	6969	5536	4744	4357	3779	3751	3626	3556	3412	3407	-0.4%	4.8%
Iran	995	1017	1044	1099	1204	1248	1221	1160	1192	1158	1131	-3.4%	1.5%
Kuwait	72	110	102	124	130	126	139	180	202	202	206	1.6%	0.3%
Qatar	18	17	17	19	21	23	25	26	24	25	30	19.7%	♦
Saudi Arabia	1174	1095	1116	1160	1123	1163	1199	1267	1306	1333	1347	0.5%	1.8%
United Arab Emirates	318	326	335	353	349	344	317	235	257	280	282	0.6%	0.4%
Other Middle East	921	1005	1090	1135	1202	1207	1261	1293	1301	1309	1309	-0.3%	1.8%
Total Middle East	3497	3571	3704	3891	4028	4110	4161	4161	4283	4307	4306	-0.6%	5.9%
Algeria	209	211	210	204	198	187	187	194	187	192	200	3.5%	0.3%
Egypt	470	457	438	437	474	501	531	559	573	564	551	-3.5%	0.7%
South Africa	359	369	383	401	427	437	445	451	462	475	488	2.1%	0.7%
Other Africa	956	1006	1041	1088	1099	1115	1144	1180	1216	1224	1251	1.9%	1.7%
Total Africa	1994	2043	2073	2130	2198	2240	2307	2385	2439	2455	2490	0.8%	3.3%
Australia	676	679	720	753	781	794	823	825	843	837	845	1.0%	1.1%
Bangladesh	35	38	43	45	59	60	69	76	70	70	71	1.0%	0.1%
China	2411	2662	2913	3145	3390	3672	3935	4047	4416	4985	5041	0.8%	6.6%
China Hong Kong SAR	131	167	174	185	198	194	192	184	193	201	198	-2.1%	0.3%
India	1233	1296	1313	1413	1533	1663	1753	1835	2016	2067	2072	-0.4%	2.8%
Indonesia	669	729	782	774	820	888	963	914	980	1053	1095	3.7%	1.5%
Japan	5410	5521	5440	5745	5784	5812	5761	5525	5618	5576	5427	-3.2%	7.0%
Malaysia	292	296	330	372	381	405	431	407	439	441	407	-8.8%	0.5%
New Zealand	105	111	112	121	125	127	131	131	134	134	134	-0.4%	0.2%
Pakistan	230	249	272	291	315	329	339	350	363	373	377	0.7%	0.5%
Philippines	227	278	290	306	344	360	389	392	375	348	347	-0.5%	0.5%
Singapore	457	474	516	590	617	586	630	651	619	654	726	10.2%	1.1%
South Korea	1254	1518	1675	1840	2009	2144	2373	2030	2178	2229	2235	-0.1%	2.9%
Taiwan	566	583	620	665	713	717	741	766	820	816	776	-5.2%	1.1%
Thailand	446	489	556	617	717	776	785	736	734	725	714	-2.8%	1.0%
Other Asia Pacific	238	260	282	294	310	344	368	383	400	432	453	4.4%	0.6%
Total Asia Pacific	14379	15350	16038	17155	18094	18868	19680	19250	20200	20941	20916	-0.5%	27.7%
TOTAL WORLD	66331	66972	66671	68058	69195	70692	72496	72815	74495	75295	75291	-0.2%	100.0%
of which: European Union 15	12533	12726	12646	12654	12816	13049	13186	13417	13457	13350	13469	0.7%	18.2%
OECD	41555	42503	42822	44012	44383	45556	46409	46508	47412	47589	47471	-0.4%	62.4%
Former Soviet Union	7980	6969	5536	4744	4357	3779	3751	3626	3556	3412	3407	-0.4%	4.8%
Other EMEs	16796	17501	18313	19302	20455	21357	22336	22682	23527	24294	24413	♦	32.8%

*Inland demand plus international aviation and marine bunkers and refinery fuel and loss.

♦Less than 0.05



consumption*

Million tonnes	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	765.6	782.2	789.3	809.8	807.7	836.5	848.0	863.8	888.9	897.6	895.6	-0.2%	25.5%
Canada	75.3	76.8	77.1	78.4	79.8	82.1	85.2	86.7	87.2	88.1	88.0	-0.1%	2.5%
Mexico	70.4	71.2	71.0	77.8	71.4	73.8	77.3	81.2	80.8	84.1	82.7	-1.7%	2.4%
Total North America	911.3	930.2	937.4	966.0	958.9	992.4	1010.5	1031.7	1056.9	1069.8	1066.3	-0.3%	30.4%
Argentina	19.4	19.6	19.6	19.4	19.5	20.4	21.2	22.1	21.0	20.3	19.0	-6.2%	0.5%
Brazil	59.0	62.1	62.9	65.7	69.2	74.1	79.9	83.2	85.7	85.4	85.1	-0.4%	2.4%
Chile	6.8	7.4	8.0	8.8	9.7	10.6	11.4	11.4	11.7	11.8	12.0	2.0%	0.3%
Colombia	9.6	10.6	10.8	11.1	11.8	12.2	12.3	12.0	10.6	10.5	9.9	-5.6%	0.3%
Ecuador	4.7	4.6	4.8	5.2	5.1	5.7	6.5	6.6	6.0	5.8	5.9	2.3%	0.2%
Peru	5.3	5.5	5.7	6.2	7.1	7.3	7.2	7.3	7.4	7.3	6.8	-5.8%	0.2%
Venezuela	18.6	19.7	19.4	19.6	20.0	19.0	20.4	21.6	21.3	22.5	22.2	-1.3%	0.6%
Other S. & Cent. America	44.9	46.1	47.3	50.2	52.7	53.9	55.3	56.7	57.3	57.4	57.5	0.2%	1.6%
Total S. & Cent. America	168.3	175.6	178.5	186.2	195.1	203.2	214.2	220.9	221.0	221.0	218.4	-1.1%	6.2%
Austria	11.6	11.3	11.4	11.3	11.3	11.6	11.9	12.3	12.1	11.8	12.4	5.3%	0.4%
Belgium & Luxembourg	26.5	27.1	26.5	27.0	26.4	29.4	30.3	31.6	32.4	33.9	32.3	-4.6%	0.9%
Bulgaria	5.9	6.0	6.2	5.8	5.6	5.5	4.4	4.8	4.5	4.5	4.6	1.5%	0.1%
Czech Republic	7.1	6.8	6.9	7.1	8.0	8.4	8.0	8.3	8.2	7.9	8.3	5.1%	0.2%
Denmark	9.1	9.0	9.5	10.1	10.5	11.4	11.1	10.7	10.6	10.4	10.1	-2.4%	0.3%
Finland	10.6	10.3	9.9	10.4	9.9	10.3	10.2	10.5	10.7	10.7	10.5	-1.5%	0.3%
France	94.6	94.4	91.1	88.2	89.0	91.0	91.7	95.0	96.4	94.9	95.8	0.9%	2.7%
Germany	133.1	134.3	136.3	135.1	135.1	137.4	136.5	136.6	132.4	129.8	131.6	1.4%	3.7%
Greece	15.8	16.1	16.7	16.9	17.6	18.2	18.4	18.2	18.7	19.9	19.4	-2.8%	0.6%
Hungary	8.0	8.1	7.7	8.1	7.7	7.1	7.1	7.4	7.1	6.8	6.8	-1.2%	0.2%
Iceland	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	2.4%	♦
Republic of Ireland	4.9	5.1	5.1	5.6	5.7	6.0	6.6	7.4	8.3	8.2	8.7	6.3%	0.2%
Italy	92.4	94.5	92.6	92.5	95.5	94.2	94.6	94.7	94.4	93.5	92.8	-0.8%	2.6%
Netherlands	35.8	36.5	36.4	36.4	38.0	37.4	39.5	39.4	40.6	41.7	43.9	5.3%	1.3%
Norway	8.7	9.0	9.5	9.6	9.6	10.1	10.3	10.0	10.1	9.4	9.7	2.9%	0.3%
Poland	14.9	13.6	14.0	14.8	14.9	17.2	18.2	19.9	19.9	20.0	19.0	-4.8%	0.5%
Portugal	11.5	12.8	12.0	12.0	12.9	12.1	13.7	15.1	15.4	14.9	15.2	1.7%	0.4%
Romania	15.6	12.7	12.1	11.2	13.5	13.0	13.7	12.0	9.5	10.0	10.1	1.4%	0.3%
Slovakia	4.4	3.9	3.2	3.3	3.2	3.4	3.4	3.8	3.4	3.4	3.4	-0.9%	0.1%
Spain	49.4	52.8	51.3	53.5	56.3	58.7	62.0	66.4	68.4	70.0	72.7	3.9%	2.1%
Sweden	15.5	16.4	16.1	17.0	16.1	17.4	16.1	16.2	16.1	15.2	15.6	2.5%	0.4%
Switzerland	13.0	13.1	12.3	12.7	11.8	12.2	12.8	13.0	12.6	12.2	13.1	6.9%	0.4%
Turkey	22.1	23.5	27.0	25.8	28.4	29.8	30.0	29.6	29.5	31.6	30.4	-3.9%	0.9%
United Kingdom	82.5	83.6	84.0	82.9	81.9	83.9	81.3	80.9	79.7	77.9	76.1	-2.3%	2.2%
Other Europe	16.9	13.0	13.4	13.0	13.7	15.3	16.4	16.7	16.7	16.3	16.8	2.8%	0.5%
Total Europe	710.5	714.6	711.9	711.0	723.4	741.8	749.1	761.4	758.6	755.8	760.2	0.6%	21.7%
Azerbaijan	8.2	8.1	8.2	8.1	8.5	7.0	6.0	7.5	7.4	6.2	4.6	-25.8%	0.1%
Belarus	24.0	21.2	14.0	12.8	12.3	9.3	9.6	8.3	6.9	6.1	5.9	-3.3%	0.2%
Kazakhstan	21.7	20.3	15.7	12.3	12.0	10.2	10.3	8.2	6.6	7.0	7.7	10.0%	0.2%
Lithuania	8.2	4.5	3.9	3.6	3.2	3.3	3.3	3.8	3.1	2.4	2.8	15.9%	0.1%
Russian Federation	243.4	224.4	188.6	162.7	146.1	130.1	129.1	123.7	126.2	123.5	122.3	-1.0%	3.5%
Turkmenistan	5.0	4.9	3.2	3.7	3.9	3.0	3.0	2.8	2.5	2.3	2.4	4.3%	0.1%
Ukraine	57.5	42.6	24.8	19.8	18.9	14.2	13.8	14.3	12.7	12.0	12.7	5.8%	0.4%
Uzbekistan	11.0	9.1	8.1	7.2	6.7	7.4	6.7	7.0	7.1	6.4	6.5	1.6%	0.2%
Other Former Soviet Union	18.4	12.9	9.2	6.1	5.4	4.2	5.0	5.0	4.5	4.4	4.7	7.2%	0.1%
Total Former Soviet Union	397.4	348.0	275.7	236.3	217.0	188.7	186.8	180.6	177.0	170.3	169.6	-0.4%	4.8%
Iran	49.0	50.0	50.9	53.4	58.4	60.6	59.0	55.9	57.3	56.1	54.2	-3.4%	1.5%
Kuwait	3.7	5.6	5.0	6.2	6.5	6.3	6.9	9.1	10.3	10.4	10.5	1.6%	0.3%
Qatar	0.8	0.8	0.8	0.9	1.0	1.1	1.1	1.2	1.1	1.2	1.4	19.7%	♦
Saudi Arabia	55.4	51.4	52.1	53.5	51.4	53.7	55.3	58.8	60.9	62.4	62.7	0.5%	1.8%
United Arab Emirates	16.5	16.9	17.2	18.2	18.0	17.8	16.3	11.9	13.0	14.2	14.3	0.6%	0.4%
Other Middle East	44.9	49.0	52.6	54.9	58.1	58.6	61.0	62.6	63.0	63.5	63.3	-0.3%	1.8%
Total Middle East	170.3	173.7	178.6	187.1	193.4	198.1	199.6	199.5	205.6	207.8	206.4	-0.6%	5.9%
Algeria	9.1	9.1	9.1	8.7	8.4	8.1	8.0	8.2	8.1	8.5	8.8	3.5%	0.3%
Egypt	23.4	22.7	21.6	21.5	23.3	24.6	26.0	27.3	27.8	27.2	26.2	-3.5%	0.7%
South Africa	16.7	17.3	18.0	18.8	20.1	20.7	21.0	21.3	21.8	22.5	23.0	2.1%	0.7%
Other Africa	45.4	47.8	49.3	51.5	51.9	52.7	53.9	55.7	57.4	57.9	59.0	1.9%	1.7%
Total Africa	94.6	96.9	98.0	100.5	103.7	106.1	108.9	112.5	115.1	116.1	117.0	0.8%	3.3%
Australia	30.8	30.9	32.7	34.0	35.3	35.9	37.0	37.0	38.0	37.7	38.1	1.0%	1.1%
Bangladesh	1.7	1.8	2.1	2.2	2.9	2.9	3.3	3.7	3.4	3.4	3.4	1.0%	0.1%
China	117.9	129.0	140.5	149.5	160.7	174.4	185.6	190.3	207.2	230.1	231.9	0.8%	6.6%
China Hong Kong SAR	6.3	8.1	8.3	8.9	9.5	9.3	9.2	8.8	9.3	9.7	9.5	-2.1%	0.3%
India	58.9	62.1	62.7	67.4	73.0	79.4	83.3	86.8	95.2	97.5	97.1	-0.4%	2.8%
Indonesia	32.2	35.1	37.6	37.0	39.1	42.4	45.9	43.5	46.8	50.4	52.3	3.7%	1.5%
Japan	252.1	257.5	251.9	267.4	267.6	268.8	265.0	253.6	257.3	255.4	247.2	-3.2%	7.0%
Malaysia	13.9	14.0	15.6	17.4	17.9	19.0	20.2	19.0	20.3	20.4	18.6	-8.8%	0.5%
New Zealand	4.9	5.2	5.2	5.6	5.8	5.9	6.1	6.1	6.3	6.3	6.2	-0.4%	0.2%
Pakistan	11.4	12.4	13.5	14.5	15.8	16.6	17.0	17.6	18.2	18.8	18.9	0.7%	0.5%
Philippines	11.1	13.7	14.1	14.9	16.8	17.5	18.8	19.1	18.0	16.6	16.5	-0.5%	0.5%
Singapore	23.7	24.7	26.7	30.6	32.0	30.3	32.4	33.3	31.6	33.5	36.9	10.2%	1.1%
South Korea	59.9	72.3	79.3	87.0	94.8	101.4	111.4	93.9	100.7	103.2	103.1	-0.1%	2.9%
Taiwan	27.6	28.4	30.2	32.3	34.7	34.8	36.0	37.2	39.9	39.8	37.7	-5.2%	1.1%
Thailand	21.4	23.6	26.8	29.8	34.7	37.5	37.8	35.4	35.4	34.8	33.8	-2.8%	1.0%
Other Asia Pacific	11.4	12.5	13.5	14.0	14.7	16.4	17.5	18.2	19.0	20.6	21.5	4.4%	0.6%
Total Asia Pacific	685.2	731.3	760.7	812.5	855.3	892.5	926.5	903.5	946.6	978.2	972.7	-0.5%	27.7%
TOTAL WORLD	3137.6	3170.3	3140.8	3199.6	3246.8	3322.8	3395.6	3410.1	3480.8	3519.0	3510.6	-0.2%	100.0%
of which:													
European Union 15	593.3	604.2	598.9	598.9	606.2	619.0	623.9	635.0	636.2	632.8	637.1	0.7%	18.2%
OECD	1931.1	1979.0	1986.7	2041.0	2053.0	2112.4	2144.6	2150.2	2187.1	2197.4	2189.6	-0.4%	62.4%
Former Soviet Union	397.4	348.0	275.7	236.3	217.0	188.7	186.8	180.6	177.0	170.3	169.6	-0.4%	4.8%
Other EMEs	809.1	843.3	878.4	922.3	976.8	1021.7	1064.2	1079.3	1116.7	1151.3	1151.4	♦	32.8%

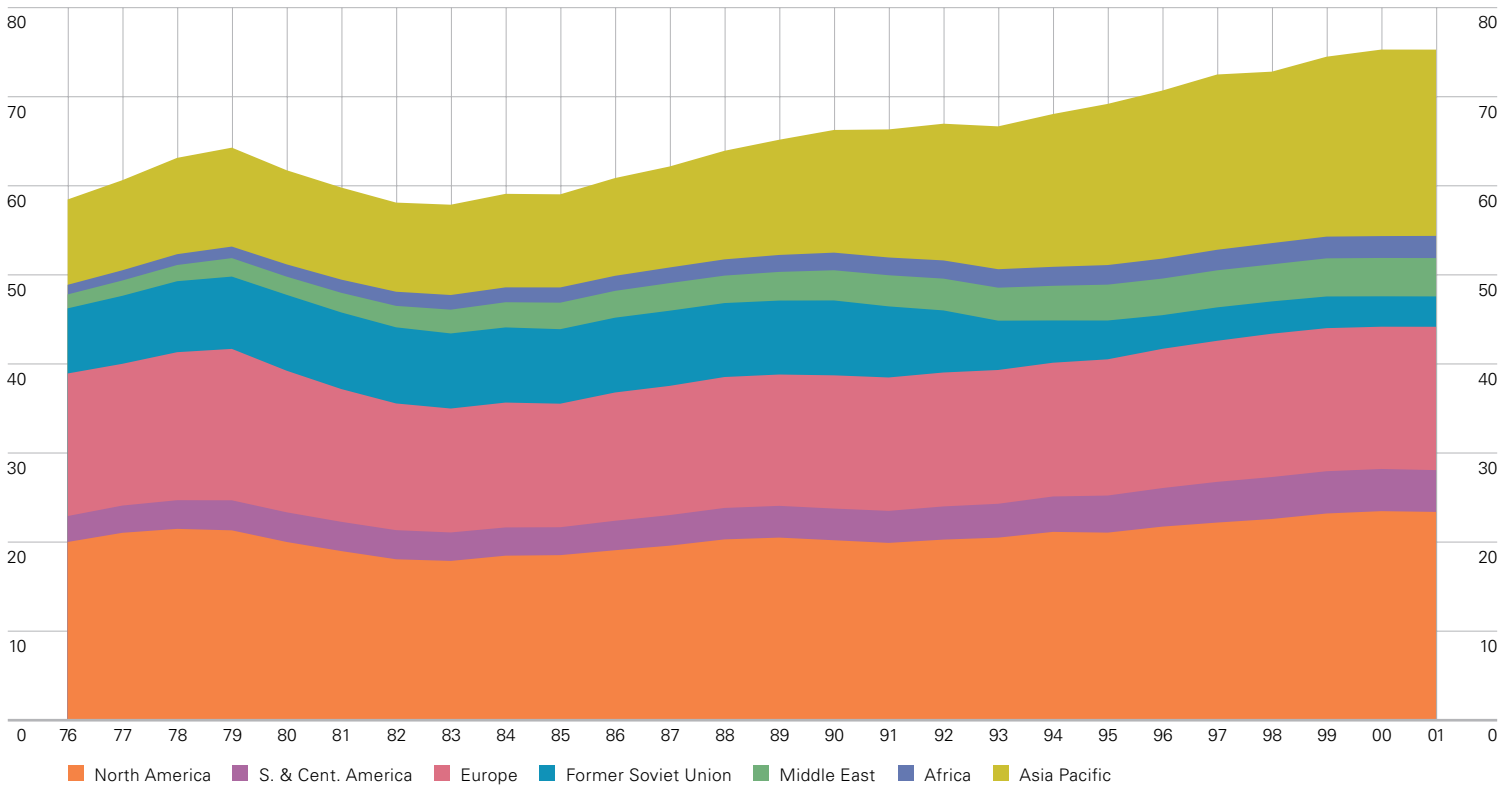
*Inland demand plus international aviation and marine bunkers and refinery fuel and loss.

♦Less than 0.05%.

Note: Differences between these world consumption figures and world production statistics on page 7 are accounted for by stock changes, consumption of non-petroleum additives and substitute fuels, and unavoidable disparities in the definition, measurement or conversion of oil supply and demand data. The US volumetric consumption levels include no adjustment for processing gain (see 'definitions' on the inside back cover).

consumption by area

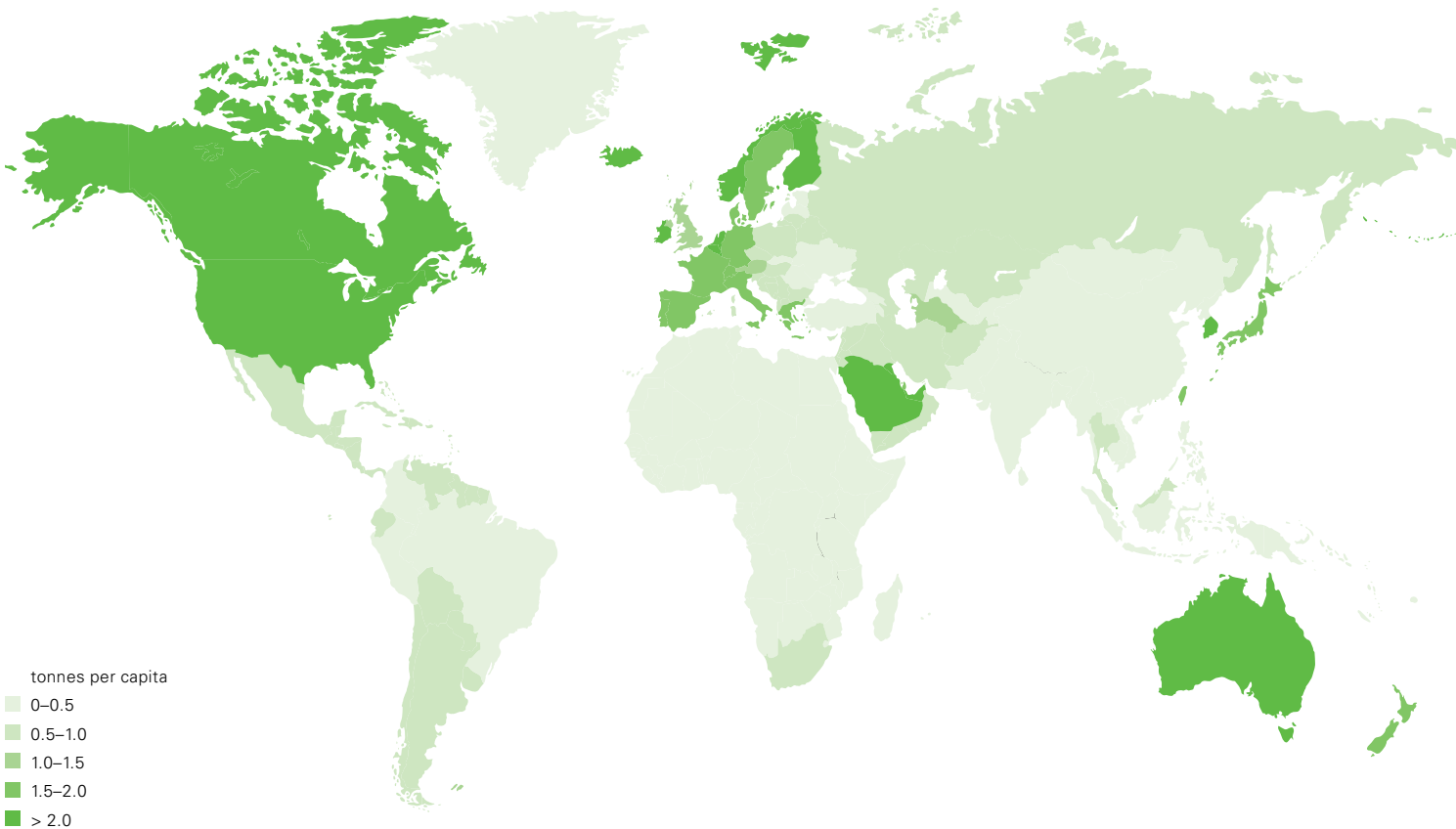
Million barrels daily



Global oil consumption failed to grow in 2001 for the first time since 1993. Having been the engine of consumption growth for much of the 1990s, Asian oil demand growth has slowed sharply since the economic crisis of 1997/98.

consumption per capita

Tonnes





regional consumption – by product group

Thousand barrels daily	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
North America													
Gasolines	8680	8833	8975	9100	9235	9389	9560	9849	9998	10106	10200	0.9%	43.6%
Middle distillates	5369	5449	5600	5895	5935	6194	6398	6450	6628	6811	6767	-0.6%	28.9%
Fuel oil	1701	1619	1571	1571	1336	1348	1351	1506	1415	1518	1451	-4.4%	6.2%
Others	4158	4378	4352	4579	4555	4805	4882	4788	5169	5037	4969	-1.4%	21.3%
Total North America	19908	20279	20498	21145	21061	21736	22191	22593	23210	23473	23386	-0.4%	100.0%
of which: USA													
Gasolines	7529	7670	7792	7880	8025	8167	8324	8579	8716	8813	8883	0.8%	45.2%
Middle distillates	4648	4711	4844	5084	5132	5342	5502	5545	5700	5852	5843	-0.2%	29.8%
Fuel oil	1147	1079	1062	1003	835	831	777	869	814	893	829	-7.2%	4.2%
Others	3389	3573	3539	3751	3733	3969	4017	3924	4290	4143	4078	-1.6%	20.8%
Total USA	16713	17033	17236	17719	17725	18309	18621	18917	19519	19701	19633	-0.3%	100.0%
S. & Cent. America													
Gasolines	981	983	1025	1105	1160	1197	1266	1283	1396	1374	1346	-2.0%	28.7%
Middle distillates	1223	1276	1312	1398	1476	1538	1625	1700	1680	1690	1705	0.9%	36.3%
Fuel oil	704	682	697	721	753	788	845	868	776	749	725	-3.2%	15.4%
Others	688	781	767	749	773	804	831	857	893	919	917	-0.3%	19.6%
Total S. & Cent. America	3596	3722	3801	3973	4162	4327	4568	4709	4745	4732	4693	-0.8%	100.0%
Europe													
Gasolines	4177	4213	4158	4129	4201	4227	4279	4318	4334	4217	4121	-2.3%	25.6%
Middle distillates	5774	5809	5871	5883	6045	6356	6421	6631	6694	6722	6939	3.2%	43.1%
Fuel oil	2447	2385	2353	2280	2283	2260	2206	2191	2088	1982	1981	-0.1%	12.3%
Others	2579	2631	2639	2727	2766	2790	2933	2952	2946	3053	3052	*	19.0%
Total Europe	14976	15038	15022	15019	15295	15633	15839	16092	16063	15975	16093	0.7%	100.0%
Middle East													
Gasolines	560	616	635	708	763	774	814	830	841	840	843	0.4%	19.6%
Middle distillates	1180	1169	1235	1336	1435	1468	1465	1459	1482	1483	1517	2.2%	35.2%
Fuel oil	1210	1167	1142	1170	1187	1206	1205	1173	1251	1281	1241	-3.1%	28.8%
Others	547	620	691	678	644	662	678	699	709	703	704	0.2%	16.4%
Total Middle East	3497	3571	3704	3891	4028	4110	4161	4161	4283	4307	4306	*	100.0%
Africa													
Gasolines	504	516	527	539	554	552	559	568	574	580	591	2.1%	23.8%
Middle distillates	780	795	818	840	866	893	919	949	985	1007	1032	2.4%	41.5%
Fuel oil	413	424	412	416	435	445	466	491	494	474	456	-3.6%	18.3%
Others	297	308	316	335	343	349	363	376	386	395	410	3.8%	16.4%
Total Africa	1994	2043	2073	2130	2198	2240	2307	2385	2439	2455	2490	1.4%	100.0%
Asia Pacific incl. China and Japan													
Gasolines	3266	3540	3731	4013	4317	4549	4973	5018	5311	5549	5525	-0.4%	26.4%
Middle distillates	5225	5619	6014	6262	6724	7160	7430	7186	7596	7798	7878	1.0%	37.7%
Fuel oil	3509	3637	3622	3892	3857	3795	3829	3563	3548	3505	3366	-4.0%	16.1%
Others	2379	2553	2671	2988	3196	3364	3447	3483	3745	4089	4147	1.4%	19.8%
Total Asia Pacific	14379	15350	16038	17155	18094	18868	19680	19250	20200	20941	20916	-0.1%	100.0%
China													
Gasolines	642	711	804	848	904	986	1111	1098	1164	1313	1245	-5.2%	24.7%
Middle distillates	683	790	898	878	997	1080	1202	1277	1455	1633	1698	4.0%	33.7%
Fuel oil	661	674	725	665	669	719	750	725	694	725	728	0.4%	14.4%
Others	425	488	486	755	819	888	871	946	1103	1314	1371	4.3%	27.2%
Total China	2411	2662	2913	3145	3390	3672	3935	4047	4416	4985	5041	1.1%	100.0%
Japan													
Gasolines	1269	1338	1355	1442	1548	1576	1646	1611	1702	1735	1711	-1.4%	31.5%
Middle distillates	1788	1824	1853	1905	1971	2027	1991	1949	1978	1958	1958	-	36.1%
Fuel oil	1277	1264	1112	1292	1135	1067	977	879	861	804	690	-14.2%	12.7%
Others	1076	1095	1120	1105	1129	1142	1147	1085	1077	1079	1067	-1.1%	19.7%
Total Japan	5410	5521	5440	5745	5784	5812	5761	5525	5618	5576	5427	-2.7%	100.0%
World excl. Former Soviet Union													
Gasolines	18169	18700	19051	19594	20230	20688	21451	21866	22454	22665	22626	-0.2%	31.5%
Middle distillates	19550	20117	20850	21614	22480	23609	24258	24375	25064	25512	25839	1.3%	35.9%
Fuel oil	9984	9915	9797	10051	9851	9842	9902	9794	9572	9510	9221	-3.0%	12.8%
Others	10648	11272	11436	12055	12277	12775	13133	13155	13848	14196	14199	*	19.8%
Total World excl. Former Soviet Union	58351	60004	61135	63314	64838	66913	68745	69190	70939	71883	71884	*	100.0%
European Union 15													
Gasolines	3574	3620	3562	3512	3550	3559	3590	3607	3622	3545	3458	-2.5%	25.7%
Middle distillates	4953	4978	5033	5051	5179	5440	5514	5679	5762	5813	6000	3.2%	44.5%
Fuel oil	1857	1887	1841	1797	1791	1755	1703	1733	1658	1552	1533	-1.2%	11.4%
Others	2150	2241	2211	2294	2296	2295	2379	2398	2415	2440	2477	1.5%	18.4%
Total European Union 15	12533	12726	12646	12654	12816	13049	13186	13417	13457	13350	13469	0.9%	100.0%
OECD													
Gasolines	14585	14961	15124	15378	15721	15968	16415	16728	17028	17070	17056	-0.1%	35.9%
Middle distillates	13420	13647	13973	14414	14777	15468	15738	15753	16111	16265	16437	1.1%	34.6%
Fuel oil	5578	5539	5324	5505	5115	5036	4904	4827	4666	4637	4441	-4.2%	9.4%
Others	7972	8357	8401	8714	8769	9084	9353	9199	9607	9617	9537	-0.8%	20.1%
Total OECD	41555	42503	42822	44012	44383	45556	46409	46508	47412	47589	47471	-0.2%	100.0%
Other EMEs													
Gasolines	3584	3739	3927	4215	4509	4719	5037	5138	5426	5595	5570	-0.4%	22.8%
Middle distillates	6130	6470	6877	7200	7703	8141	8520	8622	8953	9247	9402	1.7%	38.5%
Fuel oil	4406	4376	4472	4546	4735	4806	4999	4966	4906	4873	4779	-1.9%	19.6%
Others	2676	2915	3036	3341	3507	3691	3780	3956	4242	4579	4662	1.8%	19.1%
Total Other EMEs†	16796	17501	18313	19302	20455	21357	22336	22682	23527	24294	24413	0.5%	100.0%

*Less than 0.05%.

†Excludes Former Soviet Union.

Notes: For the purposes of this table, annual changes and shares of total are calculated using thousand barrels daily figures.

'Gasolines' consists of aviation and motor gasolines and light distillate feedstock.

