

Table 10. Energy use and emissions

Economy	Commercial energy use					GDP per unit of energy use 1987 \$ per kg	Net energy imports		Carbon dioxide emissions				
	Thousand metric tons of oil equivalent		Kg of oil equivalent per capita		Avg. annual % growth 1980-95		% of commercial energy use		Total		Per capita		
	1980	1995	1980	1995			1980	1995	Million metric tons	1980	1995	1980	1995
Albania	2,674	1,020	1,001	314	-6.4	0.7	1.8	-14	8	4.8	1.8	1.8	0.6
Algeria	12,078	24,346	647	866	4.2	4.1	2.7	-452	-349	66.2	91.3	3.5	3.2
Angola	937	959	133	89	0.5	..	7.7	-722	-2,631	5.3	4.6	0.8	0.4
Argentina	39,716	53,016	1,413	1,525	1.9	2.8	2.5	8	-25	107.5	129.5	3.8	3.7
Armenia	1,070	1,671	346	444	-1.8	2.1	0.6	-18	85	..	3.6	..	1.0
Australia	70,372	94,200	4,790	5,215	2.2	2.4	2.8	-22	-98	202.8	289.8	13.8	16.0
Austria	23,449	26,383	3,105	3,279	1.3	4.5	5.5	67	68	52.2	59.3	6.9	7.4
Azerbaijan	15,001	13,033	2,433	1,735	-3.9	..	0.2	1	-13	..	42.6	..	5.7
Bangladesh	2,809	8,061	32	67	7.4	4.5	3.0	60	26	7.6	20.9	0.1	0.2
Belarus	2,385	23,808	247	2,305	10.3	..	0.7	-8	88	..	59.3	..	5.7
Belgium	