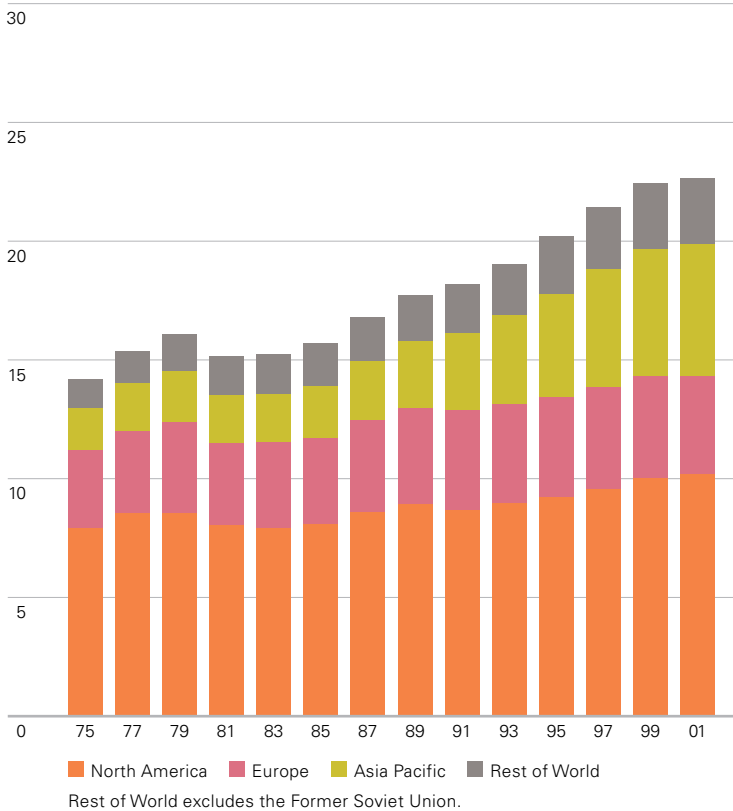
'Middle distillates' consists of jet and heating kerosenes, and gas and diesel oils (including marine bunkers).

'Fuel oil' includes marine bunkers and crude oil used directly as fuel.

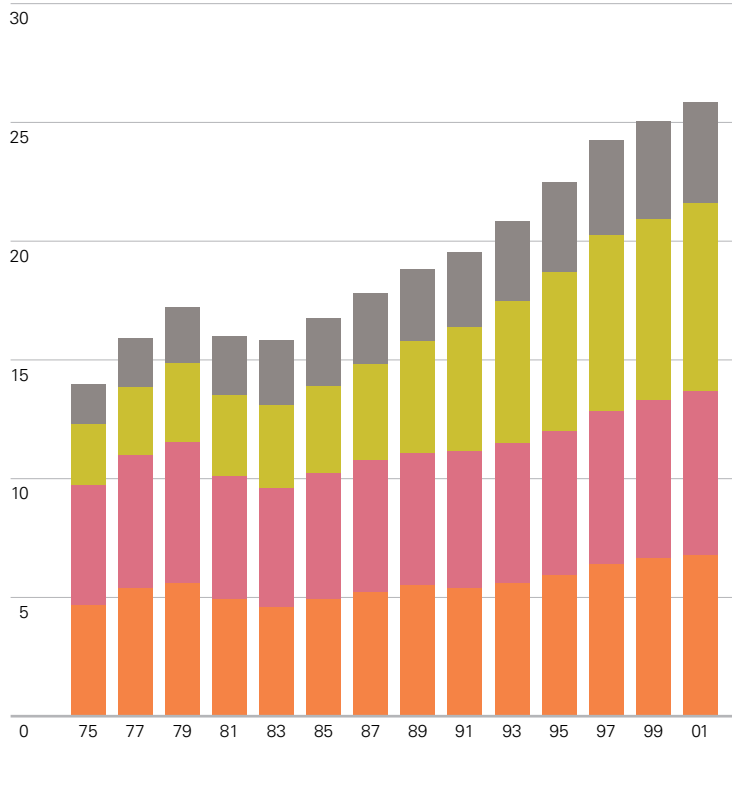
'Others' consists of refinery gas, LPGs, solvents, petroleum coke, lubricants, bitumen, wax and refinery fuel and loss.

product consumption – by region

Gasolines (million barrels daily)

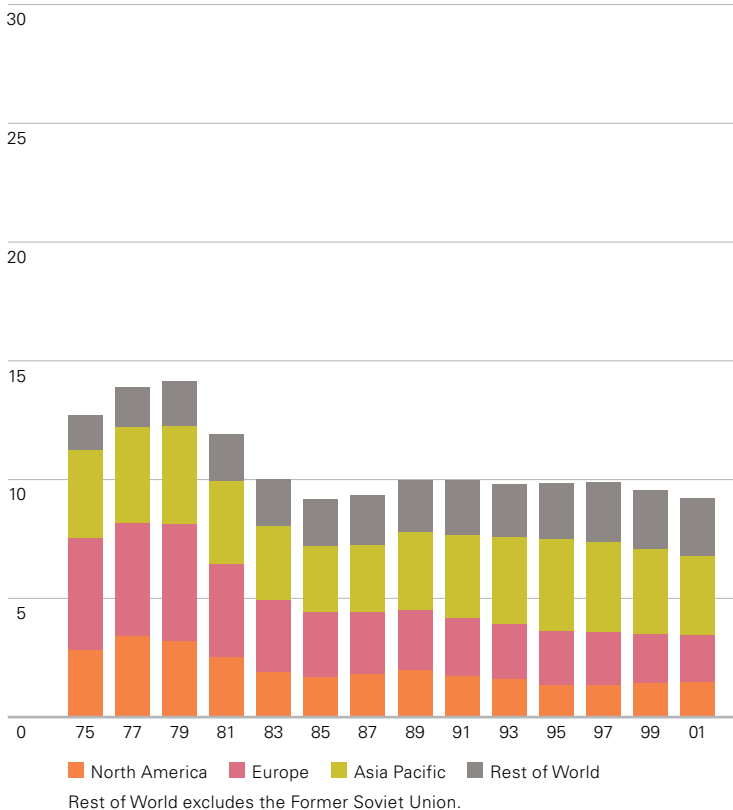


Middle distillates (million barrels daily)

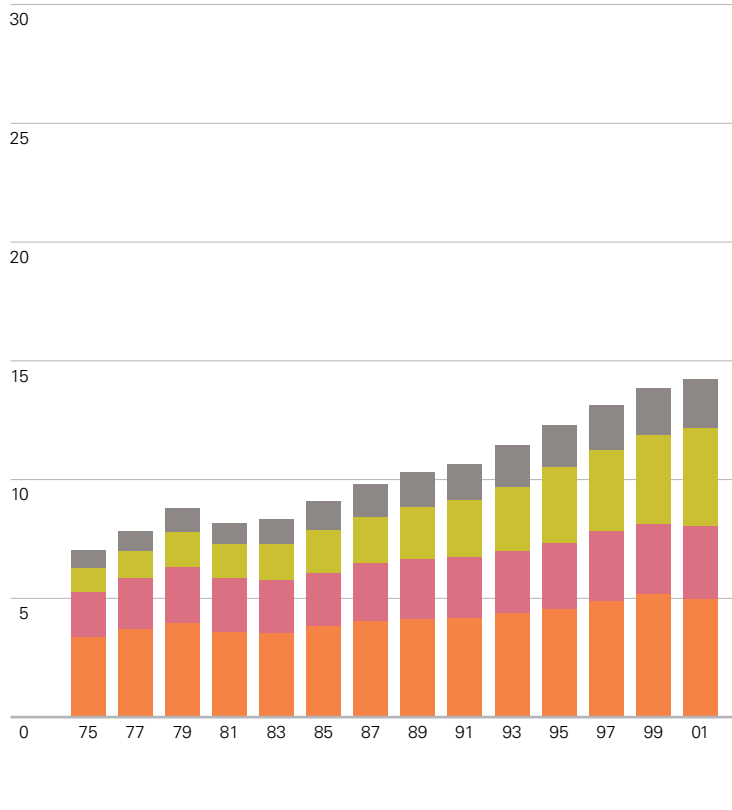


product consumption – by region

Fuel oil (million barrels daily)



Others (million barrels daily)



Middle distillates have registered the largest increment in consumption over the last 20 years, followed by gasolines and other oil. Fuel oil use has been flat since 1985, following sharp falls in the early 1980s. The fastest growth in product demand has been in Asia Pacific.

oil

spot crude prices

US dollars per barrel	Dubai \$/bbl*	Brent \$/bbl†	Nigerian Forcados \$/bbl	West Texas Intermediate \$/bbl‡
1972	1.90	—	—	—
1973	2.83	—	—	—
1974	10.41	—	—	—
1975	10.70	—	—	—
1976	11.63	12.80	12.87	12.23
1977	12.38	13.92	14.21	14.22
1978	13.03	14.02	13.65	14.55
1979	29.75	31.61	29.25	25.08
1980	35.69	36.83	36.98	37.96
1981	34.32	35.93	36.18	36.08
1982	31.80	32.97	33.29	33.65
1983	28.78	29.55	29.54	30.30
1984	28.06	28.66	28.14	29.39
1985	27.53	27.51	27.75	27.99
1986	13.01	14.38	14.45	15.04
1987	16.91	18.42	18.40	19.19
1988	13.20	14.96	14.99	15.97
1989	15.68	18.20	18.30	19.68
1990	20.50	23.81	23.85	24.50
1991	16.56	20.05	20.11	21.54
1992	17.21	19.37	19.61	20.57
1993	14.90	17.07	17.41	18.45
1994	14.76	15.98	16.25	17.21
1995	16.09	17.18	17.26	18.42
1996	18.56	20.80	21.16	22.16
1997	18.13	19.30	19.33	20.61
1998	12.16	13.11	12.62	14.39
1999	17.30	18.25	18.00	19.31
2000	26.24	28.98	28.42	30.37
2001	22.80	24.77	24.23	25.93

*1972-1985 Arabian Light, 1986-2001 Dubai.

†1976-1984 Forties, 1985-2001 Brent.

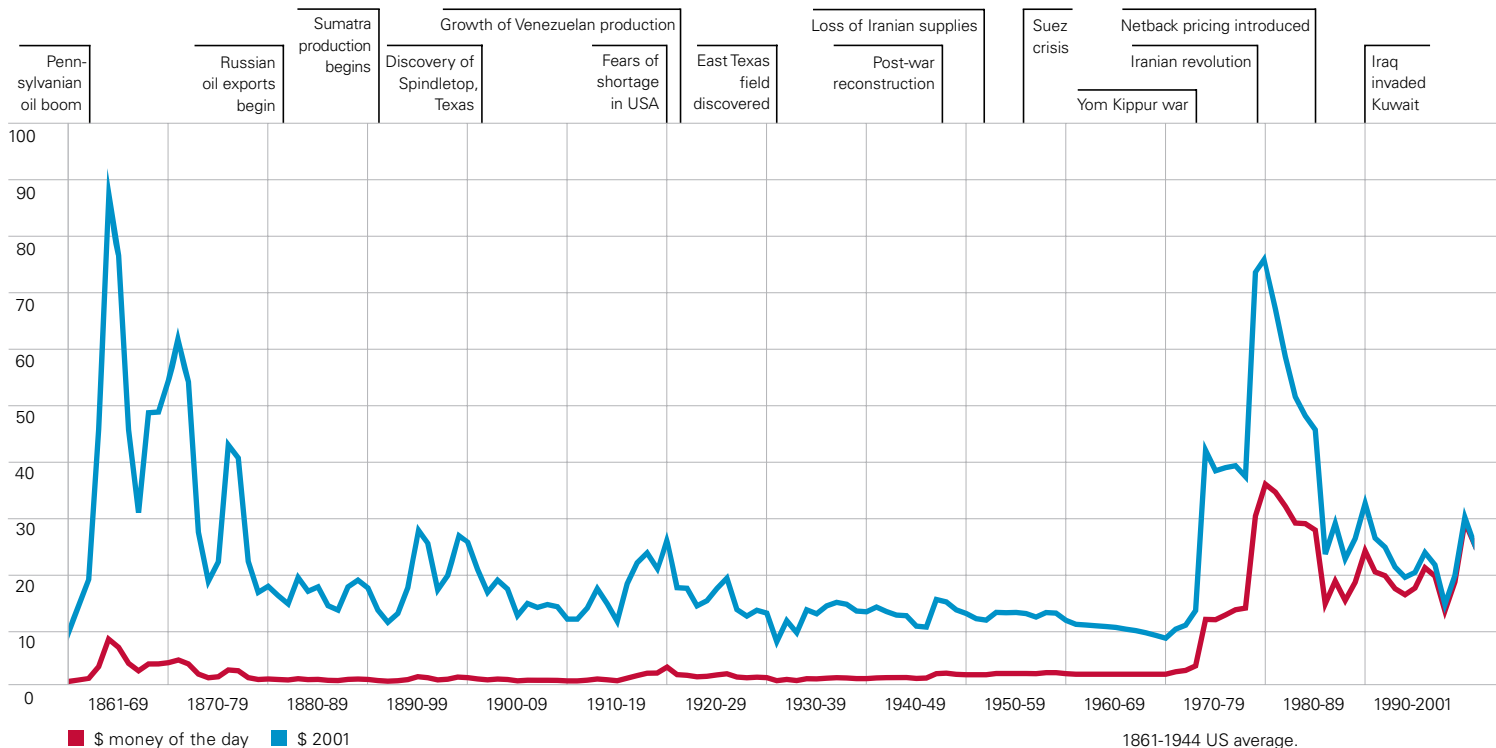
‡1976-1983 Posted WTI prices, 1984-2001 Spot WTI prices.

Source: Platts.

crude oil prices since 1861

US dollars per barrel

World events



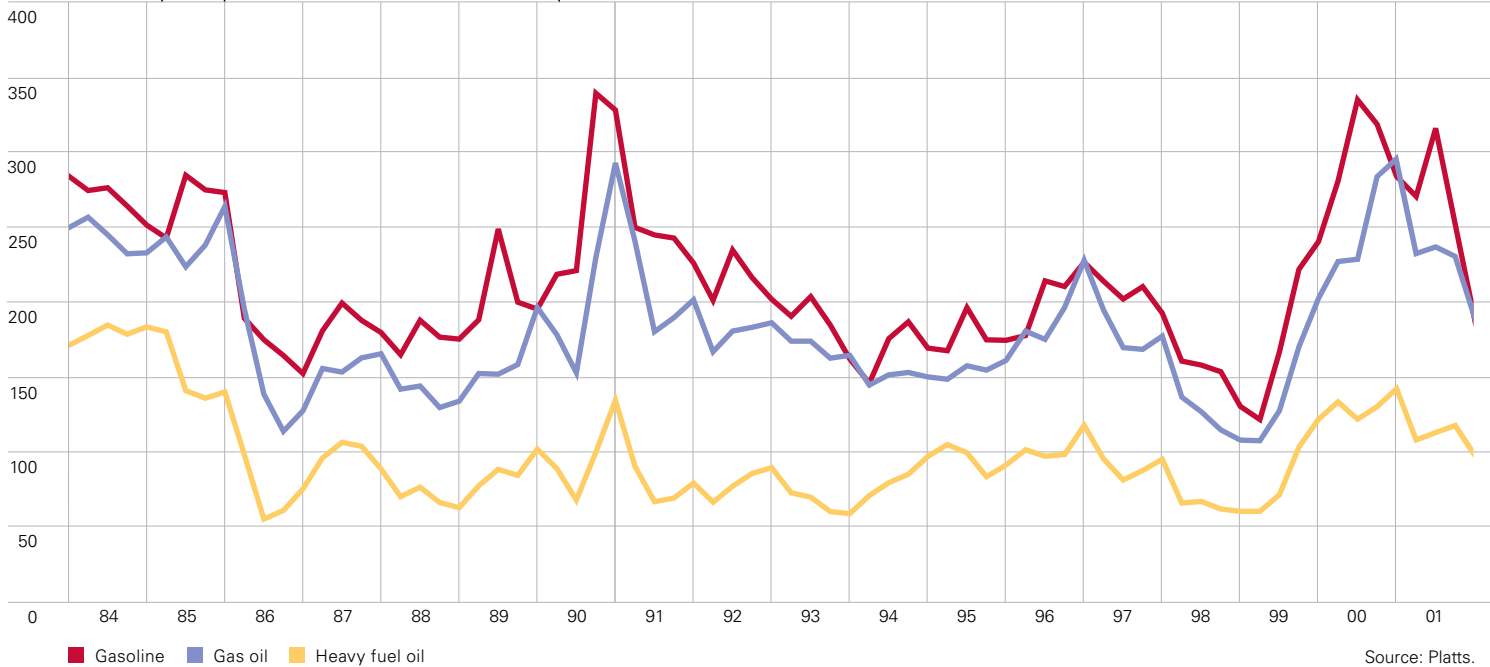
1861-1944 US average.
1945-1985 Arabian Light posted at Ras Tanura.
1986-2001 Brent spot.

Rotterdam product prices

US dollars per tonne

World events

End of coalminers' strike in UK OPEC introduced netback pricing Iraq invaded Kuwait

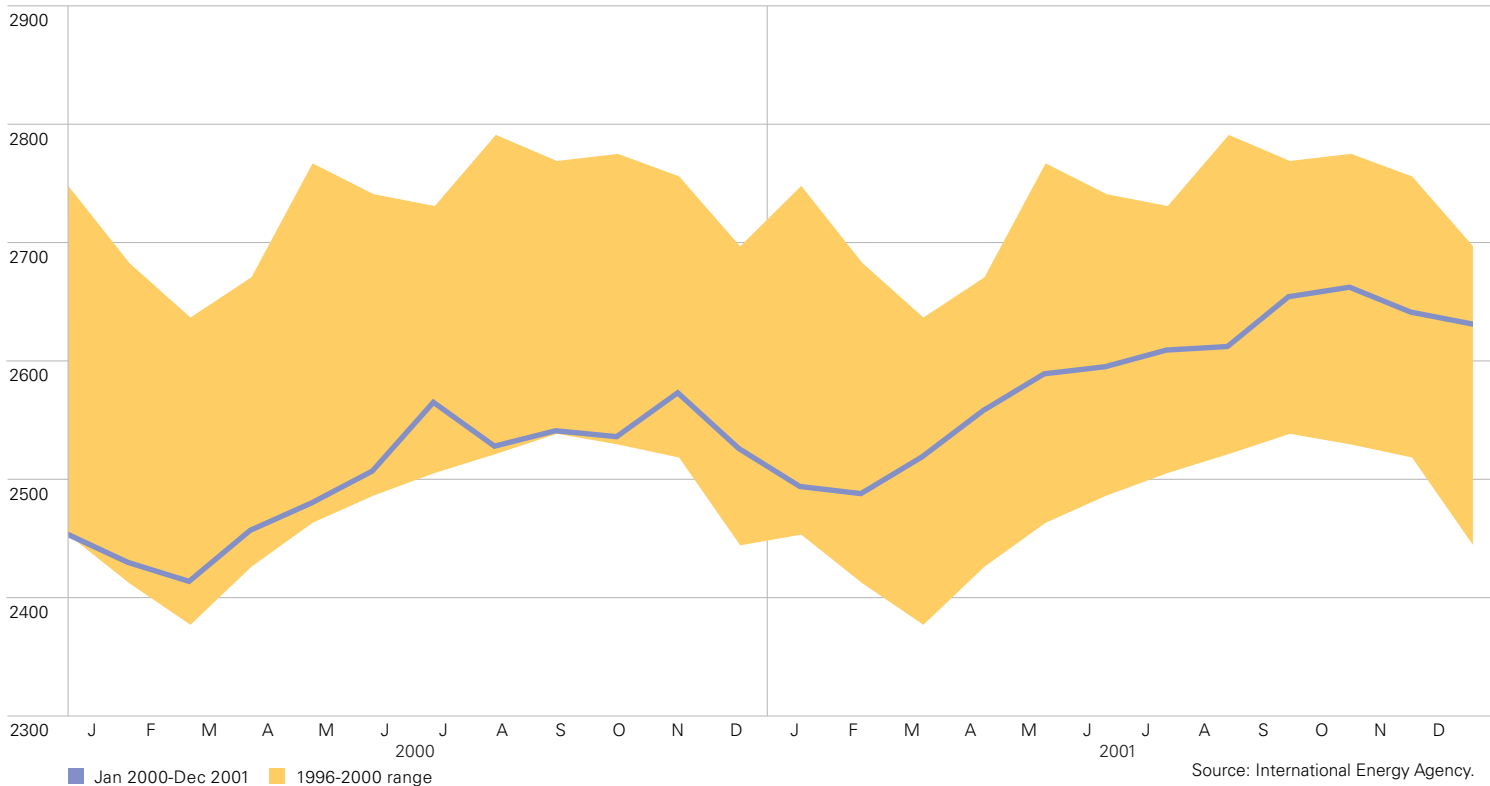


Source: Platts.

1984 to 1st quarter 1992: leaded gasoline.
From 2nd quarter 1992: unleaded gasoline.

OECD total commercial oil stocks

Million barrels



Source: International Energy Agency.

oil

refinery capacities

Thousand barrels daily*	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	15700	15120	15030	15434	15333	15452	15711	16261	16512	16595	16814	1.3%	20.5%
Canada	1903	1911	1824	1832	1792	1807	1811	1844	1861	1861	1862	0.1%	2.3%
Mexico	1448	1448	1444	1444	1444	1444	1449	1449	1449	1481	1458	-1.6%	1.8%
Total North America	19051	18479	18298	18710	18569	18703	18971	19554	19822	19937	20134	1.0%	24.5%
Argentina	694	694	688	663	648	651	653	650	650	657	657	-	0.8%
Brazil	1445	1444	1429	1473	1481	1481	1739	1742	1773	1773	1773	-	2.2%
Netherlands Antilles & Aruba	460	460	467	485	505	520	520	520	535	535	590	10.3%	0.7%
Trinidad & Tobago	240	240	240	240	240	160	160	160	160	160	160	-	0.2%
Venezuela	1224	1224	1181	1181	1181	1183	1183	1183	1183	1183	1183	-	1.4%
Other S. & Cent. America	2049	2010	2009	1984	2042	2104	2127	2031	2071	2076	2066	-0.5%	2.5%
Total S. & Cent. America	6112	6072	6014	6026	6097	6099	6382	6286	6372	6384	6429	0.7%	7.8%
Belgium	706	690	692	692	692	690	698	732	736	770	778	1.0%	0.9%
France	1699	1711	1687	1697	1728	1749	1872	1918	1933	1984	1961	-1.2%	2.4%
Germany	2209	2219	2248	2272	2104	2098	2170	2206	2240	2262	2274	0.5%	2.8%
Greece	403	367	295	385	403	403	403	403	403	413	418	1.2%	0.5%
Italy	2422	2433	2360	2272	2272	2256	2241	2269	2292	2292	2292	-	2.8%
Netherlands	1225	1254	1197	1197	1197	1169	1196	1196	1212	1212	1233	1.7%	1.5%
Norway	288	288	288	288	298	308	308	310	323	318	305	-4.1%	0.4%
Portugal	291	290	291	291	291	290	291	291	291	291	291	-	0.4%
Spain	1255	1232	1245	1205	1215	1232	1265	1247	1247	1247	1247	-	1.5%
Sweden	422	421	422	422	422	421	422	422	422	422	422	-	0.5%
Turkey	673	671	673	673	673	671	673	643	643	643	643	-	0.8%
United Kingdom	1827	1837	1844	1866	1844	1873	1823	1848	1777	1778	1769	-0.5%	2.2%
Other Europe	3366	3241	3218	3104	3098	3054	3024	3022	2759	2704	2741	1.4%	3.3%
Total Europe	16786	16654	16460	16364	16237	16214	16386	16507	16278	16336	16374	0.2%	19.9%
Total Former Soviet Union	12310	10090	10085	10215	10302	10341	10410	9988	8730	8712	8695	-0.2%	10.6%
Bahrain	250	250	250	250	250	250	250	250	250	250	250	-	0.3%
Iran	957	957	1092	1092	1235	1330	1378	1448	1450	1450	1474	1.7%	1.8%
Iraq	350	584	634	634	634	634	634	634	634	639	644	0.8%	0.8%
Kuwait	140	380	455	720	795	825	880	895	895	690	720	4.3%	0.9%
Saudi Arabia	1750	1550	1550	1670	1670	1670	1693	1780	1811	1811	1816	0.3%	2.2%
Other Middle East	1065	1088	1102	1121	1123	1172	1317	1259	1320	1469	1730	17.8%	2.1%
Total Middle East	4512	4809	5083	5487	5707	5881	6152	6266	6360	6309	6634	5.2%	8.1%
Total Africa	2715	2749	2871	2723	2785	2870	2807	2780	2842	2957	3080	4.2%	3.7%
Australasia	765	782	791	796	818	848	890	916	919	919	926	0.8%	1.1%
China	2892	3044	3334	3567	4014	4226	4559	4592	5401	5407	5402	-0.1%	6.6%
India	1122	1041	1069	1072	1133	1210	1236	1356	2190	2219	2261	1.9%	2.8%
Indonesia	867	867	867	932	992	992	992	1028	1060	1065	1065	-	1.3%
Japan	4505	4636	4802	4862	5006	5006	5056	5088	5109	5029	4811	-4.3%	5.9%
Singapore	1085	1115	1160	1158	1273	1245	1246	1246	1246	1255	1255	-	1.5%
South Korea	984	1370	1591	1615	1727	1917	2316	2316	2316	2316	2316	-	2.8%
Other Asia Pacific	1597	1787	1835	1964	2285	2546	2550	2704	2745	2763	2823	2.2%	3.4%
Total Asia Pacific	13817	14642	15449	15966	17248	17990	18845	19246	20986	20973	20859	-0.5%	25.4%
TOTAL WORLD	75303	73495	74260	75491	76945	78098	79953	80627	81390	81608	82205	0.7%	100.0%
of which: European Union 15	13110	13090	12924	12982	12887	12921	13069	13237	13265	13392	13406	0.1%	16.3%
OECD	40421	40360	40412	40977	40999	41359	42289	43104	43443	43606	43595	*	53.0%
Former Soviet Union	12310	10090	10085	10215	10302	10341	10410	9988	8730	8712	8695	-0.2%	10.6%
Other EMEs	22572	23045	23763	24299	25644	26398	27254	27535	29217	29290	29915	2.1%	36.4%

*Atmospheric distillation capacity on a calendar-day basis.

*Less than 0.05%.

Note: For the purposes of this table, annual changes and shares of total are calculated using thousand barrels daily figures.

refinery throughputs

Thousand barrels daily*	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	13301	13411	13613	13866	13973	14195	14662	14889	14804	15067	15130	0.4%	21.6%
Canada	1491	1458	1539	1580	1569	1644	1694	1709	1714	1765	1823	3.3%	2.6%
Mexico	1511	1497	1540	1459	1488	1491	1438	1451	1389	1364	1400	2.6%	2.0%
S. & Cent. America	4648	4625	4697	4849	4849	4994	5238	5443	5405	5401	5535	2.5%	7.9%
Europe	13810	14003	14272	14397	14448	14697	14859	15336	14838	14989	14849	-0.9%	21.2%
Former Soviet Union	8818	7156	5926	5075	4888	4624	4735	4482	4468	4558	4900	7.5%	7.0%
Middle East	3828	4277	4666	5244	5160	5408	5448	5595	5672	5635	5616	-0.3%	8.0%
Africa	2255	2255	2279	2244	2358	2381	2539	2408	2448	2393	2442	2.0%	3.5%
Australasia	745	747	756	787	788	844	872	865	881	881	885	0.5%	1.3%
China	2282	2426	2570	2548	2711	2850	3084	3060	3686	4218	4210	-0.2%	6.0%
Japan	3653	3882	3982	4167	4169	4168	4319	4212	4149	4145	4107	-0.9%	5.9%
Other Asia Pacific	5270	5717	6051	6314	6822	7544	8183	8010	8309	8914	9061	1.6%	13.0%
TOTAL WORLD	61612	61453	61892	62529	63223	64840	67072	67460	67763	69330	69958	0.9%	100.0%
of which: European Union 15	11739	12038	12169	12214	12158	12430	12569	13038	12631	12737	12646	-0.7%	18.1%
OECD	34985	35911	36638	37191	37521	38431	39673	40146	39677	40064	39996	-0.2%	57.2%
Former Soviet Union	8818	7156	5926	5075	4888	4624	4735	4482	4468	4558	4900	7.5%	7.0%
Other EMEs	17809	18386	19328	20263	20815	21785	22663	22831	23618	24707	25062	1.4%	35.8%

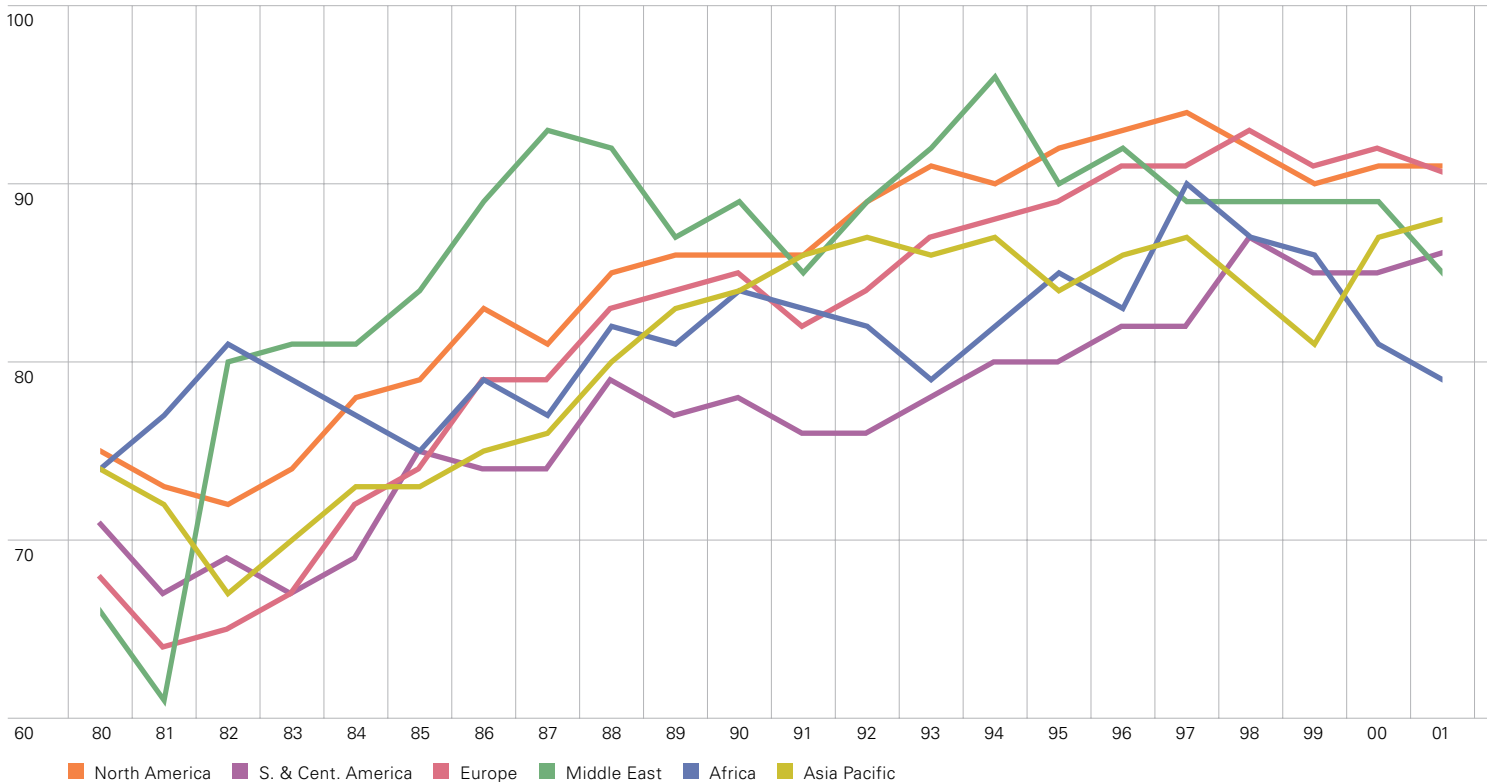
*Calendar day.

Note: For the purposes of this table, annual changes and shares of total are calculated using thousand barrels daily figures.

Source: Includes data from Parpinelli Tecnico.

refinery utilization

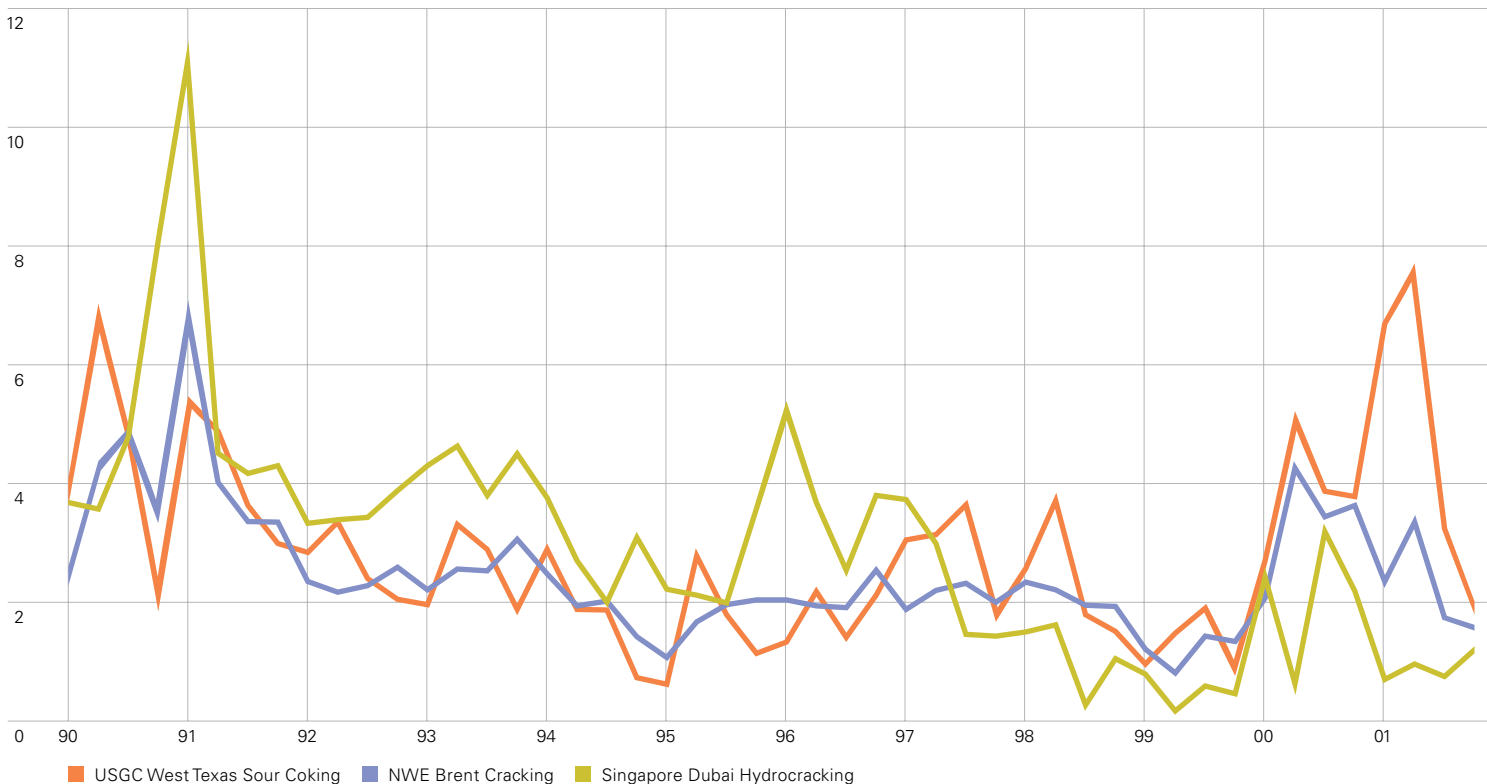
Percentage



Refinery capacity utilization for most regions peaked in the second half of the 1990s. Slower oil demand growth has meant falling utilization for most regions since then.

regional refining margins

US dollars per barrel



Note: The refining margins presented are benchmark margins for three major global refining centres, US Gulf Coast (USGC), North West Europe (NWE) (Rotterdam) and Singapore. In each case they are based on a single crude appropriate for that region and have optimized product yields based on a generic refinery configuration (cracking, hydrocracking or coking), again appropriate for that region. The margins are on a semi-variable basis, i.e. the margin after all variable costs and fixed energy costs.



trade movements

Thousand barrels daily	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
Imports													
USA	7791	7888	8620	8929	8831	9400	9907	10382	10550	11092	11618	4.7%	26.5%
Europe†	10171	10319	11083	10740	10436	10472	10421	11017	10670	11070	11531	4.2%	26.4%
Japan	4925	5306	5307	5612	5581	5685	5735	5259	5346	5329	5202	-2.4%	11.9%
Rest of World*	9451	9884	9753	10464	11562	12764	13721	13432	14157	14911	15403	3.3%	35.2%
TOTAL WORLD	32338	33397	34763	35745	36410	38321	39784	40090	40723	42402	43754	3.2%	100.0%
Exports													
USA	1000	918	959	943	949	978	976	1011	956	890	910	2.2%	2.1%
Canada	1111	1101	1215	1323	1402	1484	1492	1603	1520	1703	1804	5.9%	4.1%
Mexico	1468	1469	1434	1421	1422	1656	1767	1770	1739	1814	1882	3.7%	4.3%
S. & Cent. America	1953	2374	2391	2695	2797	3011	3219	3240	3145	3079	3143	2.1%	7.2%
Europe	n/a	n/a	1358	1634	1472	1540	1463	1344	1851	1967	1947	-1.0%	4.5%
Former Soviet Union#	1860	2298	2436	2531	2731	3239	3413	3569	4019	4273	4679	9.5%	10.7%
Middle East	13829	15453	16456	16513	16651	17170	18184	18702	18341	18944	19098	0.8%	43.6%
North Africa	2781	2849	2685	2652	2696	2756	2743	2712	2726	2732	2724	-0.3%	6.2%
West Africa	2500	2679	2676	2675	2723	2916	3102	3094	2985	3293	3182	-3.4%	7.3%
Asia Pacific†	2257	2414	2420	2517	2576	2790	2735	2490	2650	2767	2879	4.0%	6.6%
Rest of World*	3579	1842	733	841	991	781	690	555	791	940	1506	60.2%	3.4%
TOTAL WORLD	32338	33397	34763	35745	36410	38321	39784	40090	40723	42402	43754	3.2%	100.0%

*Includes unidentified trade.

†Excludes Japan.

‡Prior to 1993, excludes Central Europe (Albania, Bulgaria, Czech Republic, Former Republic of Yugoslavia, Hungary, Poland, Romania, Slovakia).

n/a not available.

#Prior to 1993, includes Central Europe and excludes movements between Former Soviet Union and Central Europe.

Note: For the purposes of this table, annual changes and shares of total are calculated using thousand barrels daily figures.

inter-area movements 2001

From	To												Total
	USA	Canada	Mexico	S. & C. America	Europe	Africa	Australasia	China	Japan	Other Asia Pacific	Rest of World	Unidentified	
USA	-	6.3	12.1	7.9	11.1	0.2	0.3	0.3	0.6	3.9	0.9	-	43.6
Canada	88.0	-	-	0.2	0.5	-	-	-	-	0.2	-	-	88.9
Mexico	70.8	1.3	-	9.2	9.8	0.2	-	-	1.1	1.0	0.2	-	93.6
S. & Cent. America	126.3	6.0	1.5	-	13.8	0.6	-	0.3	0.4	5.6	-	-	154.5
Europe	46.2	28.9	0.3	2.2	-	7.1	-	1.1	0.1	5.2	4.2	-	95.3
Former Soviet Union	4.3	-	-	7.1	181.2	0.5	-	5.3	0.7	8.7	2.3	20.0	230.1
Middle East	138.0	7.2	1.1	11.8	176.2	41.0	9.1	34.2	208.8	316.7	2.5	-	946.6
North Africa	13.7	3.6	0.8	4.3	96.9	3.9	-	0.3	0.5	7.0	3.2	-	134.2
West Africa	68.1	1.0	-	11.3	34.9	1.5	-	3.8	0.8	36.9	-	-	158.3
East & Southern Africa	-	-	-	-	-	-	-	5.0	1.4	0.9	-	-	7.3
Australasia	2.2	-	-	-	-	-	-	1.0	3.9	14.1	-	-	21.2
China	1.1	-	-	0.3	0.2	-	0.3	-	4.2	8.4	-	-	14.5
Japan	0.4	-	-	-	0.1	0.2	0.2	1.1	-	2.5	-	-	4.5
Other Asia Pacific	9.4	0.2	0.2	-	2.3	0.3	19.4	27.2	34.2	10.8	0.8	-	104.8
Unidentified*	5.2	2.3	-	-	42.9	-	1.2	8.7	0.5	1.1	-	-	61.9
TOTAL IMPORTS	573.7	56.8	16.0	54.3	569.9	55.5	30.5	88.3	257.2	423.0	14.1	20.0	2159.3

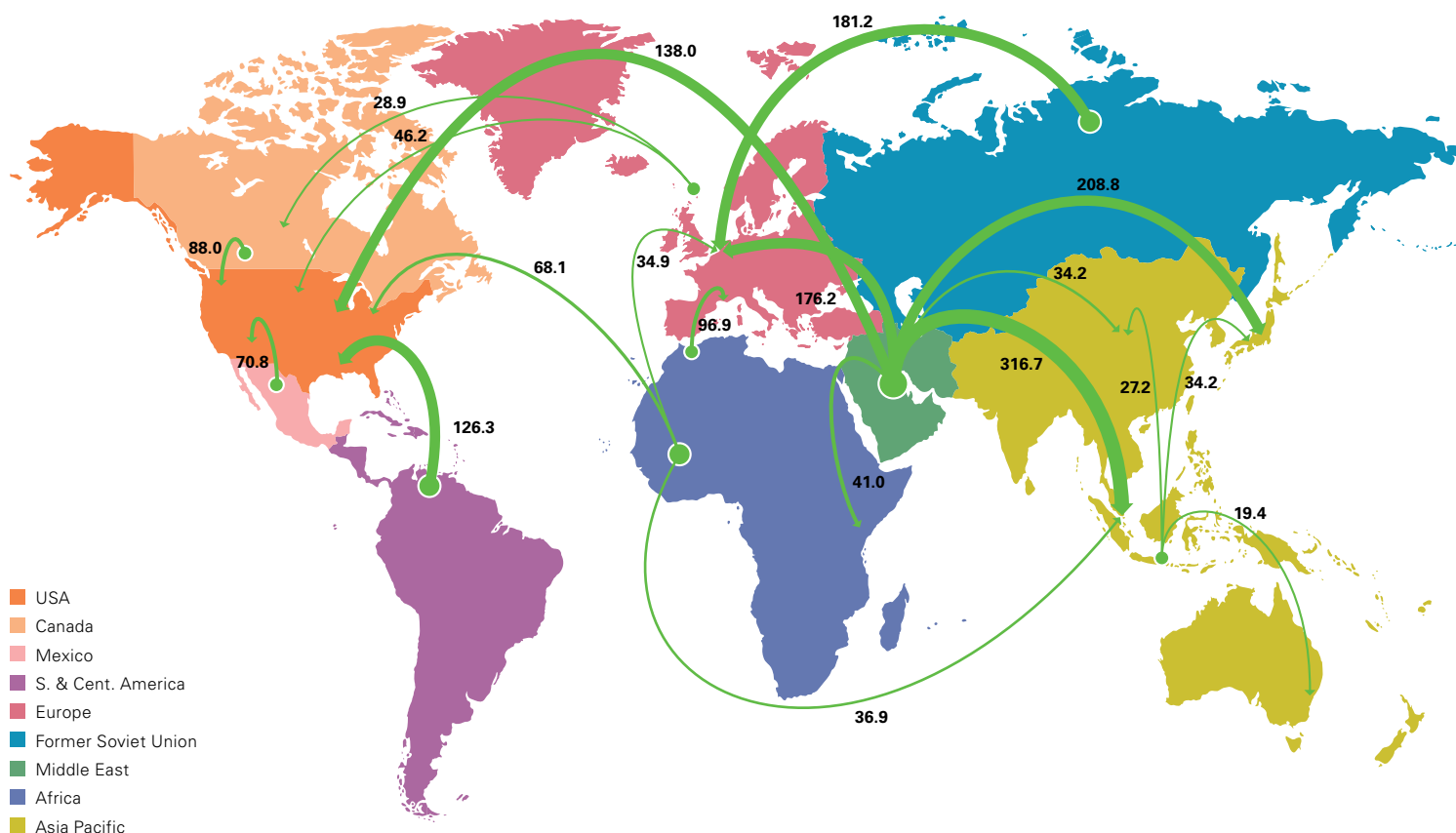
Thousand barrels daily

From	USA	Canada	Mexico	S. & C. America	Europe	Africa	Australasia	China	Japan	Other Asia Pacific	Rest of World	Unidentified	Total
USA	-	130	253	165	232	4	6	6	13	82	19	-	910
Canada	1786	-	-	4	10	-	-	-	-	4	-	-	1804
Mexico	1424	26	-	185	197	4	-	-	22	20	4	-	1882
S. & Cent. America	2567	122	31	-	281	12	-	6	8	114	-	-	3143
Europe	945	582	6	45	-	148	-	22	2	108	88	-	1947
Former Soviet Union	90	-	-	143	3668	10	-	109	14	179	47	418	4679
Middle East	2775	145	23	237	3548	831	183	689	4211	6405	52	-	19098
North Africa	286	72	17	86	1961	79	-	6	10	142	64	-	2724
West Africa	1370	20	-	227	701	30	-	76	16	741	-	-	3182
East & Southern Africa	-	-	-	-	-	-	-	100	28	18	-	-	147
Australasia	45	-	-	-	-	-	-	20	80	285	-	-	430
China	23	-	-	6	4	-	6	-	85	174	-	-	298
Japan	8	-	-	-	2	4	4	23	-	52	-	-	94
Other Asia Pacific	193	4	4	-	48	6	391	562	703	222	17	-	2151
Unidentified*	107	47	-	-	878	-	25	175	10	22	-	-	1265
TOTAL IMPORTS	11618	1149	334	1098	11531	1130	616	1796	5202	8569	291	418	43754

*Includes changes in the quantity of oil in transit, movements not otherwise shown, unidentified military use etc.

major trade movements

Trade flows worldwide (million tonnes)



imports and exports 2001

	Million tonnes				Thousand barrels daily			
	Crude imports	Product imports	Crude exports	Product exports	Crude imports	Product imports	Crude exports	Product exports
USA	455.4	118.3	1.9	41.7	9145	2473	38	872
Canada	47.0	9.8	65.9	23.0	944	205	1323	481
Mexico	–	16.0	90.8	2.8	–	334	1823	59
S. & Cent. America	44.6	9.7	105.2	49.3	896	203	2113	1031
Europe	464.6	105.3	54.8	40.5	9330	2201	1101	847
Former Soviet Union	–	5.5	159.5	70.6	–	115	3203	1476
Middle East	4.2	4.4	838.7	107.9	84	92	16843	2256
North Africa	8.1	5.1	98.7	35.5	163	107	1982	742
West Africa	2.6	8.1	154.7	3.6	52	169	3107	75
East & Southern Africa	26.5	5.1	7.1	0.2	532	107	143	4
Australasia	26.1	4.4	16.2	5.0	524	92	325	105
China	60.3	28.0	6.6	7.9	1211	585	133	165
Japan	212.0	45.2	–	4.5	4257	945	–	94
Other Asia Pacific	332.6	90.4	48.4	56.4	6679	1890	972	1179
Unidentified*	–	20.0	35.5	26.4	–	418	713	552
TOTAL WORLD	1684.0	475.3	1684.0	475.3	33818	9936	33818	9936

*Includes changes in the quantity of oil in transit, movements not otherwise shown, unidentified military use etc.

Note: Bunkers are not included as exports. Intra-area movements (for example, between countries in Europe) are excluded.

natural gas

proved reserves

	At end 1981	At end 1991	At end 2000	At end 2001		Share of total	R/P ratio
	Trillion cubic metres	Trillion cubic metres	Trillion cubic metres	Trillion cubic metres	Trillion cubic feet		
USA	5.61	4.79	4.74	5.02	177.4	3.2%	9.2
Canada	2.55	2.74	1.73	1.69	59.7	1.1%	9.8
Mexico	2.13	2.02	0.86	0.84	29.5	0.5%	24.0
Total North America	10.29	9.56	7.33	7.55	266.7	4.9%	10.0
Argentina	0.66	0.58	0.75	0.78	27.5	0.5%	20.3
Bolivia	0.15	0.13	0.52	0.68	24.0	0.4%	*
Brazil	0.05	0.11	0.23	0.22	7.8	0.1%	28.8
Colombia	0.12	0.11	0.20	0.12	4.3	0.1%	20.1
Ecuador	0.12	0.11	0.10	0.10	3.7	0.1%	*
Trinidad & Tobago	0.31	0.25	0.60	0.66	23.5	0.4%	51.4
Venezuela	1.33	3.11	4.16	4.18	147.6	2.7%	*
Other S. & Cent. America	0.11	0.32	0.37	0.42	14.7	0.3%	*
Total S. & Cent. America	2.86	4.73	6.93	7.16	253.0	4.6%	71.6
Denmark	0.06	0.11	0.10	0.08	2.7	♦	9.2
Germany	0.17	0.25	0.33	0.34	12.1	0.2%	20.1
Hungary	n/a	0.11	0.08	0.04	1.3	♦	13.3
Italy	0.10	0.32	0.23	0.23	8.1	0.1%	14.8
Netherlands	1.58	1.97	1.77	1.77	62.5	1.1%	25.1
Norway	1.40	1.72	1.25	1.25	44.0	0.8%	21.7
Romania	n/a	0.10	0.37	0.10	3.6	0.1%	8.0
United Kingdom	0.74	0.55	0.76	0.73	26.0	0.5%	6.9
Other Europe	0.53	0.39	0.33	0.32	11.4	0.2%	27.8
Total Europe	4.57	5.52	5.21	4.86	171.7	3.1%	16.1
Azerbaijan	n/a	n/a	0.85	0.85	30.0	0.5%	*
Kazakhstan	n/a	n/a	1.84	1.84	65.0	1.2%	*
Russian Federation	n/a	n/a	48.14	47.57	1680.0	30.7%	83.1
Turkmenistan	n/a	n/a	2.86	2.86	101.0	1.8%	56.6
Ukraine	n/a	n/a	1.12	1.12	39.6	0.7%	62.2
Uzbekistan	n/a	n/a	1.87	1.87	66.2	1.2%	33.2
Other Former Soviet Union	n/a	n/a	0.02	0.02	0.8	♦	55.8
Total Former Soviet Union	32.85	49.55	56.71	56.14	1982.6	36.2%	78.5
Bahrain	0.24	0.17	0.11	0.09	3.2	0.1%	10.3
Iran	13.71	17.00	23.00	23.00	812.3	14.8%	*
Iraq	0.77	2.69	3.11	3.11	109.8	2.0%	*
Kuwait	0.98	1.37	1.49	1.49	52.7	1.0%	*
Oman	0.08	0.28	0.83	0.83	29.3	0.5%	61.9
Qatar	1.70	4.59	11.15	14.40	508.5	9.3%	*
Saudi Arabia	3.35	5.23	6.05	6.22	219.5	4.0%	*
United Arab Emirates	0.66	5.64	6.01	6.01	212.1	3.9%	*
Yemen	–	0.20	0.48	0.48	16.9	0.3%	*
Other Middle East	0.09	0.18	0.29	0.29	10.2	0.2%	56.7
Total Middle East	21.58	37.35	52.52	55.91	1974.6	36.1%	*
Algeria	3.71	3.30	4.52	4.52	159.7	2.9%	57.8
Egypt	0.08	0.35	1.00	1.00	35.2	0.6%	47.5
Libya	0.66	1.22	1.31	1.31	46.4	0.8%	*
Nigeria	1.15	2.97	3.51	3.51	124.0	2.3%	*
Other Africa	0.40	0.95	0.82	0.84	29.5	0.5%	*
Total Africa	5.99	8.78	11.16	11.18	394.8	7.2%	90.2
Australia	0.53	0.43	1.26	2.55	90.0	1.6%	77.9
Bangladesh	0.20	0.72	0.30	0.30	10.6	0.2%	27.8
Brunei	0.20	0.32	0.39	0.39	13.8	0.3%	34.3
China	0.69	1.00	1.37	1.37	48.3	0.9%	45.1
India	0.35	0.73	0.65	0.65	22.9	0.4%	24.5
Indonesia	0.78	1.84	2.05	2.62	92.5	1.7%	41.6
Malaysia	0.54	1.67	2.31	2.12	75.0	1.4%	44.8
Pakistan	0.46	0.64	0.61	0.71	25.1	0.5%	35.6
Papua New Guinea	–	0.23	0.22	0.35	12.2	0.2%	*
Thailand	0.34	0.39	0.33	0.36	12.7	0.2%	19.9
Vietnam	–	†	0.19	0.19	6.8	0.1%	96.3
Other Asia Pacific	0.21	0.51	0.65	0.66	23.4	0.4%	36.9
Total Asia Pacific	4.30	8.47	10.34	12.27	433.3	7.9%	43.8
TOTAL WORLD	82.44	123.97	150.19	155.08	5476.7	100.0%	61.9
of which: European Union 15	2.87	3.32	3.24	3.21	113.4	2.1%	14.5
OECD#	15.29	15.42	13.45	14.87	525.0	9.6%	13.7

*Over 100 years.

†Less than 0.05.

♦Less than 0.05%.

#1981 excludes Central European members.

n/a not available.

Notes:

Proved reserves of natural gas – Generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions.

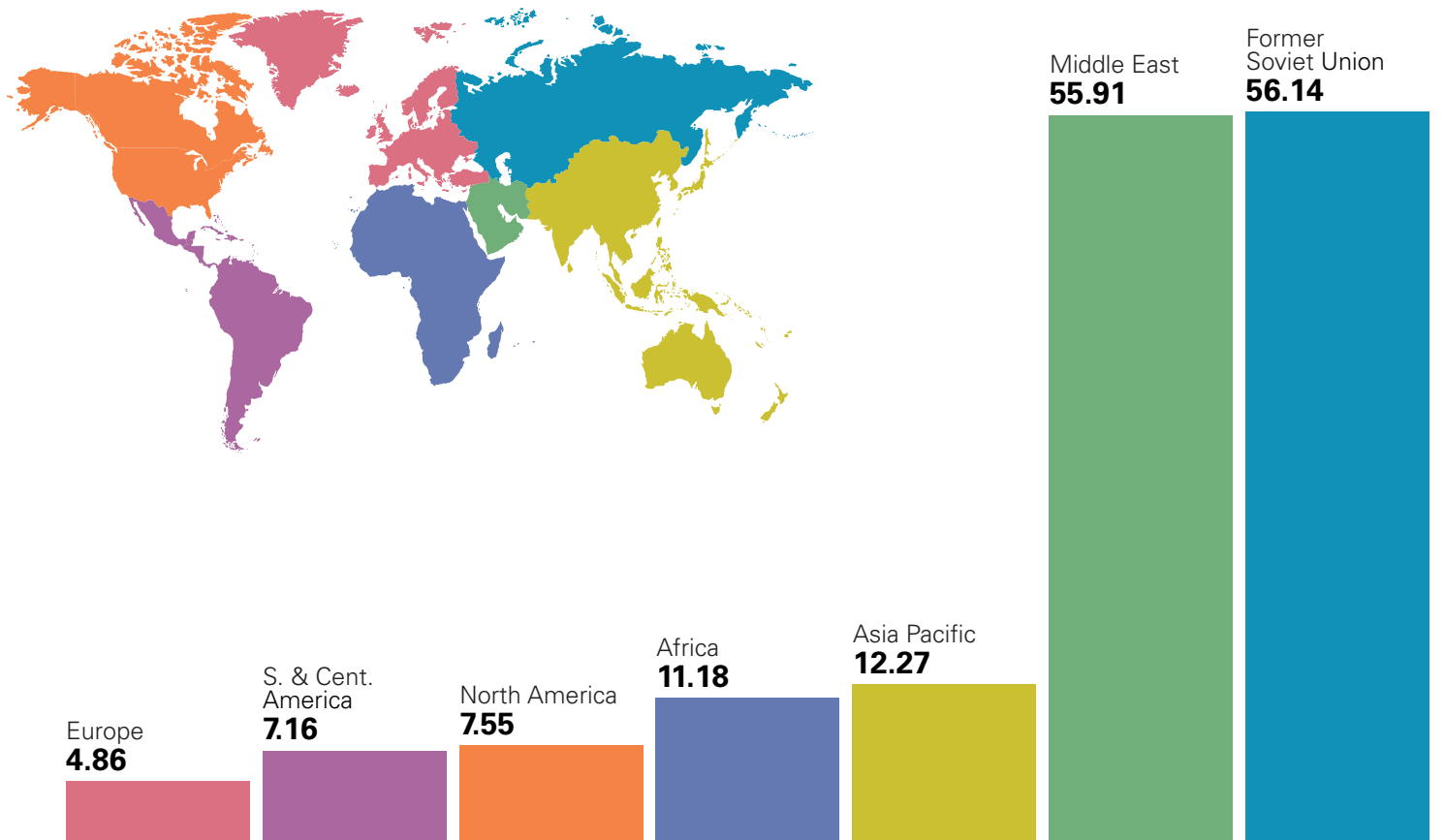
Reserves/Production (R/P) ratio – If the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that level.

Source of data – With the exception of Azerbaijan, the estimates contained in this table are those published by the Oil and Gas Journal.

Trillion equals one million million (10¹²). 1 trillion cubic feet of natural gas = 26 million tonnes of oil (approximately).

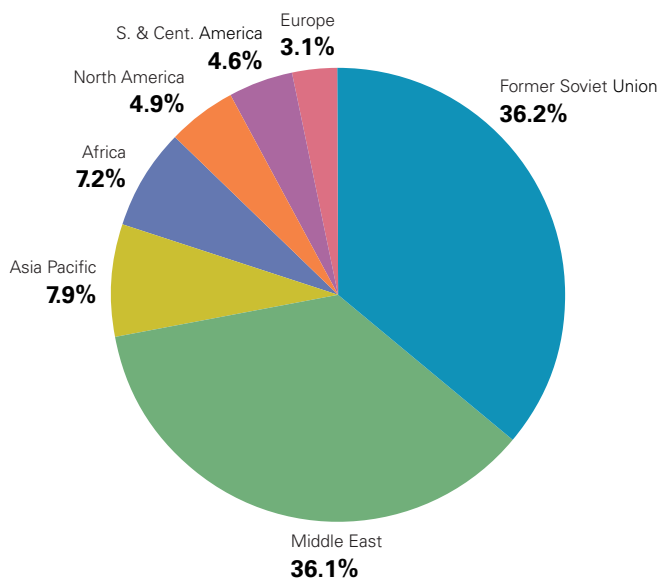
proved reserves at end 2001

Trillion cubic metres



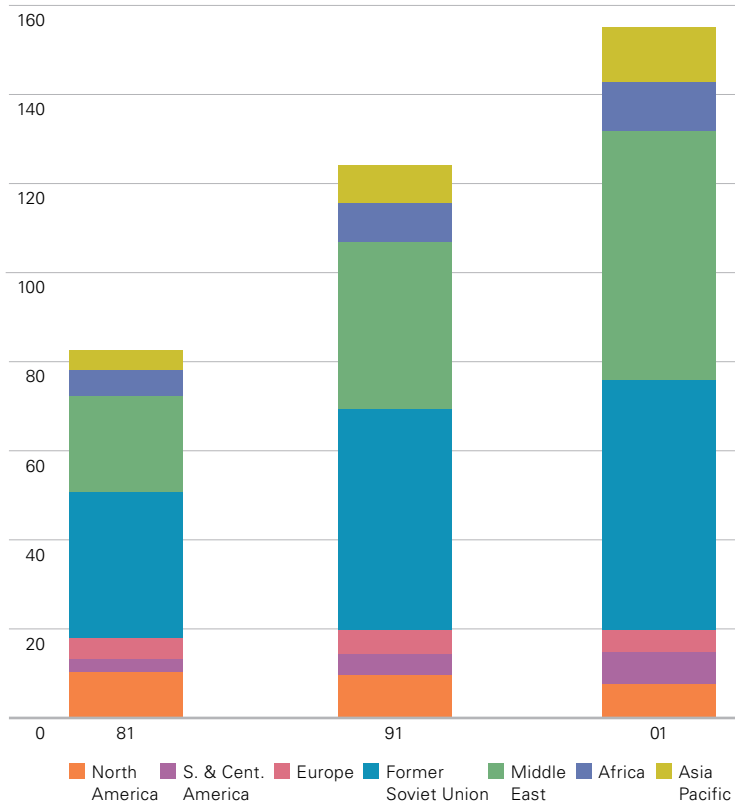
distribution of proved reserves 2001

Trillion cubic metres %



proved reserves

Trillion cubic metres



natural gas

production*

Billion cubic metres	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	510.4	514.5	520.4	541.8	534.9	542.2	543.1	549.2	541.6	544.9	555.4	1.9%	22.5%
Canada	105.4	116.1	125.5	135.9	148.2	153.6	156.2	160.5	162.2	167.8	172.0	2.5%	7.0%
Mexico	27.9	27.8	27.8	28.7	28.1	31.2	33.8	36.6	38.5	37.1	34.7	-6.3%	1.4%
Total North America	643.7	658.4	673.7	706.4	711.2	727.0	733.1	746.3	742.3	749.8	762.1	1.6%	30.9%
Argentina	19.9	20.1	21.5	22.3	25.0	26.6	27.4	29.6	34.6	37.4	38.4	2.6%	1.6%
Bolivia	3.0	3.0	3.0	3.3	3.2	3.2	3.3	3.1	2.5	3.4	4.1	20.5%	0.2%
Brazil	3.9	4.0	4.5	4.5	4.8	5.5	6.0	6.3	6.7	6.8	7.7	13.3%	0.3%
Colombia	4.1	4.0	4.2	4.2	4.4	4.7	5.9	6.3	5.2	5.9	6.1	3.0%	0.2%
Trinidad & Tobago	5.7	6.0	5.9	6.2	6.1	7.1	7.4	8.6	10.9	13.0	12.9	-0.5%	0.5%
Venezuela	21.9	21.6	23.3	24.7	27.5	29.7	30.8	32.3	27.4	27.9	28.9	3.3%	1.2%
Other S. & Cent. America	2.0	2.2	2.1	2.2	2.2	2.3	2.4	2.5	2.1	2.1	2.0	-2.6%	0.1%
Total S. & Cent. America	60.5	60.9	64.5	67.4	73.2	79.1	83.2	88.7	89.4	96.5	100.1	3.7%	4.1%
Denmark	4.0	4.1	4.5	4.9	5.3	6.4	7.9	7.6	7.8	8.1	8.4	3.5%	0.3%
Germany	14.7	14.9	14.9	15.6	16.1	17.4	17.1	16.7	17.8	16.9	17.0	0.9%	0.7%
Hungary	4.3	4.0	4.3	4.1	4.2	4.0	3.7	3.3	2.9	2.7	2.7	1.0%	0.1%
Italy	17.4	18.2	19.5	20.6	20.4	20.0	19.3	19.0	17.5	16.2	15.5	-4.6%	0.6%
Netherlands	69.0	69.1	70.0	66.4	67.0	75.8	67.1	63.6	59.3	57.3	61.4	7.1%	2.5%
Norway	27.3	29.4	28.9	30.8	31.2	41.0	46.7	47.8	51.0	54.0	57.5	6.4%	2.3%
Romania	24.5	21.8	20.6	18.7	18.0	17.2	15.0	14.0	14.0	13.8	12.6	-8.5%	0.5%
United Kingdom	50.6	51.5	60.5	64.6	70.8	84.2	85.9	90.2	99.1	108.3	105.8	-2.3%	4.3%
Other Europe	14.3	14.0	15.1	14.5	14.6	13.3	12.8	12.3	11.6	11.8	11.6	-1.4%	0.5%
Total Europe	226.1	227.0	238.3	240.2	247.6	279.3	275.5	274.5	281.0	289.1	292.5	1.2%	11.9%
Azerbaijan	8.0	7.4	6.3	6.0	6.2	5.9	5.6	5.2	5.6	5.3	5.2	-2.0%	0.2%
Kazakhstan	7.4	7.6	6.2	4.2	5.5	6.1	7.6	7.4	9.3	10.8	10.8	0.3%	0.4%
Russian Federation	599.8	597.4	576.5	566.4	555.4	561.1	532.6	551.3	551.0	545.0	542.4	-0.5%	22.0%
Turkmenistan	78.6	56.1	60.9	33.3	30.1	32.8	16.1	12.4	21.3	43.8	47.9	9.1%	1.9%
Ukraine	22.8	19.6	17.9	17.0	17.0	17.2	17.4	16.8	16.9	16.7	17.1	2.3%	0.7%
Uzbekistan	39.1	39.9	42.0	44.0	45.3	45.7	47.8	51.1	51.9	52.6	53.5	1.8%	2.2%
Other Former Soviet Union	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	-8.7%	*
Total Former Soviet Union	756.3	728.6	710.2	671.3	659.9	669.1	627.4	644.6	656.4	674.6	677.3	0.4%	27.5%
Bahrain	5.5	6.5	6.9	7.1	7.2	7.4	8.0	8.4	8.7	8.8	8.9	1.4%	0.4%
Iran	25.8	25.0	27.1	31.8	35.3	39.0	47.0	50.0	57.8	60.2	60.6	0.6%	2.5%
Kuwait	0.5	2.6	5.4	6.0	9.3	9.3	9.3	9.5	8.6	9.6	9.5	-1.0%	0.4%
Oman	2.6	2.9	2.8	2.9	4.1	4.4	5.0	5.2	5.5	8.4	13.4	59.7%	0.5%
Qatar	7.6	12.6	13.5	13.5	13.5	13.7	17.4	19.6	22.1	29.1	32.5	11.7%	1.3%
Saudi Arabia	35.2	38.3	40.0	42.8	42.9	44.4	45.3	46.8	46.2	49.8	53.7	7.8%	2.2%
United Arab Emirates	23.8	22.2	23.0	25.8	31.3	33.8	36.3	37.1	38.5	39.8	41.3	3.8%	1.7%
Other Middle East	3.4	4.0	4.2	4.9	5.3	6.0	7.2	7.5	7.9	7.9	8.1	2.0%	0.3%
Total Middle East	104.4	114.1	122.9	134.8	148.9	158.0	175.5	184.1	195.3	213.6	228.0	6.7%	9.3%
Algeria	53.2	55.3	56.1	51.6	58.7	62.3	71.8	76.6	86.0	84.4	78.2	-7.3%	3.2%
Egypt	7.8	8.4	10.0	10.6	11.0	11.5	11.6	12.2	14.7	18.3	21.0	14.4%	0.9%
Libya	5.9	6.1	5.8	5.8	5.8	5.8	6.0	5.8	5.5	5.4	5.4	-	0.2%
Nigeria	3.9	4.3	4.9	4.4	4.8	5.4	5.1	5.1	6.0	10.8	13.4	23.6%	0.5%
Other Africa	1.1	1.1	2.7	2.9	3.0	4.2	4.9	5.0	5.4	5.6	6.0	5.8%	0.2%
Total Africa	71.9	75.2	79.5	75.3	83.3	89.2	99.4	104.7	117.6	124.5	124.0	-0.5%	5.0%
Australia	21.7	23.5	24.5	28.1	29.8	30.6	30.0	30.4	30.6	31.1	32.7	5.3%	1.3%
Bangladesh	5.3	5.7	6.1	6.6	7.4	7.6	7.6	7.8	8.3	10.0	10.8	8.2%	0.4%
Brunei	9.1	9.8	10.3	10.4	11.8	11.7	11.7	10.8	11.2	11.3	11.4	1.0%	0.5%
China	14.9	15.1	16.2	16.6	17.6	19.9	22.2	22.3	24.3	27.2	30.3	11.5%	1.2%
India	14.2	15.9	16.1	17.3	18.8	20.4	20.7	24.6	24.9	26.1	26.4	1.1%	1.1%
Indonesia	51.5	54.3	56.2	62.9	63.8	67.1	67.6	64.7	71.4	67.3	62.9	-6.4%	2.6%
Malaysia	20.4	22.8	24.9	26.1	28.9	33.6	38.6	38.5	40.8	45.3	47.4	4.7%	1.9%
Pakistan	11.1	11.5	12.2	13.3	14.6	15.4	15.6	16.0	17.3	18.9	19.9	5.2%	0.8%
Thailand	7.0	7.5	8.4	9.5	10.1	11.8	14.1	15.5	16.9	17.9	18.1	1.0%	0.7%
Other Asia Pacific	8.7	9.1	9.5	9.5	9.2	10.2	10.8	10.6	11.6	18.6	20.1	8.3%	0.8%
Total Asia Pacific	163.9	175.2	184.4	200.3	212.0	228.3	238.9	241.2	257.3	273.7	280.0	2.4%	11.4%
TOTAL WORLD	2026.8	2039.4	2073.5	2095.7	2136.1	2230.0	2233.0	2284.1	2339.3	2421.8	2464.0	1.7%	100.0%
of which: European Union 15	163.8	165.7	177.0	179.8	187.0	210.4	203.3	202.3	206.4	211.6	212.9	0.6%	8.6%
OECD	871.0	891.5	919.6	960.0	973.8	1024.3	1028.3	1041.5	1045.1	1061.7	1080.4	1.8%	43.8%
Former Soviet Union	756.3	728.6	710.2	671.3	659.9	669.1	627.4	644.6	656.4	674.6	677.3	0.4%	27.5%
Other EMEs	399.6	419.3	443.6	464.4	502.1	536.6	577.0	597.6	638.0	685.6	706.4	3.0%	28.7%

*Excluding gas flared or recycled.

*Less than 0.05%.

Notes: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar); as it is derived directly from tonnes of oil equivalent using an average conversion factor, it does not necessarily equate with gas volumes expressed in specific national terms.

Because of rounding some totals may not agree exactly with the sum of their component parts.

Natural gas production data expressed in billion cubic feet per day is available at www.bp.com/centres/energy/

production*

Million tonnes oil equivalent	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	459.4	463.1	468.3	487.6	481.4	488.0	488.8	494.3	487.4	490.4	499.9	1.9%	22.5%
Canada	94.8	104.5	112.9	122.3	133.4	138.2	140.6	144.5	146.0	151.0	154.8	2.5%	7.0%
Mexico	25.1	25.0	25.0	25.8	25.3	28.1	30.4	32.9	34.6	33.4	31.3	-6.3%	1.4%
Total North America	579.3	592.6	606.2	635.7	640.1	654.3	659.8	671.7	668.0	674.8	686.0	1.6%	30.9%
Argentina	17.9	18.1	19.4	20.0	22.5	23.9	24.6	26.6	31.1	33.7	34.5	2.6%	1.6%
Bolivia	2.7	2.7	2.7	3.0	2.8	2.9	2.9	2.8	2.3	3.1	3.7	20.5%	0.2%
Brazil	3.5	3.6	4.0	4.1	4.3	5.0	5.4	5.6	6.1	6.1	6.9	13.3%	0.3%
Colombia	3.7	3.6	3.8	3.7	4.0	4.2	5.3	5.6	4.7	5.3	5.5	3.0%	0.2%
Trinidad & Tobago	5.1	5.4	5.3	5.6	5.5	6.4	6.7	7.8	9.8	11.7	11.6	-0.5%	0.5%
Venezuela	19.7	19.5	21.0	22.2	24.8	26.8	27.7	29.1	24.7	25.1	26.0	3.3%	1.2%
Other S. & Cent. America	1.8	2.0	1.9	2.0	2.0	2.0	2.1	2.3	1.9	1.9	1.8	-2.6%	0.1%
Total S. & Cent. America	54.4	54.9	58.1	60.6	65.9	71.2	74.7	79.8	80.6	86.9	90.0	3.7%	4.1%
Denmark	3.6	3.7	4.1	4.4	4.8	5.8	7.1	6.8	7.0	7.3	7.5	3.5%	0.3%
Germany	13.2	13.4	13.4	14.0	14.5	15.7	15.4	15.0	16.1	15.2	15.3	0.9%	0.7%
Hungary	3.8	3.6	3.9	3.7	3.7	3.6	3.3	3.0	2.6	2.4	2.5	1.0%	0.1%
Italy	15.7	16.3	17.5	18.6	18.3	18.0	17.3	17.1	15.7	14.6	13.9	-4.6%	0.6%
Netherlands	62.1	62.2	63.0	59.7	60.3	68.2	60.4	57.2	53.3	51.6	55.2	7.1%	2.5%
Norway	24.6	26.5	26.0	27.7	28.0	36.9	42.0	43.0	45.9	48.6	51.7	6.4%	2.3%
Romania	22.0	19.6	18.5	16.8	16.2	15.5	13.5	12.6	12.6	12.4	11.3	-8.5%	0.5%
United Kingdom	45.6	46.3	54.5	58.2	63.7	75.8	77.3	81.2	89.2	97.4	95.2	-2.3%	4.3%
Other Europe	12.9	12.6	13.6	13.0	13.2	12.0	11.5	11.0	10.5	10.6	10.5	-1.4%	0.5%
Total Europe	203.5	204.2	214.5	216.1	222.7	251.5	247.8	246.9	252.9	260.1	263.1	1.2%	11.9%
Azerbaijan	7.2	6.6	5.7	5.4	5.5	5.3	5.0	4.7	5.0	4.7	4.7	-2.0%	0.2%
Kazakhstan	6.6	6.8	5.6	3.8	5.0	5.5	6.8	6.7	8.4	9.7	9.7	0.3%	0.4%
Russian Federation	539.8	537.6	518.8	509.8	499.9	505.0	479.3	496.2	495.9	490.5	488.2	-0.5%	22.0%
Turkmenistan	70.8	50.5	54.8	30.0	27.1	29.6	14.5	11.2	19.1	39.5	43.1	9.1%	1.9%
Ukraine	20.5	17.6	16.1	15.3	15.3	15.4	15.7	15.1	15.2	15.0	15.4	2.3%	0.7%
Uzbekistan	35.2	35.9	37.8	39.6	40.8	41.1	43.0	46.0	46.7	47.4	48.2	1.8%	2.2%
Other Former Soviet Union	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.4	0.3	0.4	0.3	-8.7%	♦
Total Former Soviet Union	680.6	655.5	639.2	604.2	593.9	602.1	564.6	580.3	590.6	607.2	609.6	0.4%	27.5%
Bahrain	5.0	5.8	6.2	6.4	6.5	6.7	7.2	7.5	7.8	7.9	8.0	1.4%	0.4%
Iran	23.2	22.5	24.4	28.6	31.8	35.1	42.3	45.0	52.0	54.2	54.5	0.6%	2.5%
Kuwait	0.5	2.4	4.9	5.4	8.4	8.4	8.3	8.5	7.8	8.6	8.6	-1.0%	0.4%
Oman	2.4	2.6	2.5	2.6	3.6	3.9	4.5	4.7	4.9	7.6	12.1	59.7%	0.5%
Qatar	6.9	11.4	12.2	12.2	12.2	12.3	15.7	17.6	19.8	26.2	29.3	11.7%	1.3%
Saudi Arabia	31.7	34.4	36.0	38.5	38.6	40.0	40.8	42.1	41.6	44.8	48.3	7.8%	2.2%
United Arab Emirates	21.4	20.0	20.7	23.2	28.2	30.4	32.7	33.4	34.6	35.9	37.2	3.8%	1.7%
Other Middle East	3.1	3.6	3.8	4.4	4.8	5.4	6.5	6.7	7.1	7.1	7.3	2.0%	0.3%
Total Middle East	94.2	102.7	110.7	121.3	134.1	142.2	158.0	165.5	175.6	192.3	205.3	6.7%	9.3%
Algeria	47.9	49.8	50.5	46.5	52.8	56.1	64.6	68.9	77.4	76.0	70.4	-7.3%	3.2%
Egypt	7.0	7.6	9.0	9.5	9.9	10.4	10.5	11.0	13.2	16.5	18.9	14.4%	0.9%
Libya	5.3	5.5	5.2	5.2	5.2	5.2	5.4	5.2	5.0	4.9	4.9	-	0.2%
Nigeria	3.5	3.8	4.4	4.0	4.4	4.9	4.6	4.6	5.4	9.8	12.1	23.6%	0.5%
Other Africa	1.0	1.0	2.4	2.6	2.7	3.8	4.4	4.5	4.9	5.1	5.4	5.8%	0.2%
Total Africa	64.7	67.7	71.5	67.8	75.0	80.4	89.5	94.2	105.9	112.3	111.7	-0.5%	5.0%
Australia	19.5	21.1	22.0	25.3	26.8	27.5	27.0	27.3	27.5	28.0	29.4	5.3%	1.3%
Bangladesh	4.8	5.2	5.5	6.0	6.6	6.8	6.8	7.0	7.5	9.0	9.7	8.2%	0.4%
Brunei	8.2	8.8	9.3	9.4	10.6	10.5	10.5	9.7	10.1	10.2	10.3	1.0%	0.5%
China	13.4	13.6	14.6	14.9	15.8	17.9	20.0	20.1	21.9	24.5	27.3	11.5%	1.2%
India	12.8	14.3	14.5	15.6	16.9	18.4	18.6	22.2	22.4	23.5	23.7	1.1%	1.1%
Indonesia	46.4	48.9	50.6	56.6	57.4	60.4	60.8	58.2	64.3	60.5	56.6	-6.4%	2.6%
Malaysia	18.3	20.5	22.4	23.5	26.0	30.3	34.8	34.6	36.8	40.7	42.7	4.7%	1.9%
Pakistan	10.0	10.3	10.9	12.0	13.1	13.8	14.0	14.4	15.6	17.0	17.9	5.2%	0.8%
Thailand	6.3	6.8	7.6	8.6	9.1	10.6	12.7	13.9	15.3	16.1	16.3	1.0%	0.7%
Other Asia Pacific	7.9	8.2	8.5	8.5	8.3	9.2	9.7	9.5	10.4	16.7	18.1	8.3%	0.8%
Total Asia Pacific	147.6	157.7	165.9	180.4	190.6	205.4	214.9	216.9	231.8	246.2	252.0	2.4%	11.4%
TOTAL WORLD	1824.3	1835.3	1866.1	1886.1	1922.3	2007.1	2009.3	2055.3	2105.4	2179.8	2217.7	1.7%	100.0%
of which: European Union 15	147.4	149.2	159.3	161.8	168.3	189.3	183.0	182.1	185.7	190.4	191.6	0.6%	8.6%
OECD	783.9	802.4	827.6	864.0	876.4	921.8	925.5	937.3	940.5	955.5	972.3	1.8%	43.8%
Former Soviet Union	680.6	655.5	639.2	604.2	593.9	602.1	564.6	580.3	590.6	607.2	609.6	0.4%	27.5%
Other EMEs	359.7	377.4	399.2	418.0	451.9	483.0	519.3	537.9	574.2	617.1	635.8	3.0%	28.7%

*Excluding gas flared or recycled.

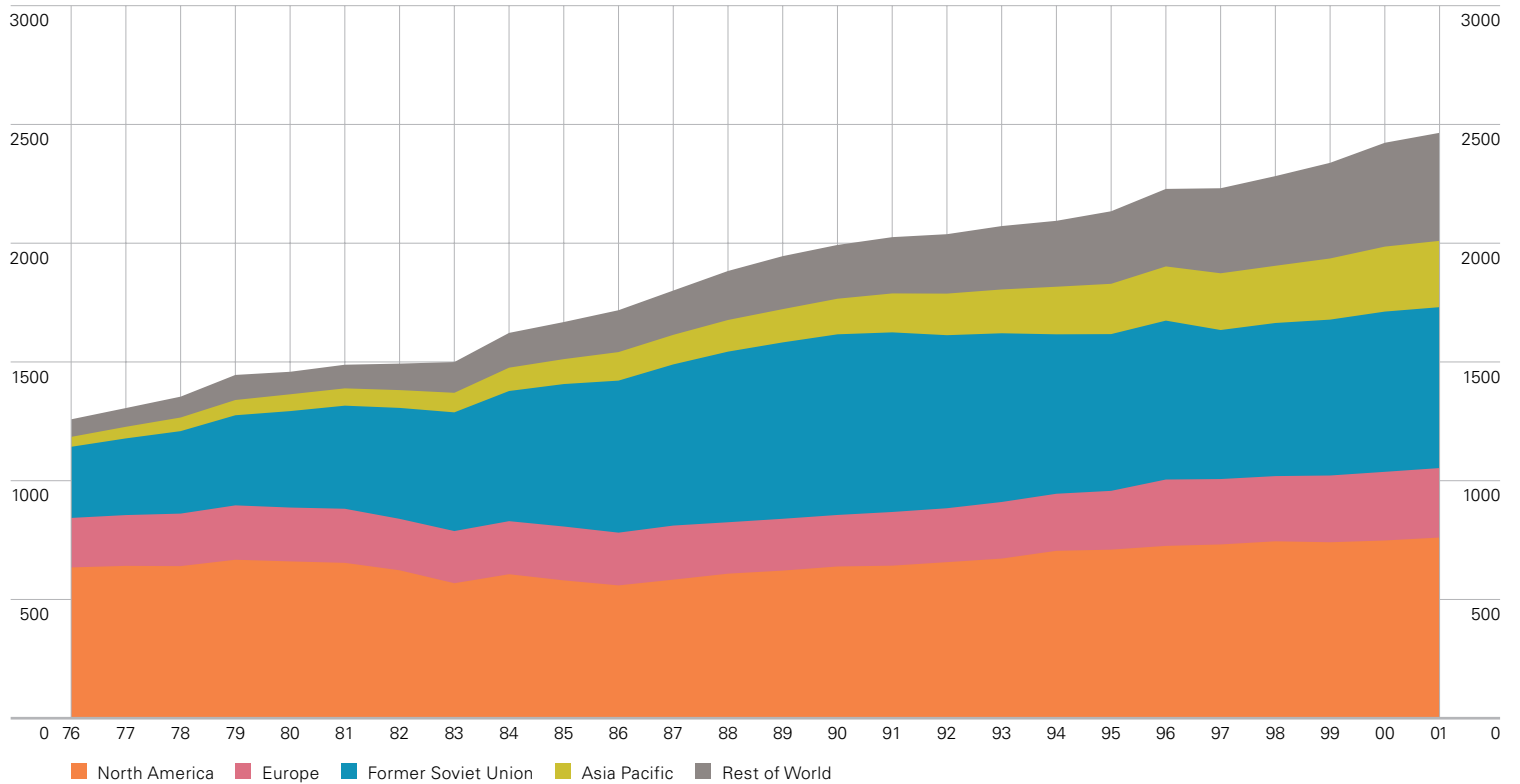
♦Less than 0.05%.

Note: Because of rounding some totals may not agree exactly with the sum of their component parts.

natural gas

production by area

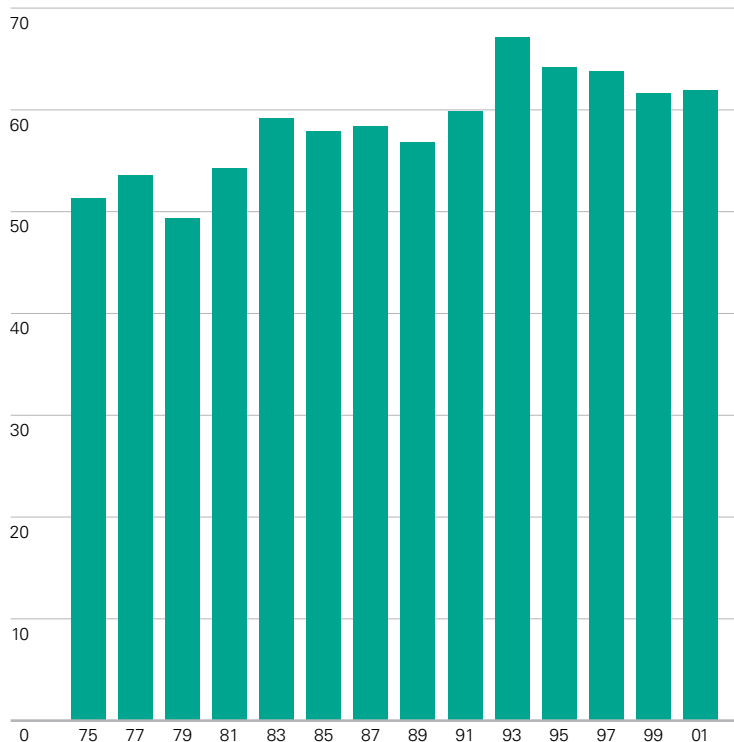
Billion cubic metres



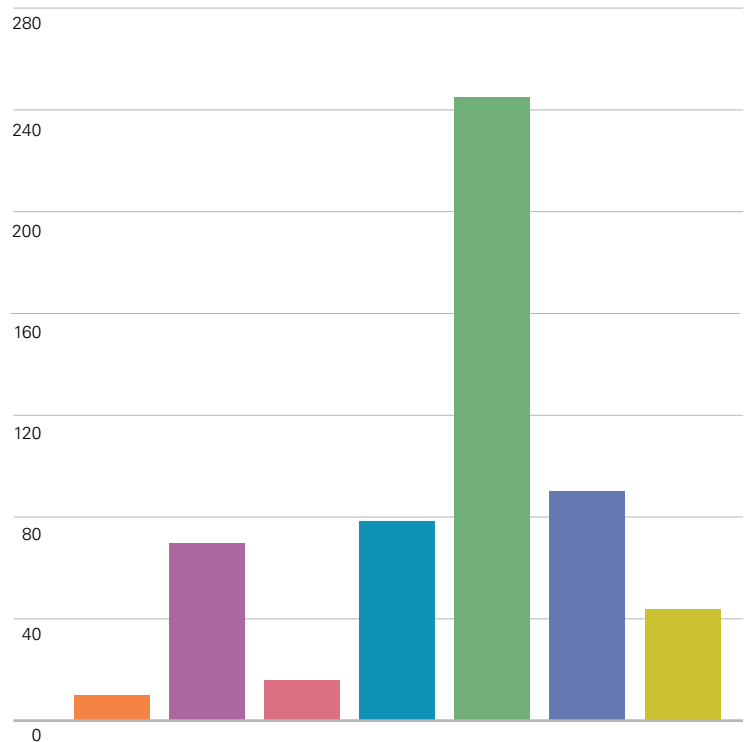
The rate of gas production growth halved in 2001 relative to a very strong 2000. However, the unbroken growth trend of the previous decade was maintained.

R/P ratios

World – Reserves to production ratio



2001 by area – Reserves to production ratio



The world's gas R/P ratio increased to 61.9 at the end of 2001, leaving it two years higher than a decade earlier. Large reserve increases in major LNG exporting countries (Indonesia, Qatar and Australia) outweighed a 1.7% increase in global production.

consumption

Billion cubic metres	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	549.0	563.7	583.2	596.1	620.6	631.7	630.9	614.3	621.7	647.1	616.2	-4.8%	25.6%
Canada	63.0	66.8	68.4	70.8	70.9	74.3	74.8	70.3	72.7	77.5	72.6	-6.4%	3.0%
Mexico	27.7	27.7	28.2	29.4	29.7	31.0	31.7	34.4	33.8	34.9	33.7	-3.3%	1.4%
Total North America	639.7	658.2	679.8	696.3	721.2	737.0	737.4	719.0	728.2	759.5	722.5	-4.9%	30.0%
Argentina	22.1	22.3	23.6	24.3	27.0	28.6	28.5	30.5	32.4	33.2	33.2	♦	1.4%
Brazil	3.9	4.0	4.5	4.5	4.8	5.5	6.0	6.3	7.1	9.1	10.9	19.3%	0.5%
Chile	1.5	1.7	1.6	1.7	1.6	1.7	2.8	3.3	4.6	5.2	5.6	6.5%	0.2%
Colombia	4.1	4.0	4.2	4.2	4.4	4.7	5.9	6.2	5.2	5.9	6.1	2.6%	0.3%
Ecuador	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	♦
Peru	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.4	0.4	0.3	0.4	7.1%	♦
Venezuela	21.9	21.6	23.3	24.7	27.5	29.7	30.8	32.3	27.4	27.9	28.9	3.3%	1.2%
Other S. & Cent. America	6.5	6.8	6.8	7.3	7.3	8.2	8.9	9.7	10.3	11.2	11.8	5.2%	0.5%
Total S. & Cent. America	60.5	60.9	64.5	67.2	73.1	78.9	83.2	88.8	87.5	92.9	97.0	4.1%	4.0%
Austria	6.1	6.0	6.4	6.5	6.8	7.3	7.7	7.6	7.7	7.3	7.4	0.6%	0.3%
Belgium & Luxembourg	10.0	10.0	11.0	10.8	11.8	13.1	12.5	13.8	14.7	14.9	14.7	-1.4%	0.6%
Bulgaria	5.0	4.3	4.1	4.1	5.0	5.2	4.1	3.4	3.0	2.9	2.6	-9.3%	0.1%
Czech Republic	5.9	5.8	5.9	6.3	7.3	8.4	8.5	8.5	8.6	8.3	8.9	7.0%	0.4%
Denmark	2.3	2.4	2.8	3.0	3.5	4.1	4.4	4.8	5.0	4.9	5.1	4.4%	0.2%
Finland	2.6	2.7	2.8	3.1	3.2	3.3	3.2	3.7	3.7	3.7	4.1	8.5%	0.2%
France	30.6	31.4	32.3	30.9	32.9	36.1	34.6	37.0	37.7	39.7	40.7	2.5%	1.7%
Germany	62.9	63.0	66.4	67.9	74.4	83.6	79.2	79.7	80.2	79.5	82.9	4.3%	3.4%
Greece	0.1	0.1	0.1	†	†	†	0.2	0.8	1.4	1.9	1.9	1.1%	0.1%
Hungary	9.6	8.2	9.0	9.4	10.2	11.4	10.8	10.9	11.0	10.7	11.9	11.1%	0.5%
Iceland	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Ireland	2.1	2.1	2.4	2.4	2.6	3.0	3.1	3.1	3.3	3.8	4.0	4.3%	0.2%
Italy	46.2	45.7	46.8	45.3	49.9	51.5	53.2	57.2	62.2	64.9	64.5	-0.6%	2.7%
Netherlands	38.1	36.7	37.9	36.9	37.8	41.7	39.1	38.7	37.9	39.2	39.3	0.2%	1.6%
Norway	2.4	2.6	2.7	2.9	2.9	3.2	3.7	3.8	3.6	4.0	4.5	10.6%	0.2%
Poland	8.8	8.7	9.0	9.2	9.9	10.6	10.5	10.6	10.3	11.1	11.4	2.7%	0.5%
Portugal	-	-	-	-	-	-	0.1	0.8	2.3	2.4	2.5	7.6%	0.1%
Romania	24.7	25.4	25.2	24.2	24.0	24.2	20.0	18.7	17.2	17.1	17.5	2.3%	0.7%
Slovakia	5.4	5.5	5.2	5.0	5.7	6.2	6.3	6.4	6.4	6.5	7.4	14.3%	0.3%
Spain	6.1	6.5	6.5	7.2	8.3	9.3	12.3	13.1	15.0	16.9	18.2	7.7%	0.8%
Sweden	0.7	0.7	0.8	0.8	0.8	0.9	0.8	0.9	0.8	0.7	0.8	4.8%	♦
Switzerland	2.0	2.1	2.2	2.2	2.4	2.6	2.5	2.6	2.7	2.7	2.8	4.2%	0.1%
Turkey	4.4	4.5	5.0	6.5	6.8	9.0	9.4	9.9	12.0	14.1	15.5	9.7%	0.6%
United Kingdom	56.6	56.4	64.2	66.1	70.5	82.1	83.8	87.2	92.5	96.0	95.4	-0.6%	4.0%
Other Europe	6.7	6.0	5.0	4.0	4.2	6.0	6.1	5.9	5.3	5.6	6.1	7.8%	0.3%
Total Europe	339.3	336.8	353.7	354.7	380.9	422.8	416.1	429.1	444.5	458.8	470.1	2.4%	19.5%
Azerbaijan	15.1	11.8	8.7	8.1	8.0	5.9	5.6	5.2	5.6	5.4	8.4	55.2%	0.3%
Belarus	14.5	16.8	15.6	13.6	12.3	13.0	14.8	15.0	15.3	16.2	16.1	-0.6%	0.7%
Kazakhstan	13.2	13.5	13.0	10.3	10.8	9.0	7.1	7.3	7.9	9.7	10.1	3.8%	0.4%
Lithuania	5.4	3.0	1.7	2.0	2.3	2.5	2.6	2.3	2.4	2.7	2.8	3.8%	0.1%
Russian Federation	431.1	417.3	416.0	390.9	377.8	379.9	350.4	364.7	363.6	377.2	372.7	-1.2%	15.5%
Turkmenistan	9.6	9.3	9.3	10.2	8.0	10.0	10.1	10.3	11.3	12.6	12.9	2.2%	0.5%
Ukraine	121.5	103.5	92.9	81.3	76.2	82.5	74.3	68.8	70.6	68.5	65.8	-4.0%	2.7%
Uzbekistan	37.1	37.3	40.7	41.3	42.4	43.3	45.4	47.0	49.3	47.1	51.1	8.5%	2.1%
Other Former Soviet Union	18.2	15.7	11.1	9.3	9.1	7.9	8.8	9.2	7.9	7.6	8.6	13.4%	0.4%
Total Former Soviet Union	665.7	628.2	609.0	567.0	546.9	554.0	519.1	529.8	533.9	547.0	548.5	0.3%	22.8%
Iran	22.7	25.0	26.6	31.8	35.2	38.9	47.1	51.8	59.8	63.0	65.0	3.2%	2.7%
Kuwait	0.5	2.6	5.4	6.0	9.3	9.3	9.3	9.5	8.6	9.6	9.5	-1.0%	0.4%
Qatar	7.6	12.6	13.5	13.5	13.5	13.7	14.6	14.8	14.0	15.1	16.0	6.0%	0.7%
Saudi Arabia	35.2	38.3	40.0	42.8	42.9	44.4	45.3	46.8	46.2	49.8	53.7	7.8%	2.2%
United Arab Emirates	20.4	18.8	19.6	21.7	24.8	27.2	29.0	30.4	31.4	32.9	34.3	4.2%	1.4%
Other Middle East	11.6	13.3	13.9	14.9	16.1	17.3	19.6	20.5	21.5	22.3	23.0	2.9%	1.0%
Total Middle East	98.0	110.6	119.0	130.7	141.8	150.8	164.9	173.8	181.5	192.7	201.5	4.5%	8.4%
Algeria	17.0	17.8	18.6	19.6	21.0	21.4	20.2	20.9	21.2	21.0	21.6	2.7%	0.9%
Egypt	7.7	8.4	9.7	10.4	11.0	11.3	11.6	12.0	14.3	18.3	21.0	14.4%	0.9%
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Africa	10.5	11.2	11.6	11.9	12.8	14.3	14.4	14.9	14.6	16.2	17.6	8.4%	0.7%
Total Africa	35.2	37.4	39.9	41.9	44.8	47.0	46.2	47.8	50.1	55.5	60.2	8.2%	2.5%
Australia	17.0	16.9	17.4	19.4	19.5	19.9	19.6	20.3	19.8	21.3	22.5	6.0%	0.9%
Bangladesh	5.3	5.7	6.1	6.6	7.4	7.6	7.6	7.8	8.3	10.0	10.8	8.2%	0.4%
China	14.9	15.1	16.2	16.6	17.7	17.7	19.3	19.3	21.4	24.5	27.7	12.9%	1.2%
China Hong Kong SAR	-	-	-	-	†	1.7	2.6	2.5	2.7	2.5	2.5	0.9%	0.1%
India	14.1	15.8	16.3	17.4	19.6	20.6	21.3	24.2	24.8	26.0	26.3	1.3%	1.1%
Indonesia	21.7	22.6	23.9	27.3	30.1	31.4	31.9	27.8	31.8	30.6	29.7	-2.9%	1.2%
Japan	54.7	56.0	56.3	60.3	61.2	66.1	65.1	69.5	74.6	76.2	79.0	3.7%	3.3%
Malaysia	9.0	10.6	13.0	13.6	13.7	15.9	16.7	17.4	18.5	20.3	21.6	6.2%	0.9%
New Zealand	4.6	4.9	4.7	4.4	4.2	4.7	5.1	4.5	5.2	5.5	5.7	5.1%	0.2%
Pakistan	11.1	11.5	12.2	13.3	14.6	15.4	15.6	16.0	17.3	18.9	20.1	6.1%	0.8%
Philippines	-	-	-	†	†	†	†	†	†	†	0.1	>100.0%	♦
Singapore	-	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	2.5	43.3%	0.1%
South Korea	3.9	5.1	6.4	8.5	10.2	13.5	16.4	15.4	18.7	21.0	23.1	9.8%	1.0%
Taiwan	3.0	3.2	3.1	4.0	4.3	4.5	5.1	6.4	6.2	6.9	7.5	9.7%	0.3%
Thailand	7.0	7.5	8.4	9.5	10.0	11.8	14.6	15.9	17.4	20.5	21.1	3.0%	0.9%
Other Asia Pacific	2.5	2.7	3.1	3.3	3.4	3.7	4.2	4.5	4.8	4.9	4.9	0.2%	0.2%
Total Asia Pacific	168.8	178.7	188.6	205.7	217.4	236.0	246.6	253.0	273.0	290.8	305.1	5.0%	12.7%
TOTAL WORLD	2007.2	2010.8	2054.5	2063.5	2126.1	2226.5	2213.5	2241.3	2298.7	2397.2	2404.9	0.3%	100.0%
of which: European Union 15	264.4	263.7	280.4	280.9	302.5	336.0	334.2	348.4	364.4	375.8	381.5	1.5%	15.9%
OECD	1022.8	1042.2	1084.0	1111.3	1164.0	1228.6	1229.5	1229.8	1265.5	1316.7	1296.7	-1.5%	53.9%
Former Soviet Union	665.7	628.2	609.0	567.0	546.9	554.0	519.1	529.8	533.9	547.0	548.5	0.3%	22.8%
Other EMEs	318.7	340.4	361.5	385.2	415.2	443.9	464.9	481.7	499.3	533.5	559.7	4.8%	23.3%

† Less than 0.05.

* Less than 0.05%.

Notes: The difference between these world consumption figures and the world production statistics on page 22 is due to variations in stocks at storage facilities and liquefaction plants, together with unavoidable disparities in the definition, measurement or conversion of gas supply and demand data. As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar); as it is derived directly from tonnes of oil equivalent using an average conversion factor, it does not necessarily equate with gas volumes expressed in specific national terms. Natural gas consumption data expressed in billion cubic feet per day is available at www.bp.com/centres/energy/

natural gas

consumption

Million tonnes oil equivalent	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	494.1	507.3	524.9	536.5	558.5	568.5	567.8	552.8	559.6	582.4	554.6	-4.8%	25.6%
Canada	56.7	60.2	61.6	63.8	63.8	66.9	67.3	63.3	65.4	69.8	65.4	-6.4%	3.0%
Mexico	24.9	24.9	25.4	26.5	26.7	27.9	28.5	30.9	30.4	31.4	30.4	-3.3%	1.4%
Total North America	575.7	592.4	611.9	626.8	649.0	663.3	663.6	647.0	655.4	683.6	650.4	-4.9%	30.0%
Argentina	19.9	20.1	21.2	21.9	24.3	25.7	25.7	27.5	29.1	29.9	29.9	*	1.4%
Brazil	3.5	3.6	4.0	4.1	4.3	5.0	5.4	5.6	6.4	8.2	9.8	19.3%	0.5%
Chile	1.3	1.5	1.4	1.5	1.5	1.5	2.5	2.9	4.1	4.7	5.0	6.5%	0.2%
Colombia	3.7	3.6	3.8	3.7	4.0	4.2	5.3	5.6	4.7	5.3	5.5	2.6%	0.3%
Ecuador	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	*
Peru	0.4	0.3	0.4	0.4	0.4	0.4	0.2	0.4	0.4	0.3	0.3	7.1%	*
Venezuela	19.7	19.5	21.0	22.2	24.8	26.8	27.7	29.1	24.7	25.1	26.0	3.3%	1.2%
Other S. & Cent. America	5.8	6.1	6.1	6.5	6.5	7.4	8.0	8.8	9.3	10.1	10.6	5.2%	0.5%
Total S. & Cent. America	54.4	54.8	58.0	60.4	65.9	71.1	74.9	80.0	78.8	83.7	87.2	4.1%	4.0%
Austria	5.4	5.4	5.7	5.8	6.1	6.6	6.9	6.8	6.9	6.6	6.6	0.6%	0.3%
Belgium & Luxembourg	9.0	9.0	9.9	9.7	10.6	11.8	11.3	12.4	13.3	13.4	13.2	-1.4%	0.6%
Bulgaria	4.5	3.9	3.7	3.7	4.5	4.6	3.7	3.1	2.7	2.6	2.3	-9.3%	0.1%
Czech Republic	5.3	5.2	5.3	5.7	6.5	7.6	7.7	7.7	7.7	7.5	8.0	7.0%	0.4%
Denmark	2.1	2.2	2.5	2.7	3.1	3.7	3.9	4.3	4.5	4.4	4.6	4.4%	0.2%
Finland	2.4	2.5	2.6	2.8	2.9	3.0	2.9	3.3	3.3	3.4	3.7	8.5%	0.2%
France	27.5	28.3	29.0	27.8	29.6	32.5	31.2	33.3	33.9	35.7	36.6	2.5%	1.7%
Germany	56.6	56.7	59.8	61.1	67.0	75.2	71.3	71.7	72.1	71.5	74.6	4.3%	3.4%
Greece	0.1	0.1	0.1	†	†	†	0.2	0.7	1.2	1.7	1.8	1.1%	0.1%
Hungary	8.6	7.4	8.1	8.4	9.2	10.2	9.7	9.8	9.9	9.6	10.7	11.1%	0.5%
Iceland	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Ireland	1.9	1.9	2.2	2.2	2.3	2.7	2.8	2.8	3.0	3.4	3.6	4.3%	0.2%
Italy	41.5	41.1	42.1	40.8	44.9	46.4	47.9	51.5	56.0	58.4	58.0	-0.6%	2.7%
Netherlands	34.2	33.0	34.1	33.2	34.0	37.5	35.2	34.9	34.1	35.3	35.3	0.2%	1.6%
Norway	2.2	2.3	2.4	2.6	2.7	2.9	3.3	3.4	3.2	3.6	4.0	10.6%	0.2%
Poland	7.9	7.8	8.1	8.2	8.9	9.5	9.4	9.5	9.3	10.0	10.2	2.7%	0.5%
Portugal	-	-	-	-	-	-	0.1	0.7	2.0	2.1	2.3	7.6%	0.1%
Romania	22.3	22.8	22.7	21.8	21.6	21.8	18.0	16.8	15.5	15.4	15.8	2.3%	0.7%
Slovakia	4.9	4.9	4.6	4.5	5.1	5.5	5.6	5.7	5.8	5.8	6.7	14.3%	0.3%
Spain	5.5	5.9	5.8	6.5	7.5	8.4	11.1	11.8	13.5	15.2	16.4	7.7%	0.8%
Sweden	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	4.8%	*
Switzerland	1.8	1.9	2.0	2.0	2.2	2.4	2.3	2.4	2.4	2.4	2.5	4.2%	0.1%
Turkey	4.0	4.1	4.5	5.9	6.2	8.1	8.5	8.9	10.8	12.7	14.0	9.7%	0.6%
United Kingdom	51.0	50.7	57.8	59.5	63.5	73.9	75.4	78.5	83.2	86.4	85.9	-0.6%	4.0%
Other Europe	6.0	5.4	4.5	3.6	3.8	5.4	5.5	5.3	4.8	5.1	5.5	7.8%	0.3%
Total Europe	305.3	303.2	318.2	319.2	342.9	380.5	374.6	386.1	399.9	412.9	423.0	2.4%	19.5%
Azerbaijan	13.6	10.6	7.8	7.3	7.2	5.3	5.0	4.7	5.0	4.9	7.6	55.2%	0.3%
Belarus	13.0	15.1	14.0	12.3	11.1	11.7	13.3	13.5	13.8	14.6	14.5	-0.6%	0.7%
Kazakhstan	11.8	12.2	11.7	9.2	9.7	8.1	6.4	6.5	7.1	8.7	9.1	3.8%	0.4%
Lithuania	4.9	2.7	1.5	1.8	2.1	2.3	2.4	2.1	2.2	2.5	2.5	3.8%	0.1%
Russian Federation	388.0	375.5	374.4	351.8	340.0	341.9	315.3	328.3	327.3	339.5	335.4	-1.2%	15.5%
Turkmenistan	8.6	8.4	8.4	9.2	7.2	9.0	9.1	9.2	10.2	11.3	11.6	2.2%	0.5%
Ukraine	109.3	93.2	83.6	73.2	68.6	74.2	66.8	61.9	63.6	61.6	59.2	-4.0%	2.7%
Uzbekistan	33.4	33.6	36.6	37.2	38.1	39.0	40.9	42.3	44.3	42.4	46.0	8.5%	2.1%
Other Former Soviet Union	16.4	14.1	10.0	8.4	8.2	7.1	7.9	8.3	7.1	6.8	7.7	13.4%	0.4%
Total Former Soviet Union	599.0	565.4	548.0	510.4	492.2	498.6	467.1	476.8	480.6	492.3	493.6	0.3%	22.8%
Iran	20.5	22.5	23.9	28.6	31.7	35.0	42.4	46.6	53.8	56.7	58.5	3.2%	2.7%
Kuwait	0.5	2.4	4.9	5.4	8.4	8.4	8.3	8.5	7.8	8.6	8.6	-1.0%	0.4%
Qatar	6.9	11.4	12.2	12.2	12.2	12.3	13.2	13.3	12.6	13.6	14.4	6.0%	0.7%
Saudi Arabia	31.7	34.4	36.0	38.5	38.6	40.0	40.8	42.1	41.6	44.8	48.3	7.8%	2.2%
United Arab Emirates	18.3	16.9	17.7	19.5	22.3	24.4	26.1	27.4	28.3	29.6	30.8	4.2%	1.4%
Other Middle East	10.4	12.0	12.5	13.4	14.5	15.6	17.7	18.5	19.4	20.1	20.7	2.9%	1.0%
Total Middle East	88.3	99.6	107.2	117.6	127.7	135.7	148.5	156.4	163.5	173.4	181.3	4.5%	8.4%
Algeria	15.3	16.0	16.7	17.6	18.9	19.3	18.1	18.8	19.1	18.9	19.4	2.7%	0.9%
Egypt	6.9	7.5	8.7	9.4	9.9	10.2	10.4	10.8	12.9	16.5	18.9	14.4%	0.9%
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Africa	9.5	10.1	10.5	10.7	11.5	12.9	12.9	13.4	13.1	14.6	15.8	8.4%	0.7%
Total Africa	31.7	33.6	35.9	37.7	40.3	42.4	41.4	43.0	45.1	50.0	54.1	8.2%	2.5%
Australia	15.3	15.2	15.7	17.5	17.6	17.9	17.6	18.3	17.8	19.1	20.3	6.0%	0.9%
Bangladesh	4.8	5.2	5.5	6.0	6.6	6.8	6.8	7.0	7.5	9.0	9.7	8.2%	0.4%
China	13.4	13.6	14.6	14.9	15.9	15.9	17.4	17.4	19.3	22.1	24.9	12.9%	1.2%
China Hong Kong SAR	-	-	-	-	†	1.5	2.4	2.2	2.4	2.2	2.2	0.9%	0.1%
India	12.7	14.3	14.7	15.7	17.7	18.5	19.1	21.8	22.3	23.4	23.7	1.3%	1.1%
Indonesia	19.5	20.3	21.5	24.6	27.0	28.2	28.7	25.0	28.7	27.5	26.7	-2.9%	1.2%
Japan	49.2	50.4	50.7	54.3	55.0	59.5	58.6	62.5	67.1	68.6	71.1	3.7%	3.3%
Malaysia	8.1	9.5	11.7	12.3	12.4	14.3	15.0	15.7	16.7	18.3	19.4	6.2%	0.9%
New Zealand	4.2	4.4	4.3	4.0	3.7	4.3	4.6	4.0	4.7	4.9	5.2	5.1%	0.2%
Pakistan	10.0	10.3	10.9	12.0	13.1	13.8	14.0	14.4	15.6	17.0	18.1	6.1%	0.8%
Philippines	-	-	-	†	†	†	†	†	†	†	0.1	>100.0%	*
Singapore	-	1.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	2.3	43.3%	0.1%
South Korea	3.5	4.6	5.7	7.6	9.2	12.2	14.8	13.8	16.8	18.9	20.8	9.8%	1.0%
Taiwan	2.7	2.8	2.7	3.6	3.9	4.0	4.6	5.7	5.6	6.2	6.8	9.7%	0.3%
Thailand	6.3	6.8	7.6	8.6	9.0	10.7	13.1	14.3	15.6	18.4	19.0	3.0%	0.9%
Other Asia Pacific	2.3	2.4	2.7	2.9	3.0	3.4	3.8	4.1	4.4	4.4	4.4	0.2%	0.2%
Total Asia Pacific	152.0	160.8	169.7	185.4	195.5	212.4	221.9	227.6	245.9	261.6	274.7	5.0%	12.7%
TOTAL WORLD	1806.4	1809.8	1848.9	1857.5	1913.5	2004.0	1992.0	2016.9	2069.2	2157.5	2164.3	0.3%	100.0%
of which: European Union 15	237.8	237.5	252.3	252.8	272.2	302.5	300.9	313.5	327.8	338.2	343.3	1.5%	15.9%
OECD	920.4	938.1	975.6	1000.3	1047.5	1105.9	1106.6	1106.5	1138.7	1184.9	1167.2	-1.5%	53.9%
Former Soviet Union	599.0	565.4	548.0	510.4	492.2	498.6	467.1	476.8	480.6	492.3	493.6	0.3%	22.8%
Other EMEs	287.0	306.3	325.3	346.8	373.8	399.5	418.3	433.6	449.9	480.3	503.5	4.8%	23.3%

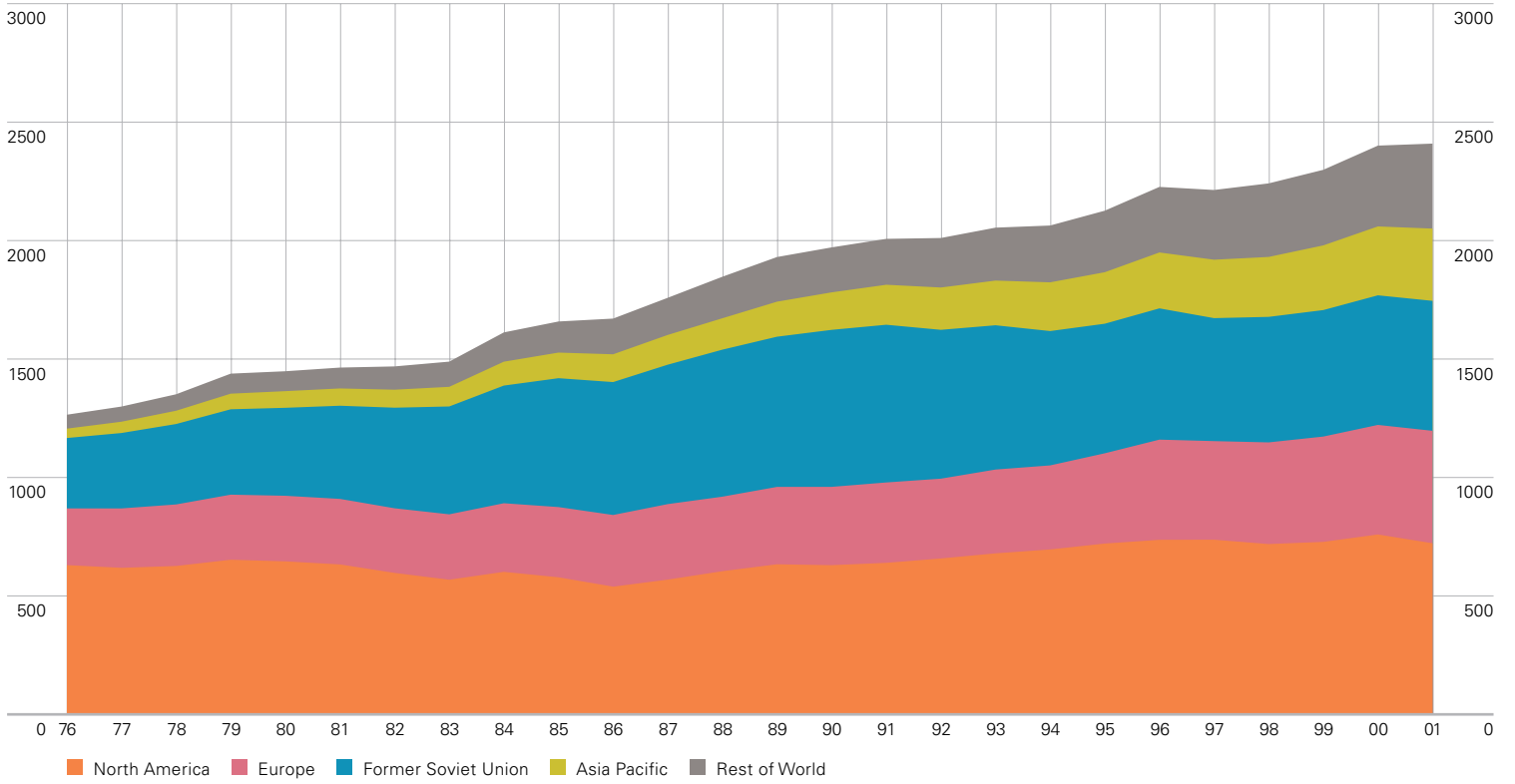
†Less than 0.05.

*Less than 0.05%.

Note: The difference between these world consumption figures and the world production statistics on page 23 is due to variations in stocks at storage facilities and liquefaction plants, together with unavoidable disparities in the definition, measurement or conversion of gas supply and demand data.

consumption by area

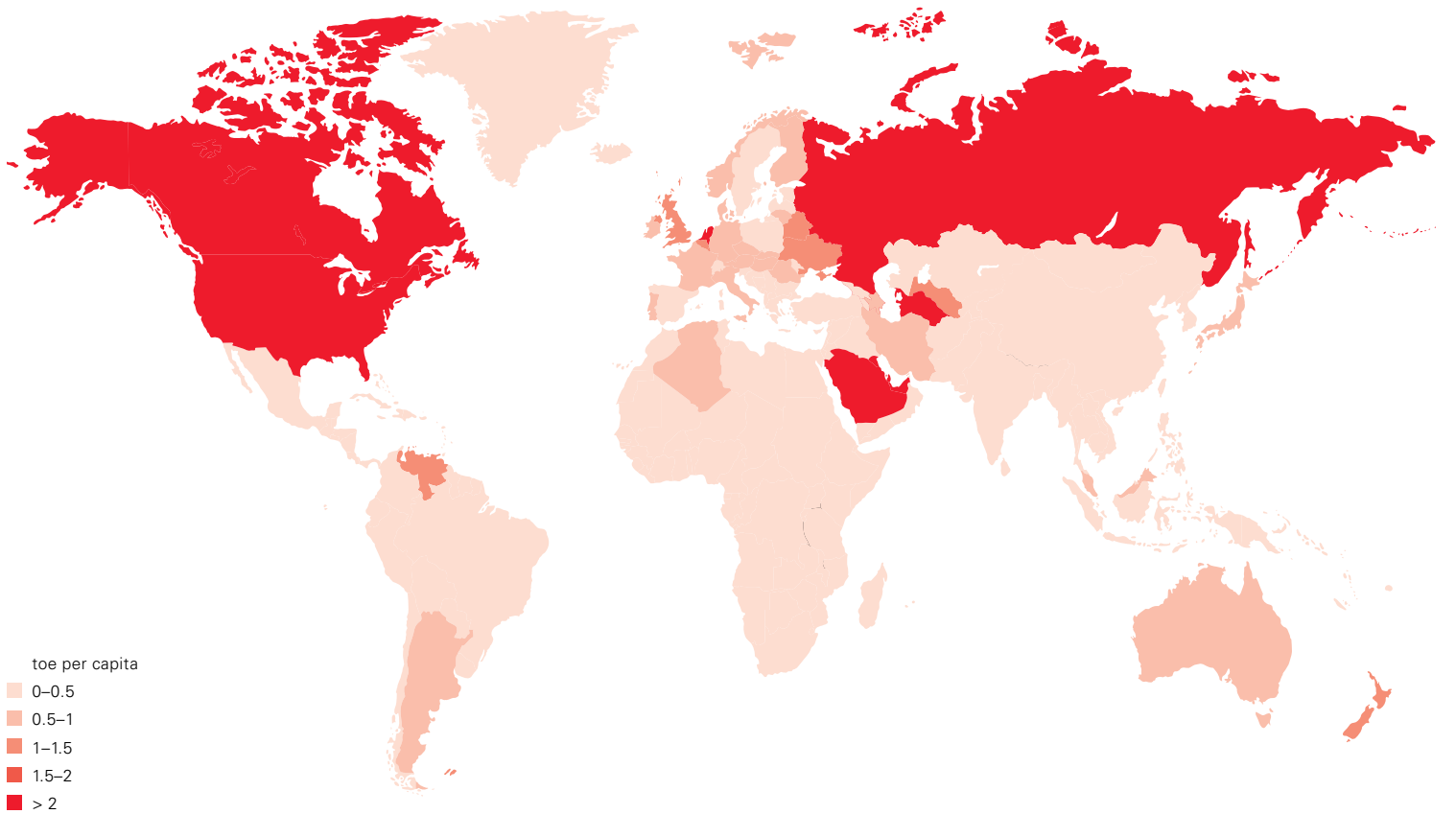
Billion cubic metres



Global gas consumption grew by a weak 0.3% in 2001, following an exceptionally strong 2000 during which consumption grew by well over 4%. Falling US demand was the main factor, with growth in most other regions remaining robust.

consumption per capita

Tonnes oil equivalent



natural gas

trade movements 2001 – by pipeline

Billion cubic metres	From																	Total imports	
	USA	Canada	Mexico	Argentina	Bolivia	Denmark	France	Germany	Netherlands	Norway	UK	Russian Fed.	Turkmenistan	Iran	Algeria	Indonesia	Malaysia		Myanmar
North America																			
USA		109.02	0.65																
Canada	4.87																		
Mexico	4.28																		
S. & C. America																			
Brazil				0.50	2.50														
Chile				4.60															
Uruguay				0.07															
Europe																			
Austria								0.32		0.50		5.22							
Belgium								0.19	7.60	5.12	0.31								
Bulgaria												2.90							
Croatia												1.08							
Czech Republic										1.70		7.50							
Finland												4.54							
France									5.80	12.87	1.29	11.18							
Germany						2.20			20.20	19.89	3.26	33.20							
Greece												1.48							
Hungary							0.90	1.12				7.95							
Ireland												3.42							
Italy									7.10	1.10		19.50			21.85				
Luxembourg									0.40	0.40									
Netherlands										5.50	7.50	0.13							
Poland										0.50		7.50							
Portugal														2.20					
Romania									0.20			2.80							
Slovakia												7.90							
Slovenia												0.68			0.36				
Spain										1.22				6.54					
Sweden						0.90													
Switzerland								0.30	1.75	0.60		0.40							
Turkey												10.93		0.11					
United Kingdom										0.50	2.20								
Others												1.97							
Middle East																			
Iran												4.20							
Africa																			
Tunisia														1.20					
Asia Pacific																			
Singapore															1.00	1.50			
Thailand																	1.75		
TOTAL EXPORTS	9.15	109.02	0.65	5.17	2.50	3.10	1.20	4.48	42.20	50.50	15.78	126.86	4.20	0.11	32.15	1.00	1.50	1.75	411.32

Note: Flows are on a contractual basis and may not correspond to physical gas flows in all cases.

Source: Cedigaz.

trade movements 2001 – LNG*

Billion cubic metres	From														Total imports
	USA	Trinidad & Tobago	Oman	Qatar	UAE	Algeria	Libya	Nigeria	Australia	Brunei	Indonesia	Malaysia	Taiwan		
North America															
USA		2.62	0.34	0.64		1.84		1.08	0.07						
S. & C. America															
Puerto Rico		0.58	0.05												
Europe															
Belgium						2.32		0.08							
France						9.80		0.50							
Greece						0.50									
Italy						2.25		3.00							
Portugal								0.26							
Spain		0.45	0.91	0.78	0.02	5.20	0.77	1.71							
Turkey						3.63		1.20							
Asia Pacific															
Japan	1.79		0.83	8.30	6.89				10.05	8.20	22.74	15.27			
South Korea			5.30	6.67	0.17				0.08	0.80	5.36	3.04	0.41		
Taiwan											3.70	2.60			
TOTAL EXPORTS	1.79	3.65	7.43	16.54	7.08	25.54	0.77	7.83	10.20	9.00	31.80	20.91	0.41	142.95	

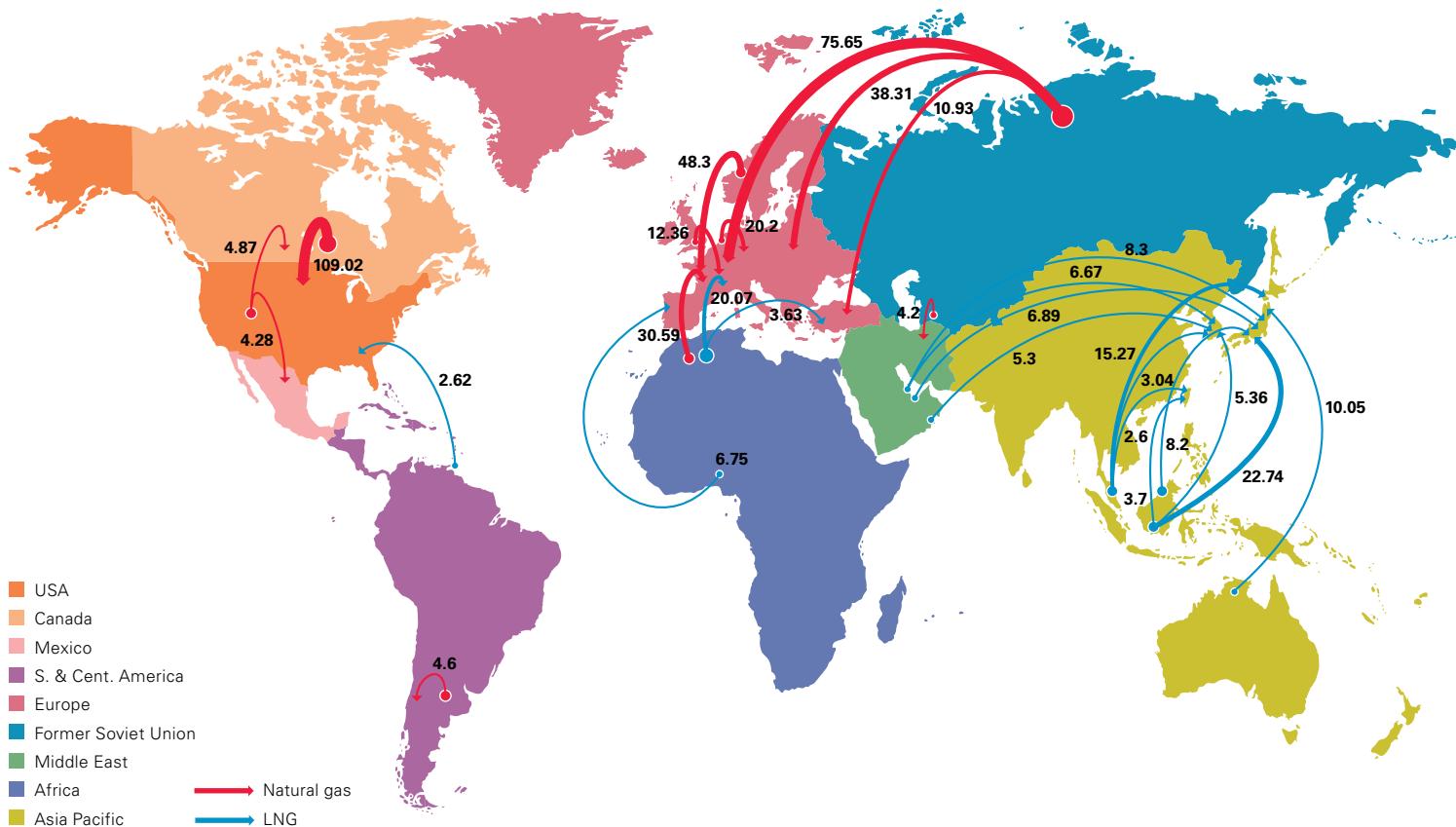
*Liquefied Natural Gas.

Source: Cedigaz.

Note: Flows are on a contractual basis and may not correspond to physical gas flows in all cases.

major trade movements

Trade flows worldwide (billion cubic metres)



prices

US dollars per million Btu	LNG		Natural gas			Crude oil
	Japan cif	European Union cif	UK (Heren NBP index)†	USA Henry Hub‡	Canada (Alberta)‡	OECD countries cif
1984	–	3.76	–	–	–	5.00
1985	5.23	3.83	–	–	–	4.75
1986	4.10	3.65	–	–	–	2.57
1987	3.35	2.59	–	–	–	3.09
1988	3.34	2.36	–	–	–	2.56
1989	3.28	2.09	–	1.70	–	3.01
1990	3.64	2.82	–	1.64	1.05	3.82
1991	3.99	3.18	–	1.49	0.89	3.33
1992	3.62	2.76	–	1.77	0.98	3.19
1993	3.52	2.53	–	2.12	1.69	2.82
1994	3.18	2.24	–	1.92	1.45	2.70
1995	3.46	2.37	–	1.69	0.89	2.96
1996	3.66	2.43	1.85	2.76	1.12	3.54
1997	3.91	2.65	2.03	2.53	1.36	3.29
1998	3.05	2.26	1.92	2.08	1.42	2.16
1999	3.14	1.8	1.64	2.27	2.00	2.98
2000	4.72	3.25	2.68	4.23	3.75	4.83
2001	4.64	4.19	3.22	4.07	3.61	4.06

†Source: PH Energy.

‡Source: Natural Gas Week.

Note: cif = cost+insurance+freight (average prices).

coal

proved reserves at end of 2001

Million tonnes	Anthracite and bituminous	Sub-bituminous and Lignite	Total	Share of total	R/P ratio
USA	115891	134103	249994	25.4%	246
Canada	3471	3107	6578	0.7%	93
Mexico	860	351	1211	0.1%	101
Total North America	120222	137561	257783	26.2%	234
Brazil	–	11929	11929	1.2%	*
Colombia	6267	381	6648	0.7%	157
Venezuela	479	–	479	♦	59
Other S. & Cent. America	992	1704	2696	0.3%	*
Total S. & Cent. America	7738	14014	21752	2.2%	381
Bulgaria	13	2698	2711	0.3%	96
Czech Republic	2114	3564	5678	0.6%	86
France	22	14	36	♦	15
Germany	23000	43000	66000	6.7%	326
Greece	–	2874	2874	0.3%	43
Hungary	–	1097	1097	0.1%	80
Poland	20300	1860	22160	2.3%	136
Romania	1	1456	1457	0.1%	44
Spain	200	460	660	0.1%	29
Turkey	278	3411	3689	0.4%	54
United Kingdom	1000	500	1500	0.2%	47
Other Europe	584	16949	17533	1.8%	337
Total Europe	47512	77883	125395	12.7%	167
Kazakhstan	31000	3000	34000	3.5%	431
Russian Federation	49088	107922	157010	15.9%	*
Ukraine	16274	17879	34153	3.5%	407
Other Former Soviet Union	1000	3812	4812	0.5%	*
Total Former Soviet Union	97362	132613	229975	23.4%	*
South Africa	49520	–	49520	5.0%	220
Zimbabwe	502	–	502	0.1%	101
Other Africa	5149	196	5345	0.5%	*
Middle East	1710	–	1710	0.2%	*
Total Africa & Middle East	56881	196	57077	5.8%	246
Australia	42550	39540	82090	8.3%	261
China	62200	52300	114500	11.6%	105
India	82396	2000	84396	8.6%	246
Indonesia	790	4580	5370	0.5%	58
Japan	773	–	773	0.1%	242
New Zealand	33	539	572	0.1%	141
North Korea	300	300	600	0.1%	6
Pakistan	–	2265	2265	0.2%	*
South Korea	78	–	78	♦	20
Other Asia Pacific	227	1600	1827	0.2%	47
Total Asia Pacific	189347	103124	292471	29.7%	147
TOTAL WORLD	519062	465391	984453	100.0%	216
of which: OECD	211084	234686	445770	45.3%	215
Former Soviet Union	97362	132613	229975	23.4%	*
Other EMEs	210616	98092	308708	31.4%	150

*More than 500 years.

♦Less than 0.05%.

Notes:

Proved reserves of coal – Generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known deposits under existing economic and operating conditions.

Reserves/Production (R/P) ratio – If the reserves remaining at the end of the year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that level.

Source of reserves data – World Energy Council.

prices

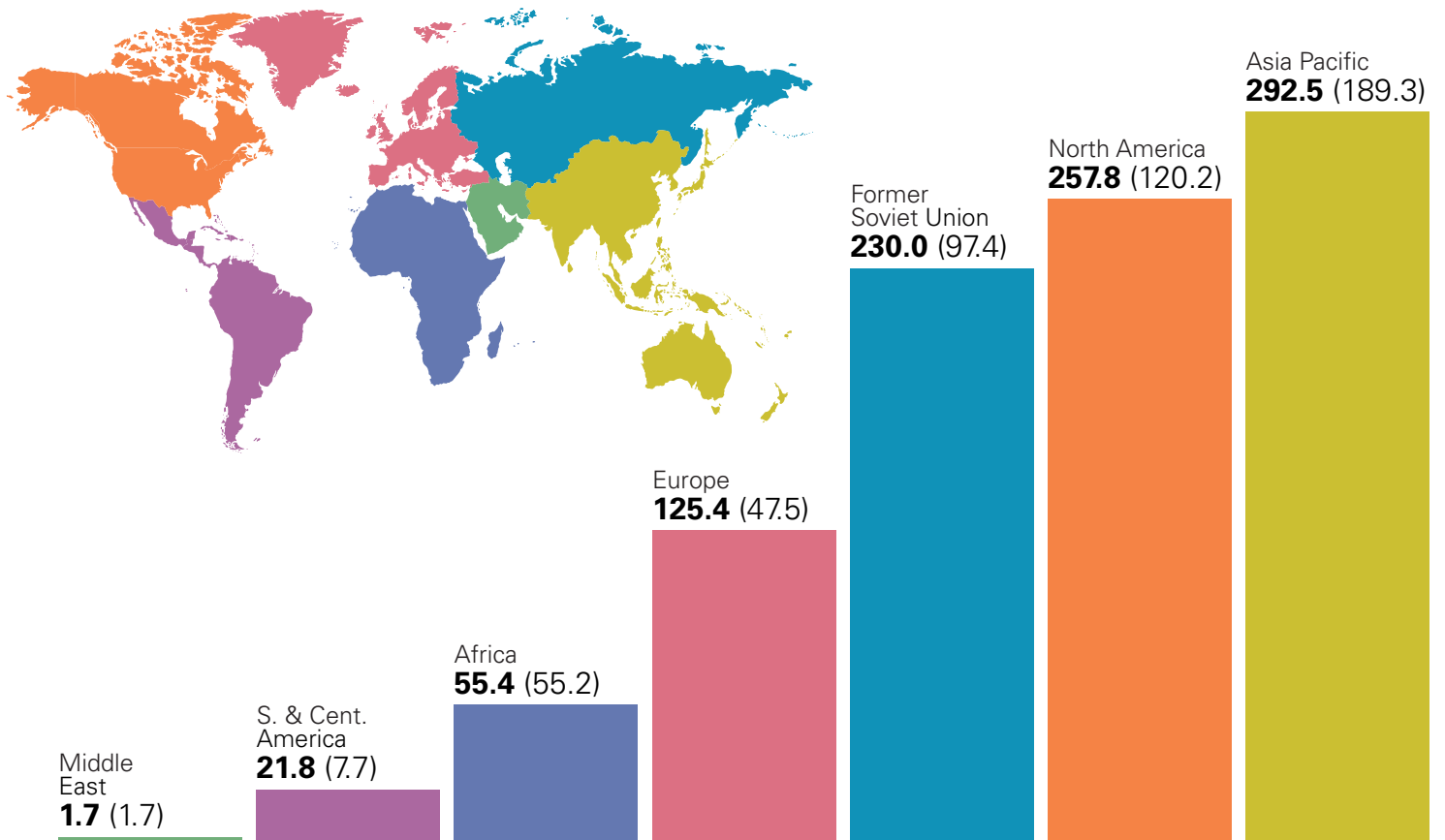
US dollars per tonne	Marker Price (basis Northwest Europe)*	Price of US coal receipts at steam-electric utility plants	Japan coking coal import cif price	Japan steam coal import cif price
1987	31.30	35.09	53.44	41.28
1988	39.94	33.77	55.06	42.47
1989	42.08	33.21	58.68	48.86
1990	43.48	33.57	60.54	50.81
1991	42.80	33.10	60.45	50.30
1992	38.53	32.35	57.82	48.45
1993	33.68	31.51	55.26	45.71
1994	37.18	30.88	51.77	43.66
1995	44.50	29.78	54.47	47.58
1996	41.25	29.16	56.68	49.54
1997	38.92	28.83	55.51	45.53
1998	32.00	28.31	50.76	40.51
1999	28.79	27.35	42.83	35.74
2000	35.98	26.99	39.69	34.58
2001	39.29	27.68	41.33	37.96

*Source of Marker Price: McCloskey Coal Information Service.

Note: cif = cost+insurance+freight (average prices).

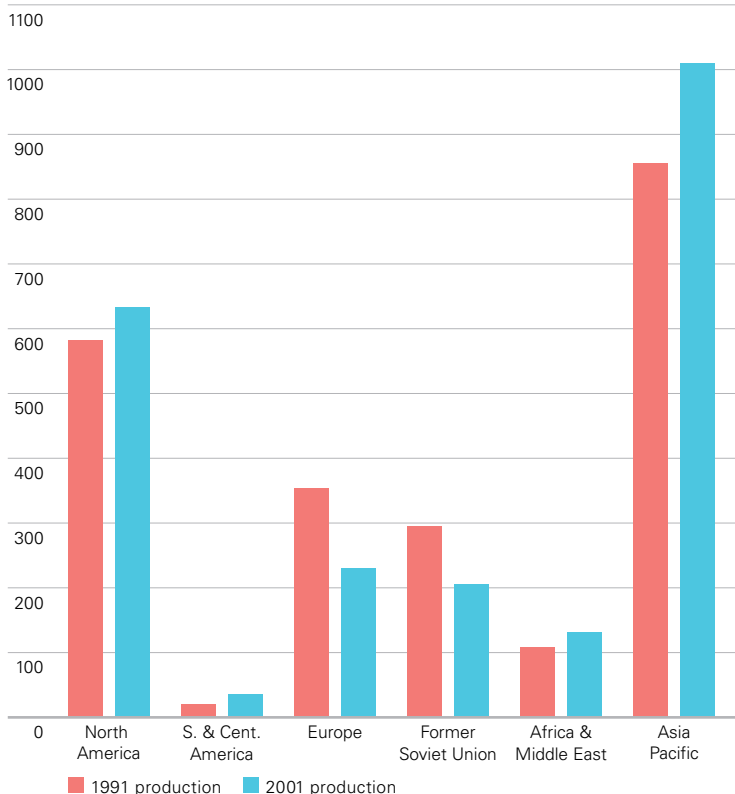
proved reserves at end 2001

Thousand million tonnes (share of anthracite and bituminous coal is shown in brackets)



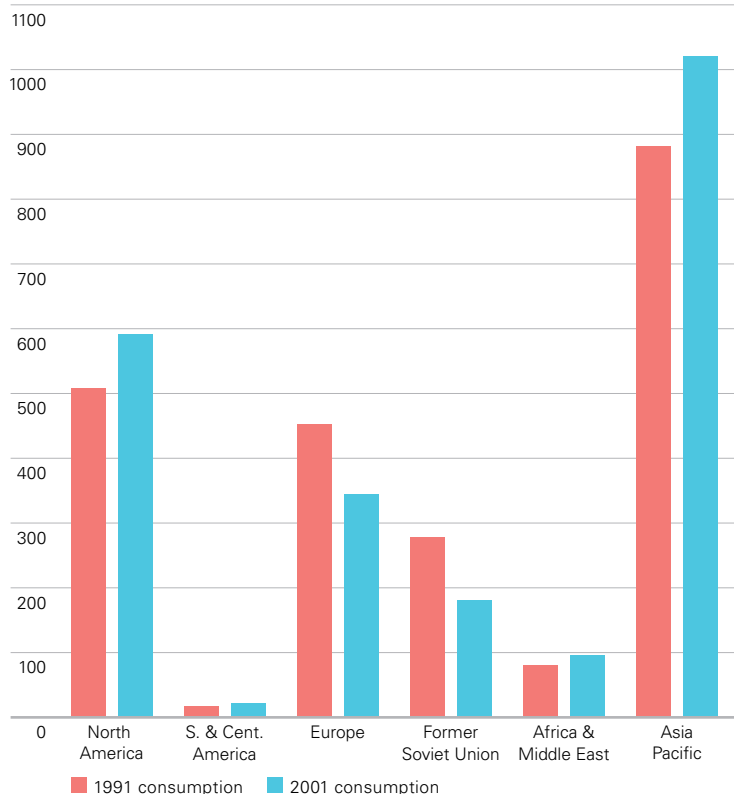
production

Million tonnes oil equivalent



consumption

Million tonnes oil equivalent



Global coal production and consumption have been broadly flat over the last decade, with declines in Europe and the Former Soviet Union offset by gains in North America, Asia and the Rest of the World.

coal

production*

Million tonnes oil equivalent	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	539.9	540.7	506.2	552.8	550.7	567.1	580.3	598.4	579.7	565.6	590.7	4.4%	26.3%
Canada	39.7	35.1	37.5	39.4	40.8	41.6	43.0	40.8	39.2	37.0	37.6	1.6%	1.7%
Mexico	3.1	2.9	3.1	4.3	4.1	4.6	4.5	4.8	4.9	5.4	5.7	5.8%	0.3%
Total North America	582.7	578.7	546.8	596.5	595.6	613.3	627.8	644.0	623.8	608.0	634.0	4.3%	28.2%
Brazil	2.1	1.8	1.8	2.0	2.0	1.8	2.1	2.0	2.1	2.1	2.1	0.5%	0.1%
Colombia	13.8	15.3	14.1	14.7	16.7	19.5	21.0	19.6	21.3	24.8	27.6	11.3%	1.2%
Venezuela	1.8	1.8	2.9	3.2	3.2	3.1	3.9	4.7	4.8	5.7	5.9	2.8%	0.3%
Other S. & Cent. America	2.0	1.5	1.2	1.4	1.3	1.2	1.1	0.4	0.5	0.6	0.6	-1.4%	♦
Total S. & Cent. America	19.7	20.4	20.0	21.3	23.2	25.6	28.1	26.7	28.7	33.2	36.2	8.9%	1.6%
Bulgaria	4.8	5.1	4.9	4.8	5.2	5.2	4.9	5.0	4.3	4.5	4.7	3.9%	0.2%
Czech Republic	33.9	31.4	30.8	28.1	27.3	27.0	27.9	26.0	23.1	25.2	25.8	2.3%	1.1%
France	7.4	6.8	6.3	5.4	5.1	5.0	4.1	3.4	3.1	2.1	1.5	-32.4%	0.1%
Germany	102.0	93.3	83.7	77.8	74.6	70.0	66.9	61.3	59.4	56.7	54.2	-4.3%	2.4%
Greece	6.9	7.0	7.2	7.4	7.5	7.2	7.7	8.1	8.2	8.5	9.0	6.3%	0.4%
Hungary	3.9	3.6	2.8	2.9	2.6	3.2	3.3	3.0	3.0	2.9	2.8	-2.1%	0.1%
Poland	90.7	89.2	89.2	89.3	91.1	94.5	92.1	79.6	77.1	72.0	72.5	0.7%	3.2%
Romania	7.4	8.5	8.9	9.1	9.3	9.6	7.4	5.7	5.1	6.4	7.3	13.4%	0.3%
Spain	11.2	11.4	11.0	10.6	10.2	10.0	9.8	9.3	8.6	8.2	8.0	-3.2%	0.4%
Turkey	11.8	12.1	11.7	12.1	12.1	12.3	13.1	13.9	13.3	13.0	12.9	-0.1%	0.6%
United Kingdom	55.8	50.0	40.3	28.3	31.8	30.2	29.4	25.0	22.5	19.0	19.6	3.1%	0.9%
Other Europe	17.9	16.6	15.3	12.2	12.9	12.3	13.7	14.2	11.0	11.9	12.1	1.3%	0.5%
Total Europe	353.7	335.0	312.1	288.0	289.7	286.5	280.3	254.5	238.7	230.4	230.4	♦	10.2%
Kazakhstan	66.9	65.0	57.3	53.5	42.6	39.3	37.3	36.0	30.0	38.5	40.6	5.4%	1.8%
Russian Federation	154.8	148.4	135.1	121.2	118.5	114.4	109.3	103.9	112.0	115.8	120.8	4.3%	5.4%
Ukraine	69.1	68.4	59.4	48.5	44.2	39.1	39.8	39.9	42.8	42.1	43.6	3.5%	1.9%
Other Former Soviet Union	3.7	2.5	2.0	1.6	1.2	1.1	1.1	1.1	1.1	0.9	1.0	9.2%	♦
Total Former Soviet Union	294.5	284.3	253.8	224.8	206.5	193.9	187.5	180.9	185.9	197.3	206.0	4.4%	9.2%
Total Middle East	0.6	0.6	0.6	0.8	0.7	0.7	0.6	0.6	0.7	0.6	0.5	-18.0%	♦
South Africa	102.2	100.0	103.5	111.1	116.9	116.9	124.6	127.1	125.6	126.5	126.7	0.1%	5.6%
Zimbabwe	3.6	3.6	3.4	3.5	3.6	3.3	3.4	3.5	3.2	2.8	3.2	13.2%	0.1%
Other Africa	1.4	1.4	1.3	1.4	1.4	1.3	1.2	1.4	1.3	1.2	1.1	-2.1%	0.1%
Total Africa	107.2	105.0	108.2	116.0	121.9	121.5	129.2	132.0	130.1	130.5	131.0	0.4%	5.8%
Australia	113.3	119.6	121.4	122.5	128.5	133.9	147.8	151.3	155.8	153.3	168.1	9.7%	7.5%
China	545.1	559.9	580.7	619.4	650.9	691.5	665.5	619.7	523.9	501.8	548.5	9.3%	24.4%
India	112.6	119.2	123.5	126.9	135.2	145.7	149.6	150.3	147.4	157.0	161.1	2.6%	7.2%
Indonesia	8.5	13.8	17.0	20.2	25.7	31.0	33.7	38.3	45.3	47.4	56.9	20.2%	2.5%
Japan	4.4	4.2	4.0	3.8	3.4	3.6	2.4	2.0	2.2	1.7	1.8	2.2%	0.1%
New Zealand	1.5	1.7	1.8	1.8	2.1	2.2	2.0	2.0	2.2	2.2	2.5	15.7%	0.1%
Pakistan	1.3	1.3	1.4	1.4	1.4	1.5	1.4	1.5	1.5	1.4	1.5	2.5%	0.1%
South Korea	6.8	5.4	4.2	3.3	2.6	2.2	2.0	2.0	1.9	1.9	1.7	-8.0%	0.1%
Other Asia Pacific	62.6	64.2	66.7	66.2	66.4	67.5	68.5	65.0	64.2	66.2	68.1	2.8%	3.0%
Total Asia Pacific	856.1	889.3	920.7	965.5	1016.2	1079.1	1072.9	1032.1	944.4	932.9	1010.2	8.3%	44.9%
TOTAL WORLD	2214.5	2213.3	2162.2	2212.9	2253.8	2320.6	2326.4	2270.8	2152.3	2132.9	2248.3	5.4%	100.0%
of which: OECD	1035.0	1016.6	963.2	991.1	995.9	1015.6	1038.1	1032.5	1005.7	976.4	1016.8	4.1%	45.2%
Former Soviet Union	294.5	284.3	253.8	224.8	206.5	193.9	187.5	180.9	185.9	197.3	206.0	4.4%	9.2%
Other EMEs	884.8	912.5	945.4	997.3	1051.6	1111.0	1100.9	1057.4	960.5	959.2	1025.4	6.9%	45.6%

*Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal.

♦Less than 0.05%.

Note: Because of rounding some totals may not agree exactly with the sum of their component parts.

Coal production data expressed in million tonnes is available at www.bp.com/centres/energy/

consumption*

Million tonnes oil equivalent	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	478.8	482.7	498.1	502.3	504.7	528.2	540.9	546.0	546.3	565.3	555.7	-1.7%	24.6%
Canada	25.5	26.2	23.7	24.5	25.2	25.7	26.8	28.1	27.8	29.4	28.9	-1.6%	1.3%
Mexico	3.3	3.4	3.8	4.5	5.0	5.7	5.7	5.9	6.0	6.2	6.3	2.4%	0.3%
Total North America	507.6	512.3	525.6	531.3	534.9	559.6	573.4	580.0	580.1	600.9	590.9	-1.7%	26.2%
Argentina	0.8	0.8	0.7	1.2	0.9	0.9	0.8	0.7	0.7	0.7	0.7	-3.4%	♦
Brazil	10.2	9.9	10.2	10.2	10.7	11.2	11.4	11.2	11.7	12.8	14.0	9.6%	0.6%
Chile	2.0	1.8	1.8	2.2	2.4	3.2	4.2	3.7	3.5	3.9	4.0	2.1%	0.2%
Colombia	3.7	3.6	3.7	3.6	3.4	3.2	3.1	2.8	2.1	2.2	2.4	8.6%	0.1%
Ecuador	-	-	-	-	-	-	-	-	-	-	-	-	-
Peru	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.5	0.5	0.6	7.6%	♦
Venezuela	-	†	†	0.1	†	†	†	†	0.1	†	†	†	-
Other S. & Cent. America	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.6	0.7	18.0%	♦
Total S. & Cent. America	17.4	16.9	17.3	18.1	18.2	19.3	20.3	19.3	19.1	20.7	22.4	7.8%	1.0%
Austria	3.6	2.8	2.4	2.5	2.4	2.7	3.1	3.0	3.2	3.2	2.7	-16.3%	0.1%
Belgium & Luxembourg	10.8	10.2	8.7	8.5	9.8	7.6	7.5	7.9	6.9	7.6	7.1	-5.9%	0.3%
Bulgaria	7.5	7.3	8.2	7.6	7.8	8.4	7.8	8.2	6.6	6.6	6.1	-7.9%	0.3%
Czech Republic	30.4	25.4	23.7	23.2	23.5	23.6	22.8	20.5	19.0	20.7	21.3	2.8%	0.9%
Denmark	8.4	6.7	7.2	7.8	6.6	9.0	6.7	5.6	4.7	4.0	4.2	3.9%	0.2%
Finland	3.6	2.7	3.1	4.1	3.1	4.0	4.5	3.4	3.6	3.5	3.9	10.6%	0.2%
France	20.1	17.9	14.7	13.7	14.5	15.4	13.4	16.1	14.3	13.8	10.9	-20.9%	0.5%
Germany	113.3	104.4	97.9	95.6	90.6	89.9	86.8	84.8	80.2	84.9	84.4	-0.6%	3.7%
Greece	7.8	8.4	7.9	8.4	8.2	7.8	7.6	8.8	9.1	9.2	9.5	3.1%	0.4%
Hungary	5.8	4.6	4.0	3.6	3.6	3.7	3.7	3.4	3.4	3.2	3.1	-3.1%	0.1%
Iceland	0.1	†	†	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.1%	♦
Republic of Ireland	2.2	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.6	2.0	2.1	5.0%	0.1%
Italy	13.7	12.4	10.0	10.7	12.5	11.2	11.0	11.6	11.6	13.0	13.9	6.9%	0.6%
Netherlands	8.2	7.7	8.2	9.0	9.8	9.3	9.5	9.4	7.7	8.6	8.4	-1.9%	0.4%
Norway	0.4	0.4	0.5	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.6	-11.2%	♦
Poland	77.6	73.0	74.0	72.3	71.7	73.2	70.1	63.8	61.0	57.6	57.5	-0.2%	2.5%
Portugal	3.0	3.0	3.3	3.4	4.2	3.9	3.6	3.6	3.6	3.6	3.6	-2.3%	0.2%
Romania	9.6	10.3	9.5	9.4	9.7	9.5	8.4	7.0	6.7	7.0	7.7	8.8%	0.3%
Slovakia	6.3	6.2	5.6	5.0	5.1	5.0	4.7	4.5	4.3	4.0	4.1	1.7%	0.2%
Spain	18.8	19.1	18.2	18.0	18.5	15.5	17.7	17.7	20.5	21.6	19.5	-10.0%	0.9%
Sweden	2.4	2.2	2.1	2.1	2.1	2.4	2.1	2.0	2.0	1.9	2.0	4.4%	0.1%
Switzerland	0.3	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	-1.7%	♦
Turkey	16.8	19.0	18.7	17.6	17.5	20.7	22.3	22.5	20.8	22.3	20.4	-8.5%	0.9%
United Kingdom	65.1	61.2	53.3	49.7	47.5	44.4	39.6	39.7	35.6	36.9	40.3	9.0%	1.8%
Other Europe	17.3	16.6	14.7	11.8	12.1	11.6	12.2	13.6	11.0	11.8	10.6	-9.8%	0.5%
Total Europe	453.1	423.7	397.9	386.8	383.7	381.5	367.9	359.9	338.3	347.9	344.1	-1.2%	15.3%
Azerbaijan	0.1	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	1.1	0.7	0.6	0.2	0.3	0.5	0.6	0.4	0.3	0.3	0.3	0.3	♦
Kazakhstan	38.2	39.9	36.4	34.5	27.5	25.9	22.4	22.9	19.8	23.2	24.7	6.5%	1.1%
Lithuania	0.6	0.5	†	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-6.4%	♦
Russian Federation	165.6	154.7	140.8	126.4	119.4	115.7	109.7	102.8	109.4	110.4	114.6	3.9%	5.1%
Turkmenistan	0.3	0.1	-	†	†	†	-	-	-	-	-	-	-
Ukraine	62.1	63.9	56.3	46.3	42.1	33.2	38.0	36.9	38.5	38.8	39.0	0.6%	1.7%
Uzbekistan	4.0	2.9	1.9	1.8	1.4	1.2	1.2	1.2	0.9	1.0	1.1	2.4%	♦
Other Former Soviet Union	5.7	2.8	2.7	2.1	1.8	2.1	2.5	1.7	1.0	0.8	0.6	-26.2%	♦
Total Former Soviet Union	277.7	265.5	238.7	211.4	192.6	178.7	174.5	166.0	170.0	174.6	180.4	3.3%	8.0%
Iran	1.1	1.2	1.3	1.3	1.4	1.2	0.9	1.0	1.0	1.1	0.8	-25.6%	♦
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East	2.5	3.1	3.5	3.8	4.1	5.0	5.4	5.8	5.7	6.2	7.2	15.6%	0.3%
Total Middle East	3.6	4.3	4.8	5.1	5.5	6.2	6.3	6.8	6.7	7.3	8.0	9.5%	0.4%
Algeria	0.7	0.6	0.6	0.6	0.6	0.5	0.3	0.5	0.5	0.6	0.6	5.3%	♦
Egypt	0.7	0.8	0.9	1.0	0.7	0.9	0.9	0.9	0.9	0.9	0.9	-	♦
South Africa	70.1	67.3	69.8	73.6	77.4	81.7	84.3	83.4	82.3	81.9	80.6	-1.6%	3.6%
Other Africa	6.0	6.1	6.8	6.5	6.7	6.7	6.9	6.9	6.5	6.1	6.5	7.2%	0.3%
Total Africa	77.5	74.8	78.1	81.7	85.4	89.8	92.4	91.7	90.2	89.5	88.6	-0.9%	3.9%
Australia	37.4	39.0	36.4	38.7	41.2	43.9	45.4	45.9	45.5	47.5	47.6	0.3%	2.1%
Bangladesh	0.1	0.1	†	†	0.3	0.2	0.3	0.1	†	0.1	0.1	-	♦
China	534.9	549.5	570.3	606.4	635.7	676.9	649.3	616.8	512.7	493.7	520.6	5.4%	23.1%
China Hong Kong SAR	5.9	6.3	7.3	5.2	5.6	4.2	3.5	4.4	3.9	3.7	4.9	32.6%	0.2%
India	116.2	123.3	128.0	133.9	142.8	154.4	160.2	159.9	158.1	171.4	173.5	1.2%	7.7%
Indonesia	4.1	4.1	4.0	4.8	5.7	6.9	8.2	9.3	11.6	13.7	16.7	21.9%	0.7%
Japan	79.0	78.0	79.2	82.0	86.2	88.3	89.8	88.4	91.5	98.9	103.0	4.2%	4.6%
Malaysia	1.3	1.3	1.3	1.1	1.5	1.5	1.6	1.7	1.8	1.9	2.4	26.3%	0.1%
New Zealand	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.3	15.0%	0.1%
Pakistan	2.0	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	-1.9%	0.1%
Philippines	1.3	1.1	1.3	1.3	1.4	2.0	2.4	2.7	2.9	4.3	4.5	5.8%	0.2%
Singapore	-	-	-	-	-	-	-	-	-	-	-	-	-
South Korea	24.5	23.6	25.9	26.7	28.1	32.2	34.8	36.1	38.2	43.0	45.7	6.2%	2.0%
Taiwan	12.2	14.3	15.6	16.6	17.1	19.4	21.9	23.8	24.9	28.9	30.9	6.9%	1.4%
Thailand	4.5	4.8	5.4	6.1	7.1	8.7	8.7	7.3	7.9	7.8	8.8	12.7%	0.4%
Other Asia Pacific	56.5	57.3	59.1	58.7	58.9	58.7	59.3	56.5	55.8	57.9	58.7	1.4%	2.6%
Total Asia Pacific	881.1	906.1	937.2	984.9	1035.0	1100.7	1088.7	1056.1	958.1	975.9	1020.7	4.6%	45.3%
TOTAL WORLD	2218.0	2203.6	2199.6	2219.3	2255.3	2335.8	2323.5	2279.8	2162.5	2216.8	2255.1	1.7%	100.0%
of which: European Union 15	281.0	260.7	238.9	235.4	231.7	225.0	215.1	215.5	204.6	213.8	212.5	-0.7%	9.4%
OECD	1068.4	1043.7	1033.8	1037.9	1045.7	1077.2	1084.1	1082.6	1070.5	1113.9	1108.2	-0.5%	49.1%
Former Soviet Union	277.7	265.5	238.7	211.4	192.6	178.7	174.5	166.0	170.0	174.6	180.4	3.3%	8.0%
Other EMEs	871.9	894.4	927.1	970.0	1017.0	1079.9	1064.9	1031.2	922.0	928.3	966.5	4.1%	42.9%

*Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal.

†Less than 0.05.

♦Less than 0.05%.

nuclear energy

consumption*

Million tonnes oil equivalent	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	145.9	147.4	145.4	152.6	160.4	160.7	149.8	160.5	173.5	179.6	183.2	2.0%	30.5%
Canada	19.2	18.2	21.3	24.4	22.1	21.0	18.7	16.2	16.6	16.5	17.4	5.4%	2.9%
Mexico	1.0	0.9	1.1	1.0	1.9	1.8	2.4	2.1	2.3	1.9	2.0	5.9%	0.3%
Total North America	166.1	166.5	167.8	178.0	184.4	183.5	170.9	178.8	192.4	198.0	202.6	2.3%	33.7%
Argentina	1.8	1.6	1.8	1.9	1.6	1.7	1.8	1.7	1.6	1.4	1.6	14.2%	0.3%
Brazil	0.3	0.4	0.1	†	0.6	0.5	0.7	0.7	0.9	1.3	3.2	>100.0%	0.5%
Chile	-	-	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-	-	-
Other S. & Cent. America	-	-	-	-	-	-	-	-	-	-	-	-	-
Total S. & Cent. America	2.1	2.0	1.9	1.9	2.2	2.2	2.5	2.4	2.5	2.7	4.8	82.4%	0.8%
Austria	-	-	-	-	-	-	-	-	-	-	-	-	-
Belgium & Luxembourg	9.7	9.8	9.5	9.2	9.4	9.8	10.7	10.5	11.1	10.9	10.7	-2.1%	1.8%
Bulgaria	3.0	2.6	3.2	3.5	3.9	4.1	4.0	3.8	3.6	4.5	4.5	0.3%	0.7%
Czech Republic	2.7	2.8	2.9	2.9	2.8	2.9	2.8	3.0	3.0	3.1	3.3	8.5%	0.6%
Denmark	-	-	-	-	-	-	-	-	-	-	-	-	-
Finland	4.4	4.3	4.5	4.4	4.3	4.4	4.8	5.0	5.3	5.1	5.2	1.4%	0.9%
France	75.0	76.6	83.3	81.5	85.4	89.9	89.5	87.8	89.2	94.0	94.9	1.0%	15.8%
Germany	33.4	35.9	34.7	34.2	34.9	36.6	38.5	36.6	38.5	38.4	38.7	0.9%	6.4%
Greece	-	-	-	-	-	-	-	-	-	-	-	-	-
Hungary	3.1	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	-0.4%	0.5%
Iceland	-	-	-	-	-	-	-	-	-	-	-	-	-
Republic of Ireland	-	-	-	-	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands	0.8	0.9	0.9	0.9	0.9	0.9	0.5	0.9	0.9	0.9	0.9	1.2%	0.1%
Norway	-	-	-	-	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	0.3	1.2	1.2	1.2	1.2	1.2	-0.2%	0.2%
Slovakia	2.6	2.5	2.7	2.7	2.6	2.6	2.4	2.6	3.0	3.7	3.9	3.3%	0.6%
Spain	12.6	12.6	12.7	12.5	12.5	12.7	12.5	13.4	13.3	14.1	14.4	2.3%	2.4%
Sweden	17.4	14.4	13.9	16.6	15.8	16.6	15.8	15.9	16.6	13.0	16.4	26.4%	2.7%
Switzerland	5.2	5.3	5.3	5.5	5.6	5.7	5.8	5.8	5.6	6.0	6.1	1.4%	1.0%
Turkey	-	-	-	-	-	-	-	-	-	-	-	-	-
United Kingdom	16.0	17.4	20.2	20.0	20.1	21.4	22.2	22.5	21.5	19.3	20.4	5.9%	3.4%
Other Europe	1.1	0.9	0.9	1.0	1.1	1.0	1.1	1.1	1.1	1.1	1.2	10.5%	0.2%
Total Europe	187.0	189.2	197.8	198.1	202.5	212.1	215.0	213.3	217.1	218.5	225.0	3.0%	37.4%
Azerbaijan	-	-	-	-	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-	-	-	-	-
Kazakhstan	0.1	0.1	0.1	0.1	†	†	0.1	†	-	-	-	-	-
Lithuania	3.8	3.3	2.8	1.7	2.7	3.2	2.7	3.1	2.2	1.9	2.6	35.0%	0.4%
Russian Federation	27.2	27.1	27.0	22.1	22.5	24.7	24.5	23.6	27.1	29.5	30.9	4.6%	5.1%
Turkmenistan	-	-	-	-	-	-	-	-	-	-	-	-	-
Ukraine	17.0	16.7	17.0	15.6	16.0	18.0	18.0	17.0	16.3	17.5	17.2	-1.7%	2.9%
Uzbekistan	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Former Soviet Union	-	-	-	-	0.1	0.5	0.4	0.4	0.5	0.4	0.5	8.2%	0.1%
Total Former Soviet Union	48.1	47.2	46.9	39.5	41.3	46.4	45.7	44.1	46.1	49.3	51.2	3.6%	8.5%
Iran	-	-	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Middle East	-	-	-	-	-	-	-	-	-	-	-	-	-
Algeria	-	-	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-	-	-
South Africa	2.2	2.2	1.7	2.3	2.7	2.8	3.0	3.2	3.1	3.1	2.6	-17.6%	0.4%
Other Africa	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Africa	2.2	2.2	1.7	2.3	2.7	2.8	3.0	3.2	3.1	3.1	2.6	-17.6%	0.4%
Australia	-	-	-	-	-	-	-	-	-	-	-	-	-
Bangladesh	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	0.1	0.4	3.1	2.9	3.2	3.3	3.4	3.4	3.8	4.0	4.4%	0.7%
China Hong Kong SAR	-	-	-	-	-	-	-	-	-	-	-	-	-
India	1.2	1.4	1.4	1.1	1.7	1.9	2.3	2.6	2.9	3.6	4.4	21.9%	0.7%
Indonesia	-	-	-	-	-	-	-	-	-	-	-	-	-
Japan	47.4	49.3	56.3	58.7	65.1	67.3	72.8	74.0	71.9	72.3	72.7	0.5%	12.1%
Malaysia	-	-	-	-	-	-	-	-	-	-	-	-	-
New Zealand	-	-	-	-	-	-	-	-	-	-	-	-	-
Pakistan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	†	0.3	0.5	82.1%	0.1%
Philippines	-	-	-	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-	-	-	-	-
South Korea	12.7	12.8	13.2	13.3	15.2	16.7	17.4	20.3	23.3	24.7	25.4	2.9%	4.2%
Taiwan	8.0	7.7	7.8	7.9	8.0	8.6	8.2	8.3	8.7	8.7	8.0	-7.8%	1.3%
Thailand	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Asia Pacific	69.4	71.4	79.2	84.2	93.0	97.8	104.1	108.7	110.2	113.4	115.0	1.4%	19.1%
TOTAL WORLD	474.9	478.5	495.3	504.0	526.1	544.8	541.2	550.5	571.4	585.0	601.2	2.8%	100.0%
of which: European Union 15	169.3	171.9	179.7	179.3	183.3	192.3	194.5	192.6	196.4	195.7	201.6	3.1%	33.6%
OECD	409.1	414.3	431.0	443.6	462.2	474.2	469.8	480.3	498.8	506.7	518.8	2.4%	86.3%
Former Soviet Union	48.1	47.2	46.9	39.5	41.3	46.4	45.7	44.1	46.1	49.3	51.2	3.6%	8.5%
Other EMEs	17.7	17.0	17.4	20.9	22.6	24.2	25.7	26.1	26.5	29.0	31.2	7.8%	5.2%

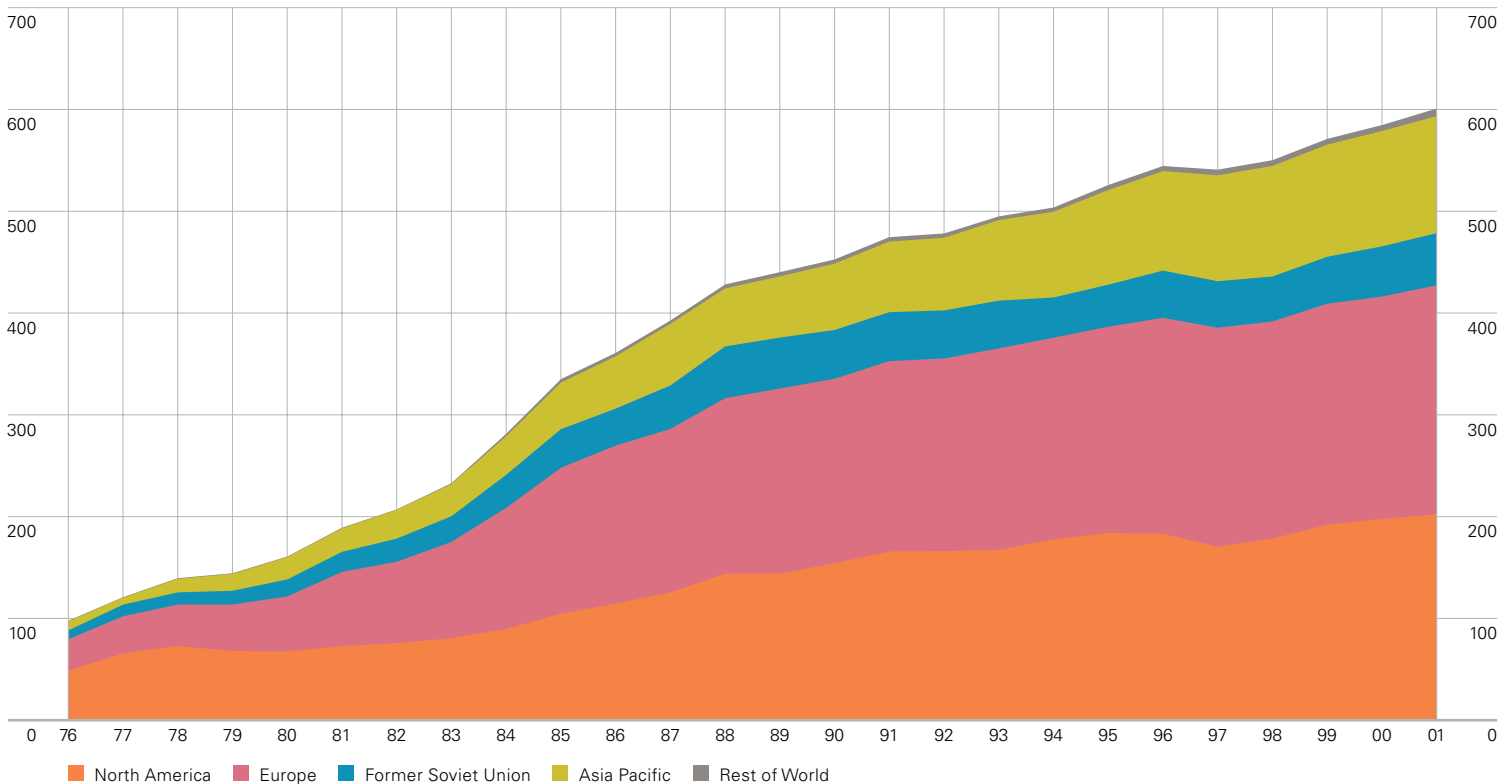
*Converted on the basis of thermal equivalence assuming 38% conversion efficiency in a modern thermal power station.

†Less than 0.05.

Note: Nuclear energy data expressed in terawatt-hours is available at www.bp.com/centres/energy/

consumption by area

Million tonnes oil equivalent

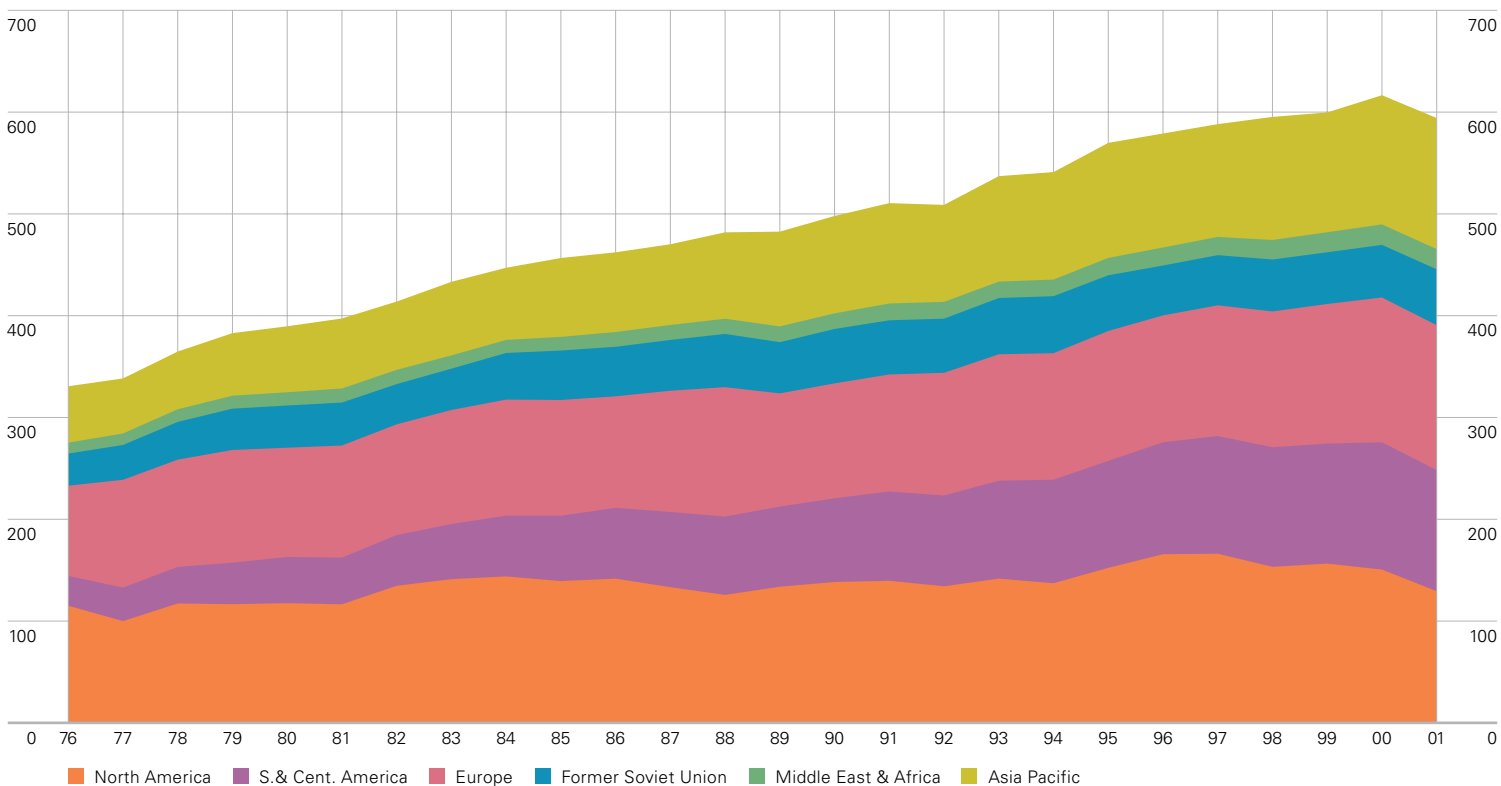


Nuclear energy maintained its record of steady growth during 2001, registering a 2.8% increase, somewhat ahead of the 10-year annual average of 2.4%.

hydroelectricity

consumption by area

Million tonnes oil equivalent



Major falls in North American and Brazilian output resulted in a steep drop in hydroelectric generation during 2001, breaking a 10-year growth trend.

hydroelectricity

consumption*

Million tonnes oil equivalent	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	65.1	56.9	63.2	58.7	70.5	78.7	81.1	72.9	71.6	62.4	48.3	-22.7%	8.1%
Canada	69.8	71.6	72.8	74.2	75.9	80.2	79.4	75.1	77.8	81.0	75.0	-7.4%	12.6%
Mexico	5.0	6.0	6.0	4.6	6.2	7.1	6.0	5.6	7.4	7.5	6.4	-14.1%	1.1%
Total North America	139.9	134.5	142.0	137.5	152.6	166.0	166.5	153.6	156.8	150.9	129.7	-14.1%	21.8%
Argentina	3.7	4.4	5.5	6.2	6.1	5.2	6.4	6.0	4.9	6.5	8.0	23.0%	1.3%
Brazil	49.3	50.5	53.2	54.9	57.5	60.1	63.1	66.0	66.3	69.6	61.4	-11.7%	10.3%
Chile	3.0	3.8	3.9	3.9	4.2	3.8	4.3	3.6	3.0	4.3	4.8	12.9%	0.8%
Colombia	6.3	5.1	6.3	7.3	7.3	8.0	7.1	6.9	7.6	6.9	7.1	2.6%	1.2%
Ecuador	1.2	1.2	1.3	1.5	1.2	1.4	1.5	1.5	1.6	1.7	1.6	-9.0%	0.3%
Peru	2.5	2.2	2.6	2.9	2.9	3.0	3.0	3.1	3.1	3.7	4.0	8.9%	0.7%
Venezuela	10.1	10.7	10.7	11.6	11.6	12.2	13.0	13.1	13.7	14.2	13.7	-3.9%	2.3%
Other S. & Cent. America	11.6	11.3	12.7	13.4	14.3	16.3	17.2	17.3	17.7	18.2	18.3	0.8%	3.1%
Total S. & Cent. America	87.7	89.2	96.2	101.7	105.1	110.0	115.6	117.5	117.9	125.1	118.9	-4.9%	20.0%
Austria	7.4	8.2	8.6	8.4	8.7	8.1	8.4	8.8	9.4	9.9	9.8	-0.2%	1.7%
Belgium & Luxembourg	0.4	0.4	0.3	0.4	0.5	0.5	0.5	0.6	0.5	0.6	0.6	2.9%	0.1%
Bulgaria	0.6	0.5	0.4	0.3	0.5	0.7	0.7	0.8	0.7	0.7	0.8	6.7%	0.1%
Czech Republic	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.6	11.5%	0.1%
Denmark	†	†	†	†	†	†	†	†	†	†	†	-14.3%	♦
Finland	3.0	3.4	3.1	2.7	2.9	2.7	2.7	3.3	2.9	3.3	3.0	-8.1%	0.5%
France	13.9	16.4	15.4	18.3	17.2	15.9	15.3	14.9	17.4	16.4	18.1	10.8%	3.0%
Germany	4.2	4.8	4.9	5.1	5.5	4.9	4.7	4.8	5.3	5.9	5.8	-0.6%	1.0%
Greece	0.7	0.5	0.6	0.7	0.9	1.0	0.9	0.9	1.1	0.9	0.5	-45.5%	0.1%
Hungary	†	†	†	†	†	†	0.1	†	†	†	†	5.0%	♦
Iceland	1.0	1.0	1.0	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.5	3.5%	0.3%
Republic of Ireland	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	-23.5%	♦
Italy	10.3	10.4	10.1	10.8	9.5	10.7	10.6	10.7	11.7	11.5	12.5	8.2%	2.1%
Netherlands	†	†	†	†	†	†	†	†	†	†	†	-18.8%	♦
Norway	25.0	26.5	27.1	25.5	27.7	23.5	25.1	26.3	27.6	32.2	27.4	-14.9%	4.6%
Poland	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	0.9	1.0	2.5%	0.2%
Portugal	2.1	1.1	2.0	2.4	1.9	3.4	3.0	3.0	2.9	2.9	2.9	-0.9%	0.5%
Romania	3.2	2.6	2.9	3.0	3.8	3.6	4.0	4.3	4.1	3.3	3.4	1.0%	0.6%
Slovakia	0.4	0.5	0.9	1.0	1.2	1.0	1.0	1.0	1.1	1.1	1.1	-4.5%	0.2%
Spain	6.4	4.7	5.8	6.5	5.5	9.4	8.5	8.8	7.0	8.3	11.6	40.5%	2.0%
Sweden	14.4	16.9	17.1	13.4	15.3	11.7	15.6	16.7	16.2	17.8	17.9	0.8%	3.0%
Switzerland	7.6	7.7	8.3	9.0	8.1	6.7	8.0	7.8	9.3	8.7	9.7	11.7%	1.6%
Turkey	5.1	6.0	7.7	6.9	8.0	9.2	8.8	9.6	7.8	7.0	5.4	-22.3%	0.9%
United Kingdom	1.4	1.6	1.3	1.5	1.4	1.1	1.3	1.5	1.9	1.8	1.5	-17.5%	0.2%
Other Europe	6.6	5.9	5.3	5.8	6.3	7.8	6.4	6.6	7.1	6.8	7.1	4.1%	1.2%
Total Europe	115.0	120.5	124.2	124.3	127.6	124.6	128.4	133.4	137.1	142.2	142.4	0.1%	23.9%
Azerbaijan	0.4	0.4	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	-15.4%	♦
Belarus	†	†	†	†	†	†	†	†	†	†	†	-	♦
Kazakhstan	1.6	1.6	1.7	2.1	1.9	1.7	1.5	1.4	1.4	1.6	1.7	2.5%	0.3%
Lithuania	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	8.9%	♦
Russian Federation	38.0	39.1	39.6	39.8	40.1	34.9	35.6	35.9	36.4	37.4	39.8	6.4%	6.7%
Turkmenistan	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-
Ukraine	2.7	1.8	2.5	2.8	2.3	2.0	2.3	3.6	2.6	2.7	3.0	11.0%	0.5%
Uzbekistan	1.4	1.4	1.7	1.6	1.4	1.5	1.3	1.3	1.3	1.0	1.3	24.2%	0.2%
Other Former Soviet Union	8.8	8.6	9.2	9.1	8.4	8.4	8.0	8.2	8.6	8.6	8.6	0.1%	1.4%
Total Former Soviet Union	53.2	53.2	55.3	56.0	54.7	49.0	49.3	51.0	50.8	51.7	54.9	5.7%	9.2%
Iran	1.6	2.0	2.2	1.8	1.9	1.8	1.3	1.7	1.2	1.1	0.8	-30.4%	0.1%
Kuwait	-	-	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-	-	-
United Arab Emirates	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Middle East	0.5	0.7	0.6	0.8	0.9	1.1	1.1	1.1	0.7	0.8	0.7	-6.6%	0.1%
Total Middle East	2.1	2.7	2.8	2.6	2.8	2.9	2.4	2.8	1.9	1.9	1.5	-20.5%	0.3%
Algeria	0.2	0.1	0.3	0.1	0.2	0.1	0.1	0.2	†	†	†	33.3%	♦
Egypt	2.3	2.3	2.4	2.5	2.6	2.7	2.7	3.1	3.4	3.2	3.0	-6.5%	0.5%
South Africa	0.9	0.5	0.3	0.6	0.4	0.8	1.1	0.9	0.8	0.9	0.8	-7.2%	0.1%
Other Africa	11.0	10.9	10.3	10.5	11.1	11.2	11.6	12.2	13.6	14.1	14.5	2.8%	2.4%
Total Africa	14.4	13.8	13.3	13.7	14.3	14.8	15.5	16.4	17.8	18.2	18.3	0.7%	3.1%
Australia	3.7	3.5	3.9	3.7	3.5	3.6	3.5	3.8	4.0	3.7	3.9	4.3%	0.7%
Bangladesh	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	5.6%	♦
China	28.3	30.0	32.7	37.8	42.2	42.3	42.5	44.9	44.1	55.0	58.3	5.9%	9.8%
China Hong Kong SAR	-	-	-	-	-	-	-	-	-	-	-	-	-
India	16.7	15.9	16.0	18.2	17.2	15.6	15.9	18.9	18.6	17.4	16.1	-7.5%	2.7%
Indonesia	1.3	1.9	1.8	1.6	1.7	1.8	1.2	2.2	2.1	2.1	2.1	-	0.4%
Japan	23.4	20.0	23.8	17.4	19.9	19.7	21.2	23.6	21.0	20.7	20.4	-1.1%	3.4%
Malaysia	1.0	1.0	1.1	1.5	1.4	1.2	0.9	1.1	1.7	1.7	1.7	-	0.3%
New Zealand	5.1	4.7	5.3	5.8	6.2	5.8	5.3	5.5	5.3	5.5	5.0	-10.3%	0.8%
Pakistan	4.1	4.5	5.0	4.9	5.1	5.6	4.2	5.5	4.9	4.0	4.0	-0.6%	0.7%
Philippines	1.2	1.0	1.1	1.3	1.4	1.6	1.4	1.1	1.8	1.8	1.6	-9.3%	0.3%
Singapore	-	-	-	-	-	-	-	-	-	-	-	-	-
South Korea	1.1	1.1	1.4	0.9	1.2	1.2	1.2	1.4	1.4	1.3	0.9	-26.1%	0.2%
Taiwan	1.2	1.9	1.5	2.0	2.0	2.0	2.2	2.4	2.0	2.0	2.1	3.4%	0.3%
Thailand	1.0	1.0	0.8	1.0	1.5	1.7	1.6	1.2	0.8	1.4	1.4	4.6%	0.2%
Other Asia Pacific	10.3	8.6	9.1	9.3	9.6	9.7	9.5	9.1	9.8	10.1	11.1	10.0%	1.9%
Total Asia Pacific	98.6	95.3	103.6	105.6	113.0	112.0	110.8	120.9	117.7	126.9	128.8	1.5%	21.7%
TOTAL WORLD	510.9	509.2	537.4	541.4	570.1	579.3	588.5	595.6	600.0	616.9	594.5	-3.7%	100.0%
of which: European Union 15	64.4	68.6	69.4	70.5	69.5	69.6	71.7	74.3	76.5	79.6	84.4	6.4%	14.2%
OECD	277.8	275.3	292.0	280.5	300.4	308.8	315.0	309.6	313.7	313.5	291.0	-7.1%	49.0%
Former Soviet Union	53.2	53.2	55.3	56.0	54.7	49.0	49.3	51.0	50.8	51.7	54.9	5.7%	9.2%
Other EMEs	179.9	180.7	190.1	204.9	215.0	221.5	224.2	235.0	235.5	251.7	248.6	-1.3%	41.8%

*Converted on the basis of thermal equivalence assuming 38% conversion efficiency in a modern thermal power station.

†Less than 0.05.

♦Less than 0.05%.

Note: Hydroelectricity data expressed in terawatt-hours is available at www.bp.com/centres/energy/

primary energy

consumption*

Million tonnes oil equivalent	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Change 2001 over 2000	2001 share of total
USA	1949.6	1976.6	2020.9	2059.9	2101.8	2172.7	2187.6	2196.0	2239.9	2287.4	2237.3	-2.2%	24.5%
Canada	246.5	253.0	256.5	265.3	266.8	275.9	277.4	269.4	274.8	284.8	274.6	-3.6%	3.0%
Mexico	104.6	106.3	107.3	114.4	111.3	116.4	120.0	125.6	126.9	131.0	127.7	-2.5%	1.4%
Total North America	2300.7	2335.9	2384.7	2439.6	2479.9	2565.0	2585.0	2591.0	2641.6	2703.2	2639.6	-2.4%	28.9%
Argentina	45.5	46.5	48.7	50.6	52.4	53.9	55.9	57.9	57.3	58.8	59.2	0.7%	0.6%
Brazil	122.3	126.5	130.4	135.0	142.3	151.0	160.5	166.8	171.1	177.3	173.6	-2.1%	1.9%
Chile	13.1	14.4	15.1	16.4	17.7	19.1	22.3	21.6	22.4	24.6	25.8	4.8%	0.3%
Colombia	23.3	23.0	24.7	25.7	26.4	27.7	27.9	27.3	25.0	24.9	24.8	-0.3%	0.3%
Ecuador	6.0	5.8	6.2	6.8	6.4	7.2	8.1	8.2	7.7	7.7	7.6	-0.3%	0.1%
Peru	8.5	8.4	9.1	9.9	10.7	11.0	10.8	11.3	11.4	11.7	11.7	0.0%	0.1%
Venezuela	48.4	49.8	51.1	53.4	56.4	58.0	61.1	63.8	59.8	61.9	61.9	0.0%	0.7%
Other S. & Cent. America	62.7	64.0	66.5	70.5	74.0	78.1	80.9	83.2	84.7	86.3	87.2	1.0%	1.0%
Total S. & Cent. America	329.8	338.4	351.8	368.3	386.3	406.0	427.5	440.1	439.4	453.2	451.8	-0.3%	5.0%
Austria	28.1	27.7	28.2	27.9	28.5	29.1	30.3	30.9	31.6	31.5	31.6	0.4%	0.3%
Belgium & Luxembourg	56.3	56.6	54.8	54.7	56.7	59.1	60.3	63.0	64.1	66.4	63.9	-3.6%	0.7%
Bulgaria	21.5	20.3	21.7	20.8	22.3	23.3	20.7	20.7	18.0	18.9	18.2	-3.3%	0.2%
Czech Republic	45.9	40.5	39.1	39.3	41.3	43.0	41.7	39.9	38.5	39.8	41.6	4.6%	0.5%
Denmark	19.5	17.9	19.2	20.7	20.2	24.1	21.7	20.6	19.9	18.8	18.9	0.5%	0.2%
Finland	23.9	23.3	23.1	24.3	23.1	24.5	25.1	25.6	25.7	26.0	26.3	1.1%	0.3%
France	231.1	233.7	233.5	229.5	235.7	244.7	241.0	247.2	251.4	254.8	256.4	0.6%	2.8%
Germany	340.6	336.2	333.6	331.1	333.1	344.0	337.8	334.5	328.5	330.5	335.2	1.4%	3.7%
Greece	24.4	25.1	25.2	25.9	26.7	27.0	27.2	28.6	30.1	31.8	31.1	-2.1%	0.3%
Hungary	25.6	23.3	22.9	23.4	23.6	24.2	23.8	23.8	23.7	23.0	23.9	3.8%	0.3%
Iceland	1.6	1.7	1.8	1.8	1.9	1.9	2.1	2.2	2.3	2.4	2.5	3.0%	0.0%
Republic of Ireland	9.2	9.2	9.5	10.0	10.2	10.8	11.6	12.4	13.2	13.9	14.6	5.1%	0.2%
Italy	158.0	158.3	154.9	154.7	162.4	162.4	163.9	168.5	173.7	176.4	177.2	0.4%	1.9%
Netherlands	79.1	78.1	79.6	79.5	82.7	85.2	84.7	84.5	83.2	86.5	88.6	2.5%	1.0%
Norway	36.3	38.2	39.5	38.4	40.7	37.1	39.3	40.4	41.5	45.9	41.7	-9.2%	0.5%
Poland	101.2	95.2	97.0	96.2	96.4	100.8	98.6	94.1	91.1	88.4	87.7	-0.9%	1.0%
Portugal	16.5	17.0	17.3	17.9	19.0	19.4	20.4	22.4	24.0	23.6	23.9	1.3%	0.3%
Romania	50.7	48.5	47.3	45.4	48.6	48.2	45.2	41.3	36.9	37.0	38.2	3.1%	0.4%
Slovakia	18.6	18.1	17.1	16.6	17.3	17.5	17.1	17.6	17.5	18.1	19.1	5.2%	0.2%
Spain	92.7	95.1	93.9	96.9	100.5	104.8	111.7	118.1	122.7	129.2	134.6	4.2%	1.5%
Sweden	50.3	50.5	49.9	49.8	50.1	48.8	50.4	51.6	51.6	48.6	52.6	8.4%	0.6%
Switzerland	27.8	28.3	28.1	29.4	27.9	27.1	28.9	29.1	30.1	29.4	31.4	6.9%	0.3%
Turkey	48.0	52.5	57.8	56.2	60.1	67.7	69.6	70.6	68.9	73.7	70.2	-4.7%	0.8%
United Kingdom	215.9	214.5	216.6	213.6	214.4	224.8	219.8	223.1	221.9	222.2	224.0	0.8%	2.5%
Other Europe	47.9	41.7	38.8	35.3	37.0	41.1	41.6	43.4	40.7	41.0	41.1	0.2%	0.5%
Total Europe	1770.7	1751.5	1750.4	1739.3	1780.4	1840.6	1834.5	1854.1	1850.8	1877.8	1894.5	0.9%	20.8%
Azerbaijan	22.3	19.1	16.6	15.8	16.1	12.6	11.4	12.6	12.8	11.4	12.5	9.1%	0.1%
Belarus	38.1	37.1	28.6	25.3	23.6	21.4	23.5	22.2	20.9	21.0	20.7	-1.4%	0.2%
Kazakhstan	73.5	74.1	65.6	58.2	51.2	45.9	40.7	39.1	35.0	40.5	43.1	6.4%	0.5%
Lithuania	17.6	11.0	8.3	7.3	8.2	9.0	8.6	9.2	7.8	7.0	8.1	16.5%	0.1%
Russian Federation	862.2	820.8	770.4	702.8	668.1	647.2	614.3	614.2	626.4	640.3	643.0	0.4%	7.0%
Turkmenistan	14.1	13.6	11.6	12.9	11.1	12.0	12.1	12.0	12.7	13.6	14.0	2.6%	0.2%
Ukraine	248.6	218.3	184.3	157.7	147.8	141.6	138.9	133.7	133.7	132.6	131.1	-1.1%	1.4%
Uzbekistan	49.8	47.0	48.3	47.8	47.6	49.0	50.1	51.8	53.6	50.9	54.8	7.8%	0.6%
Other Former Soviet Union	49.1	38.4	31.1	25.7	23.8	22.3	23.8	23.6	21.7	21.0	22.1	5.1%	0.2%
Total Former Soviet Union	1375.3	1279.4	1164.8	1053.5	997.5	961.0	923.4	918.4	924.6	938.3	949.4	1.2%	10.4%
Iran	72.2	75.7	78.3	85.2	93.3	98.5	103.7	105.2	113.4	115.0	114.3	-0.6%	1.3%
Kuwait	4.1	7.9	9.9	11.6	14.8	14.6	15.3	17.7	18.1	19.0	19.1	0.4%	0.2%
Qatar	7.7	12.2	13.0	13.0	13.1	13.4	14.3	14.5	13.7	14.7	15.7	7.1%	0.2%
Saudi Arabia	87.0	85.8	88.1	92.0	90.1	93.7	96.1	101.0	102.5	107.2	111.0	3.5%	1.2%
United Arab Emirates	34.9	33.8	34.9	37.7	40.3	42.3	42.4	39.2	41.3	43.8	45.2	3.0%	0.5%
Other Middle East	58.4	64.8	69.3	72.9	77.6	80.3	85.2	88.0	88.8	90.6	91.9	1.4%	1.0%
Total Middle East	264.3	280.2	293.5	312.4	329.2	342.8	357.0	365.6	377.8	390.3	397.2	1.8%	4.4%
Algeria	25.3	25.9	26.6	27.0	28.1	27.9	26.5	27.7	27.8	28.0	28.8	3.0%	0.3%
Egypt	33.3	33.3	33.7	34.4	36.4	38.4	40.0	42.1	45.0	47.8	49.0	2.5%	0.5%
South Africa	89.8	87.2	89.8	95.3	100.5	106.0	109.4	108.8	107.9	108.4	107.0	-1.3%	1.2%
Other Africa	71.8	74.9	76.8	79.2	81.2	83.6	85.5	88.2	90.7	92.7	95.8	3.4%	1.1%
Total Africa	220.2	221.3	226.9	235.9	246.2	255.9	261.4	266.8	271.4	276.9	280.6	1.4%	3.1%
Australia	87.2	88.5	88.6	93.9	97.5	101.3	103.6	105.0	105.4	108.1	109.9	1.7%	1.2%
Bangladesh	6.7	7.2	7.8	8.4	9.9	10.0	10.6	11.0	11.1	12.6	13.4	6.2%	0.1%
China	694.5	722.2	758.4	811.8	857.4	912.7	898.0	872.8	786.6	804.7	839.7	4.3%	9.2%
China Hong Kong SAR	12.2	14.4	15.6	14.1	15.1	15.0	15.1	15.4	15.6	15.6	16.6	6.6%	0.2%
India	205.8	216.9	222.8	236.2	252.4	269.8	280.8	290.0	297.1	313.3	314.7	0.5%	3.4%
Indonesia	57.1	61.4	64.9	67.9	73.5	79.4	84.0	80.0	89.1	93.8	97.9	4.4%	1.1%
Japan	451.1	455.2	461.8	479.8	493.8	503.6	507.4	502.2	508.7	515.9	514.5	-0.3%	5.6%
Malaysia	24.2	25.9	29.6	32.3	33.1	36.0	37.7	37.4	40.5	42.3	42.1	-0.4%	0.5%
New Zealand	15.3	15.6	16.0	16.5	16.9	17.2	17.3	16.8	17.4	17.8	17.6	-1.0%	0.2%
Pakistan	27.7	29.5	31.7	33.7	36.4	38.3	37.4	39.6	40.8	42.1	43.4	3.2%	0.5%
Philippines	13.6	15.8	16.5	17.5	19.6	21.1	22.6	22.9	22.7	22.6	22.7	0.5%	0.2%
Singapore	23.7	25.7	28.1	32.0	33.3	31.6	33.8	34.7	32.9	35.0	39.1	11.7%	0.4%
South Korea	101.8	114.4	125.4	135.5	148.6	163.8	179.6	165.5	180.5	191.1	195.9	2.5%	2.1%
Taiwan	51.7	55.1	57.9	62.3	65.7	68.9	72.9	77.5	81.1	85.6	85.4	-0.1%	0.9%
Thailand	33.2	36.1	40.6	45.5	52.4	58.4	61.2	58.2	59.7	62.4	63.0	1.0%	0.7%
Other Asia Pacific	80.4	80.9	84.3	84.9	86.4	88.2	90.0	88.0	89.0	93.0	95.8	3.0%	1.0%
Total Asia Pacific	1886.2	1964.8	2050.0	2172.3	2292.0	2415.3	2452.0	2417.0	2378.2	2455.9	2511.7	2.3%	27.5%
TOTAL WORLD	8147.2	8171.5	8222.1	8321.3	8511.5	8786.6	8840.8	8853.0	8883.8	9095.6	9124.8	0.3%	100.0%
of which: European Union 15	1345.6	1343.2	1339.3	1336.5	1363.3	1408.7	1405.9	1431.0	1441.6	1460.2	1478.9	1.3%	16.2%
OECD	4606.7	4650.6	4719.1	4803.1	4909.2	5078.9	5119.9	5129.2	5208.8	5317.0	5274.5	-0.8%	57.8%
Former Soviet Union	1375.3	1279.4	1164.8	1053.5	997.5	961.0	923.4	918.4	924.6	938.3	949.4	1.2%	10.4%
Other EMEs	2165.2	2241.5	2338.2	2464.7	2604.8	2746.7	2797.5	2805.4	2750.4	2840.3	2900.9	2.1%	31.8%

*In this Review, primary energy comprises commercially traded fuels only. Excluded, therefore, are fuels such as wood, peat and animal waste which, though important in many countries, are unreliably documented in terms of consumption statistics.

†Less than 0.05%.

primary energy

consumption by fuel*

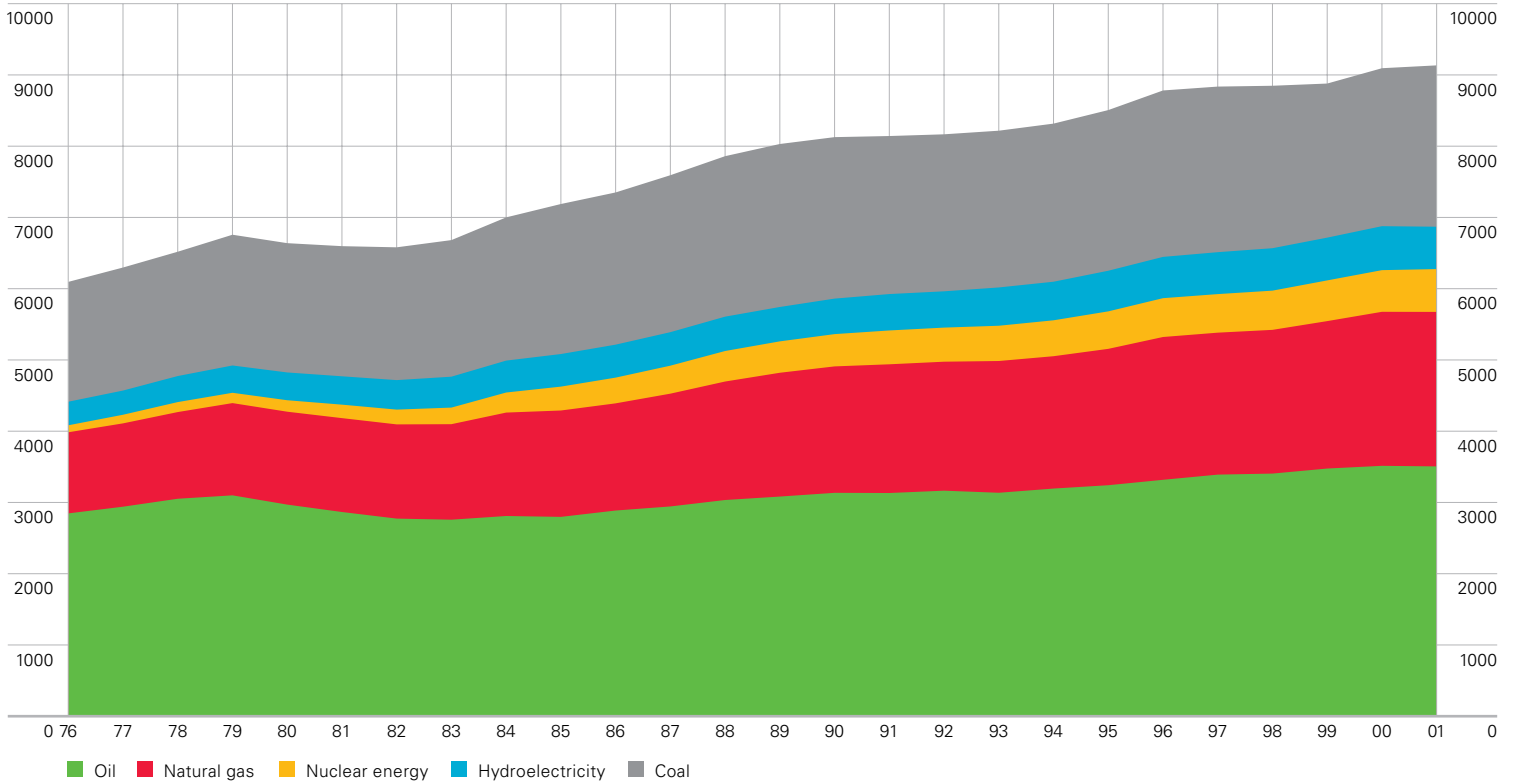
Million tonnes oil equivalent	2000						2001					
	Oil	Natural gas	Coal	Nuclear energy	Hydro-electricity	Total	Oil	Natural gas	Coal	Nuclear energy	Hydro-electricity	Total
USA	897.6	582.4	565.3	179.6	62.4	2287.4	895.6	554.6	555.7	183.2	48.3	2237.3
Canada	88.1	69.8	29.4	16.5	81.0	284.8	88.0	65.4	28.9	17.4	75.0	274.6
Mexico	84.1	31.4	6.2	1.9	7.5	131.0	82.7	30.4	6.3	2.0	6.4	127.7
Total North America	1069.8	683.6	600.9	198.0	150.9	2703.2	1066.3	650.4	590.9	202.6	129.7	2639.6
Argentina	20.3	29.9	0.7	1.4	6.5	58.8	19.0	29.9	0.7	1.6	8.0	59.2
Brazil	85.4	8.2	12.8	1.3	69.6	177.3	85.1	9.8	14.0	3.2	61.4	173.6
Chile	11.8	4.7	3.9	-	4.3	24.6	12.0	5.0	4.0	-	4.8	25.8
Colombia	10.5	5.3	2.2	-	6.9	24.9	9.9	5.5	2.4	-	7.1	24.8
Ecuador	5.8	0.1	-	-	1.7	7.7	5.9	0.1	-	-	1.6	7.6
Peru	7.3	0.3	0.5	-	3.7	11.7	6.8	0.3	0.6	-	4.0	11.7
Venezuela	22.5	25.1	†	-	14.2	61.9	22.2	26.0	†	-	13.7	61.9
Other S. & Cent. America	57.4	10.1	0.6	-	18.2	86.3	57.5	10.6	0.7	-	18.3	87.2
Total S. & Cent. America	221.0	83.7	20.7	2.7	125.1	453.2	218.4	87.2	22.4	4.8	118.9	451.8
Austria	11.8	6.6	3.2	-	9.9	31.5	12.4	6.6	2.7	-	9.8	31.6
Belgium & Luxembourg	33.9	13.4	7.6	10.9	0.6	66.4	32.3	13.2	7.1	10.7	0.6	63.9
Bulgaria	4.5	2.6	6.6	4.5	0.7	18.9	4.6	2.3	6.1	4.5	0.8	18.2
Czech Republic	7.9	7.5	20.7	3.1	0.5	39.8	8.3	8.0	21.3	3.3	0.6	41.6
Denmark	10.4	4.4	4.0	-	†	18.8	10.1	4.6	4.2	-	†	18.9
Finland	10.7	3.4	3.5	5.1	3.3	26.0	10.5	3.7	3.9	5.2	3.0	26.3
France	94.9	35.7	13.8	94.0	16.4	254.8	95.8	36.6	10.9	94.9	18.1	256.4
Germany	129.8	71.5	84.9	38.4	5.9	330.5	131.6	74.6	84.4	38.7	5.8	335.2
Greece	19.9	1.7	9.2	-	0.9	31.8	19.4	1.8	9.5	-	0.5	31.1
Hungary	6.8	9.6	3.2	3.2	†	23.0	6.8	10.7	3.1	3.2	†	23.9
Iceland	0.9	-	0.1	-	1.4	2.4	0.9	-	0.1	-	1.5	2.5
Republic of Ireland	8.2	3.4	2.0	-	0.3	13.9	8.7	3.6	2.1	-	0.2	14.6
Italy	93.5	58.4	13.0	-	11.5	176.4	92.8	58.0	13.9	-	12.5	177.2
Netherlands	41.7	35.3	8.6	0.9	†	86.5	43.9	35.3	8.4	0.9	†	88.6
Norway	9.4	3.6	0.7	-	32.2	45.9	9.7	4.0	0.6	-	27.4	41.7
Poland	20.0	10.0	57.6	-	0.9	88.4	19.0	10.2	57.5	-	1.0	87.7
Portugal	14.9	2.1	3.6	-	2.9	23.6	15.2	2.3	3.6	-	2.9	23.9
Romania	10.0	15.4	7.0	1.2	3.3	37.0	10.1	15.8	7.7	1.2	3.4	38.2
Slovakia	3.4	5.8	4.0	3.7	1.1	18.1	3.4	6.7	4.1	3.9	1.1	19.1
Spain	70.0	15.2	21.6	14.1	8.3	129.2	72.7	16.4	19.5	14.4	11.6	134.6
Sweden	15.2	0.7	1.9	13.0	17.8	48.6	15.6	0.7	2.0	16.4	17.9	52.6
Switzerland	12.2	2.4	0.1	6.0	8.7	29.4	13.1	2.5	0.1	6.1	9.7	31.4
Turkey	31.6	12.7	22.3	-	7.0	73.7	30.4	14.0	20.4	-	5.4	70.2
United Kingdom	77.9	86.4	36.9	19.3	1.8	222.2	76.1	85.9	40.3	20.4	1.5	224.0
Other Europe	16.3	5.1	11.8	1.1	6.8	41.0	16.8	5.5	10.6	1.2	7.1	41.1
Total Europe	755.8	412.9	347.9	218.5	142.2	1877.8	760.2	423.0	344.1	225.0	142.4	1894.5
Azerbaijan	6.2	4.9	-	-	0.3	11.4	4.6	7.6	-	-	0.3	12.5
Belarus	6.1	14.6	0.3	-	†	21.0	5.9	14.5	0.3	-	†	20.7
Kazakhstan	7.0	8.7	23.2	-	1.6	40.5	7.7	9.1	24.7	-	1.7	43.1
Lithuania	2.4	2.5	0.1	1.9	0.1	7.0	2.8	2.5	0.1	2.6	0.2	8.1
Russian Federation	123.5	339.5	110.4	29.5	37.4	640.3	122.3	335.4	114.6	30.9	39.8	643.0
Turkmenistan	2.3	11.3	-	-	-	13.6	2.4	11.6	-	-	-	14.0
Ukraine	12.0	61.6	38.8	17.5	2.7	132.6	12.7	59.2	39.0	17.2	3.0	131.1
Uzbekistan	6.4	42.4	1.0	-	1.0	50.9	6.5	46.0	1.1	-	1.3	54.8
Other Former Soviet Union	4.4	6.8	0.8	0.4	8.6	21.0	4.7	7.7	0.6	0.5	8.6	22.1
Total Former Soviet Union	170.3	492.3	174.6	49.3	51.7	938.3	169.6	493.6	180.4	51.2	54.9	949.4
Iran	56.1	56.7	1.1	-	1.1	115.0	54.2	58.5	0.8	-	0.8	114.3
Kuwait	10.4	8.6	-	-	-	19.0	10.5	8.6	-	-	-	19.1
Qatar	1.2	13.6	-	-	-	14.7	1.4	14.4	-	-	-	15.7
Saudi Arabia	62.4	44.8	-	-	-	107.2	62.7	48.3	-	-	-	111.0
United Arab Emirates	14.2	29.6	-	-	-	43.8	14.3	30.8	-	-	-	45.2
Other Middle East	63.5	20.1	6.2	-	0.8	90.6	63.3	20.7	7.2	-	0.7	91.9
Total Middle East	207.8	173.4	7.3	-	1.9	390.3	206.4	181.3	8.0	-	1.5	397.2
Algeria	8.5	18.9	0.6	-	†	28.0	8.8	19.4	0.6	-	†	28.8
Egypt	27.2	16.5	0.9	-	3.2	47.8	26.2	18.9	0.9	-	3.0	49.0
South Africa	22.5	-	81.9	3.1	0.9	108.4	23.0	-	80.6	2.6	0.8	107.0
Other Africa	57.9	14.6	6.1	-	14.1	92.7	59.0	15.8	6.5	-	14.5	95.8
Total Africa	116.1	50.0	89.5	3.1	18.2	276.9	117.0	54.1	88.6	2.6	18.3	280.6
Australia	37.7	19.1	47.5	-	3.7	108.1	38.1	20.3	47.6	-	3.9	109.9
Bangladesh	3.4	9.0	0.1	-	0.2	12.6	3.4	9.7	0.1	-	0.2	13.4
China	230.1	22.1	493.7	3.8	55.0	804.7	231.9	24.9	520.6	4.0	58.3	839.7
China Hong Kong SAR	9.7	2.2	3.7	-	-	15.6	9.5	2.2	4.9	-	-	16.6
India	97.5	23.4	171.4	3.6	17.4	313.3	97.1	23.7	173.5	4.4	16.1	314.7
Indonesia	50.4	27.5	13.7	-	2.1	93.8	52.3	26.7	16.7	-	2.1	97.9
Japan	255.4	68.6	98.9	72.3	20.7	515.9	247.2	71.1	103.0	72.7	20.4	514.5
Malaysia	20.4	18.3	1.9	-	1.7	42.3	18.6	19.4	2.4	-	1.7	42.1
New Zealand	6.3	4.9	1.1	-	5.5	17.8	6.2	5.2	1.3	-	5.0	17.6
Pakistan	18.8	17.0	2.0	0.3	4.0	42.1	18.9	18.1	2.0	0.5	4.0	43.4
Philippines	16.6	†	4.3	-	1.8	22.6	16.5	0.1	4.5	-	1.6	22.7
Singapore	33.5	1.6	-	-	-	35.0	36.9	2.3	-	-	-	39.1
South Korea	103.2	18.9	43.0	24.7	1.3	191.1	103.1	20.8	45.7	25.4	0.9	195.9
Taiwan	39.8	6.2	28.9	8.7	2.0	85.6	37.7	6.8	30.9	8.0	2.1	85.4
Thailand	34.8	18.4	7.8	-	1.4	62.4	33.8	19.0	8.8	-	1.4	63.0
Other Asia Pacific	20.6	4.4	57.9	-	10.1	93.0	21.5	4.4	58.7	-	11.1	95.8
Total Asia Pacific	978.2	261.6	975.9	113.4	126.9	2455.9	972.7	274.7	1020.7	115.0	128.8	2511.7
TOTAL WORLD	3519.0	2157.5	2216.8	585.0	616.9	9095.6	3510.6	2164.3	2255.1	601.2	594.5	9124.8
of which: European Union 15	632.8	338.2	213.8	195.7	79.6	1460.2	637.1	343.3	212.5	201.6	84.4	1478.9
OECD	2197.4	1184.9	1113.9	506.7	313.5	5317.0	2189.6	1167.2	1108.2	518.8	291.0	5274.5
Former Soviet Union	170.3	492.3	174.6	49.3	51.7	938.3	169.6	493.6	180.4	51.2	54.9	949.4
Other EMEs	1151.3	480.3	928.3	29.0	251.7	2840.3	1151.4	503.5	966.5	31.2	248.6	2900.9

*In this Review, primary energy comprises commercially traded fuels only. Excluded, therefore, are fuels such as wood, peat and animal waste which, though important in many countries, are unreliably documented in terms of consumption statistics.

†Less than 0.05.

world consumption

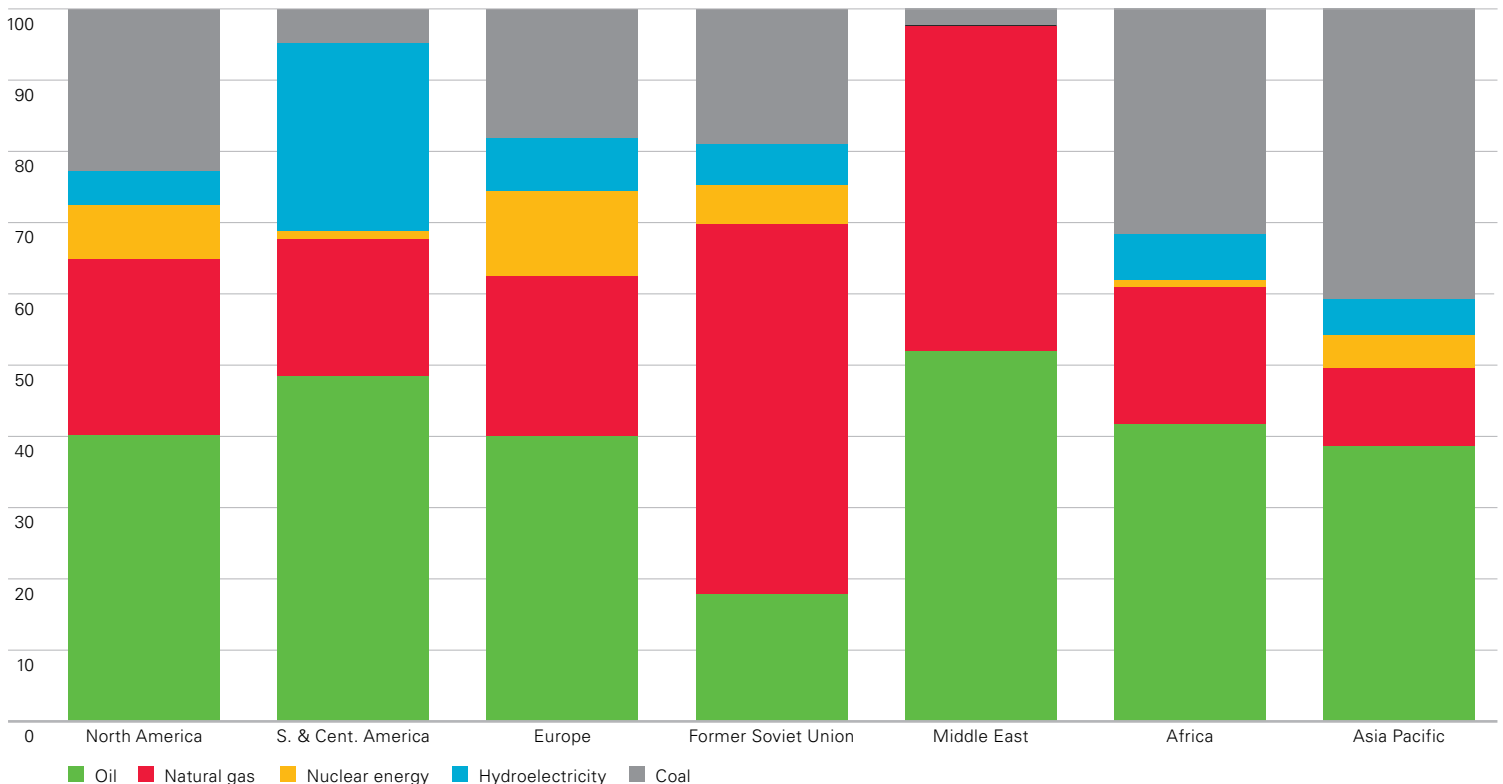
Million tonnes oil equivalent



Primary energy consumption grew by less than 0.5% in 2001, marking the third year of virtually zero growth in the last four. Nuclear and coal were the fastest-growing fuels, with hydroelectricity showing a steep fall. Coal increased its share of the overall energy market for only the second time since 1985.

regional consumption pattern 2001

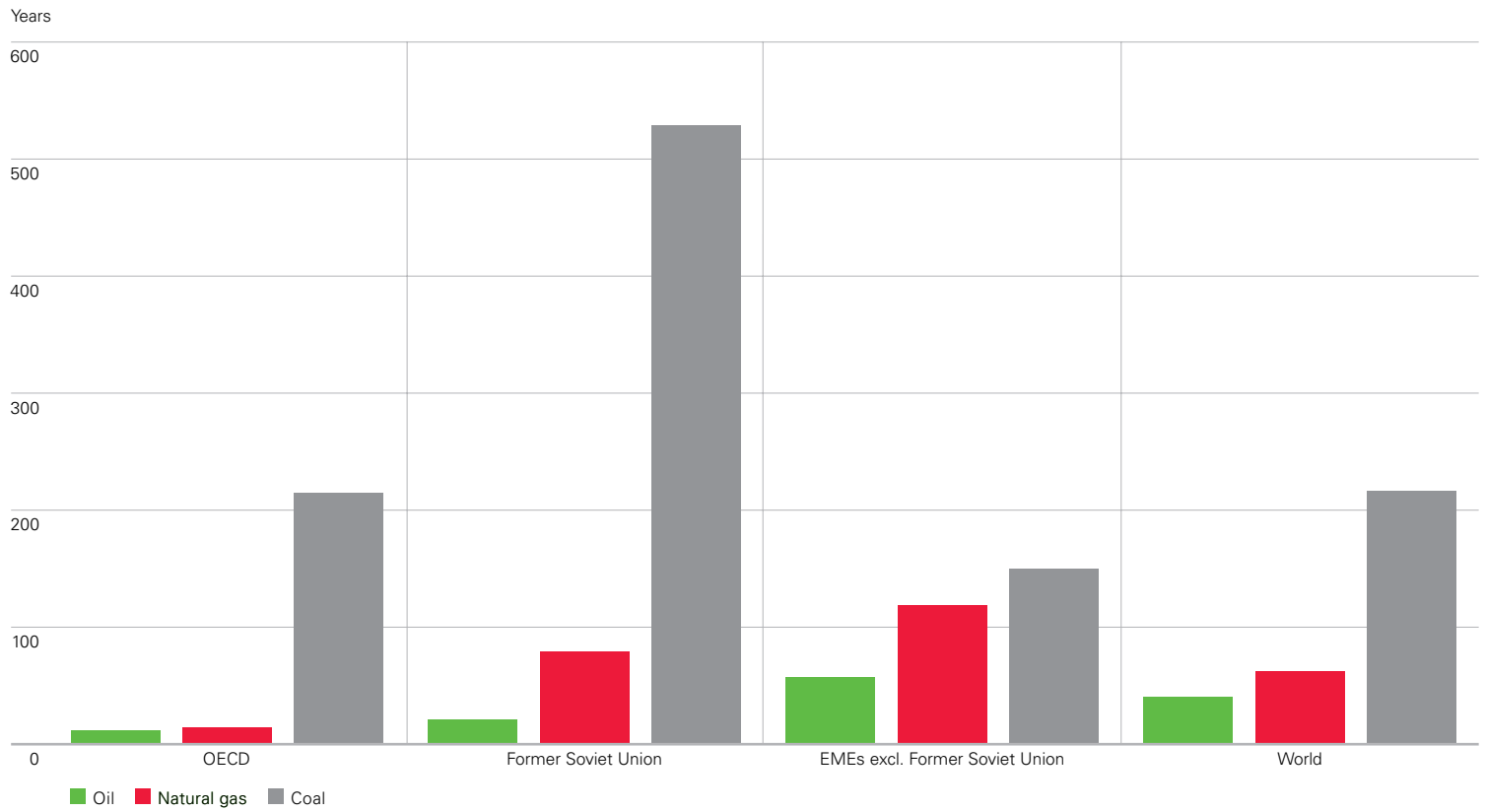
Percentage



Oil remains the largest single source of energy in most parts of the world. The exceptions are the Former Soviet Union, where gas dominates, and Asia Pacific, where coal moved marginally ahead of oil during 2001.

primary energy

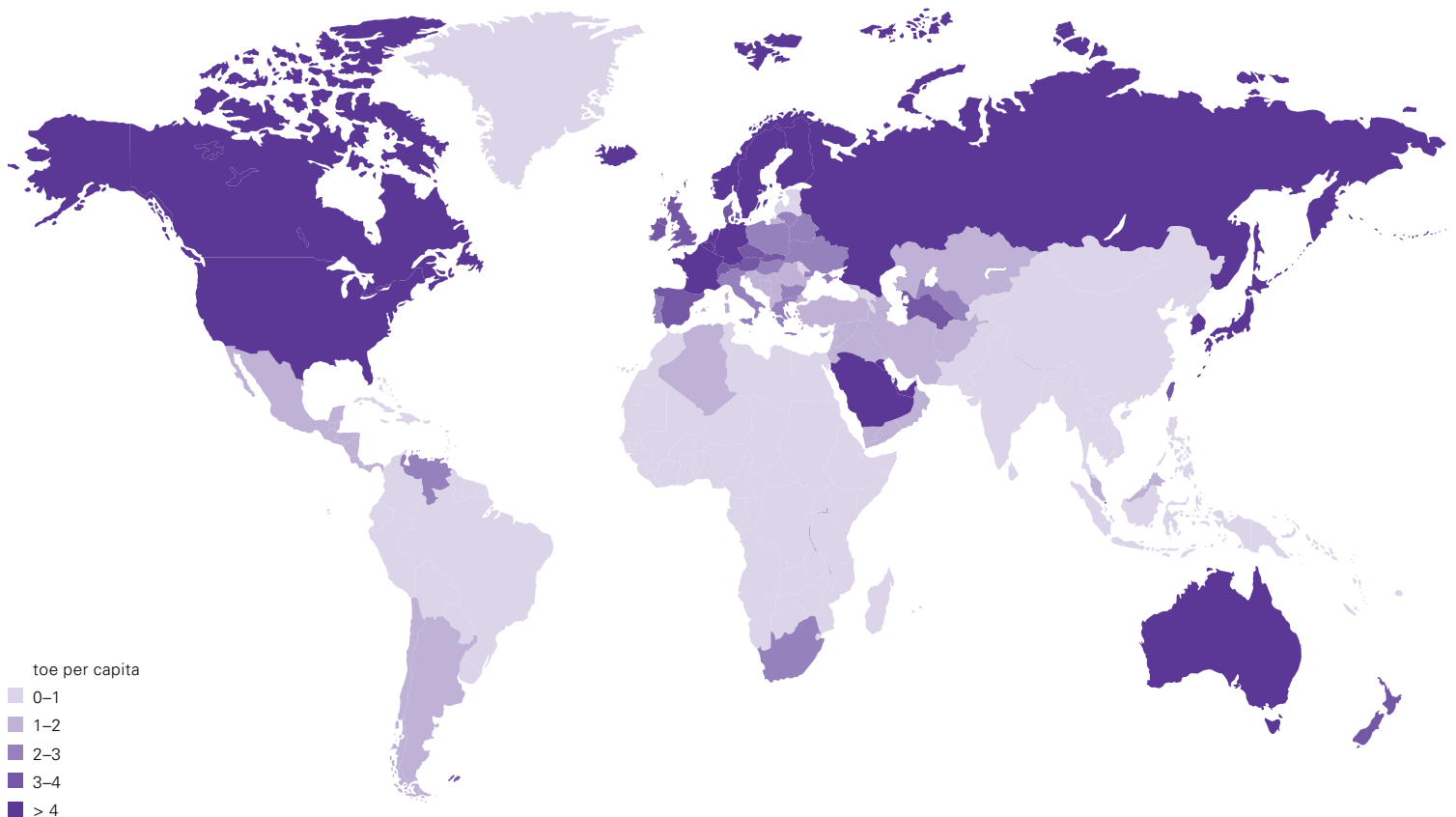
fossil fuel R/P ratios at end 2001



The world's reserves-to-production ratio for coal is nearly six times that for oil and four times that for natural gas. Coal's dominance in R/P ratio terms is particularly pronounced in the OECD and the Former Soviet Union.

energy consumption per capita

Tonnes oil equivalent



appendices

approximate conversion factors

From	To				tonnes/ year
	tonnes (metric)	kilolitres	barrels	US gallons	
Crude oil*					
1 tonne (metric)	1	1.165	7.33	307.86	–
1 kilolitre	0.8581	1	6.2898	264.17	–
1 barrel	0.1364	0.159	1	42	–
1 US gallon	0.0032	0.0038	0.0238	1	–
1 barrel/day	–	–	–	–	49.8

*Based on worldwide average gravity.

products

From	To convert			
	barrels to tonnes	tonnes to barrels	kilolitres to tonnes	tonnes to kilolitres
LPG	0.086	11.6	0.542	1.844
Gasoline	0.118	8.5	0.740	1.351
Kerosene	0.128	7.8	0.806	1.240
Gas oil/diesel	0.133	7.5	0.839	1.192
Fuel oil	0.149	6.7	0.939	1.065

natural gas and LNG

From	To					
	billion cubic metres NG	billion cubic feet NG	million tonnes oil equivalent	million tonnes LNG	trillion British thermal units	million barrels oil equivalent
1 billion cubic metres NG	1	35.3	0.90	0.73	36	6.29
1 billion cubic feet NG	0.028	1	0.026	0.021	1.03	0.18
1 million tonnes oil equivalent	1.111	39.2	1	0.805	40.4	7.33
1 million tonnes LNG	1.38	48.7	1.23	1	52.0	8.68
1 trillion British thermal units	0.028	0.98	0.025	0.02	1	0.17
1 million barrels oil equivalent	0.16	5.61	0.14	0.12	5.8	1

units

1 metric tonne = 2204.62 lb.
= 1.1023 short tons
1 kilolitre = 6.2898 barrels
1 kilocalorie (kcal) = 4.187 kJ = 3.968 Btu
1 kilojoule (kJ) = 0.239 kcal = 0.948 Btu
1 British thermal unit (Btu) = 0.252 kcal = 1.055 kJ
1 kilowatt-hour (kWh) = 860 kcal = 3600 kJ = 3412 Btu

Calorific equivalents

One tonne of oil equivalent equals approximately:

Heat units	10 million kilocalories
	42 gigajoules
	40 million Btu
Solid fuels	1.5 tonnes of hard coal
	3 tonnes of lignite
Gaseous fuels	See natural gas and LNG table
Electricity	12 megawatt-hours

One million tonnes of oil produces about 4000 gigawatt-hours of electricity in a modern power station.

definitions

Statistics published in this Review are taken from government sources and published data. No use is made of confidential information obtained by BP in the course of its business.

North America

USA (excluding Puerto Rico), Canada and Mexico.

South and Central America

Caribbean (including Puerto Rico), Central and South America.

Europe

European members of the OECD plus Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Former Yugoslav Republic of Macedonia, Gibraltar, Malta, Romania, Slovenia, Yugoslavia.

Former Soviet Union

Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

Middle East

Arabian Peninsula, Iran, Iraq, Israel, Jordan, Lebanon, Syria.

North Africa

Territories on the north coast of Africa from Egypt to Western Sahara.

West Africa

Territories on the west coast of Africa from Mauritania to Angola, including Cape Verde.

East and Southern Africa

Territories on the east coast of Africa from Sudan to Republic of South Africa. Also Botswana, Madagascar, Malawi, Namibia, Uganda, Zambia, Zimbabwe.

Asia Pacific

Brunei, Cambodia, China, China Hong Kong SAR*, Indonesia, Japan, Laos, Malaysia, Mongolia, North Korea, Philippines, Singapore, South Asia (Afghanistan, Bangladesh, India, Myanmar, Nepal, Pakistan and Sri Lanka), South Korea, Taiwan, Thailand, Vietnam, Australia, New Zealand, Papua New Guinea and Oceania.

*Special Administrative Region.

Australasia

Australia, New Zealand.

Country groupings are made purely for statistical purposes and are not intended to imply any judgement about political or economic standings.

OECD members

Europe: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Republic of Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom.

Other member countries: Australia, Canada, Japan, Mexico, New Zealand, South Korea, USA.

OPEC members

Middle East: Iran, Iraq, Kuwait, Qatar, Saudi Arabia, United Arab Emirates (Abu Dhabi, Dubai, Ras-al-Khaimah and Sharjah). North Africa: Algeria, Libya. West Africa: Nigeria. Asia Pacific: Indonesia. South America: Venezuela. (Since Ecuador and Gabon have withdrawn from OPEC, they are excluded from all OPEC totals.)

European Union members

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Republic of Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, UK.

Other EMEs (Emerging Market Economies)

South and Central America, Africa, Middle East, Non-OECD Asia and Non-OECD Europe.

Other terms

Tonnes: Metric tons.

Percentages: Calculated before rounding of actuals. All annual changes and shares of totals are on a weight basis except on pages 12, 16 and 18.

Rounding differences: Because of rounding, some totals – including the 2001 share of total – may not agree exactly with the sum of their component parts.

US processing gain: In previous years we have deducted processing gain from volumetric consumption levels. From this year in order to retain consistency across regions we will no longer be deducting US processing gain.

Questions on data

BP regrets it is unable to deal with enquiries about the data in the Statistical Review of World Energy.

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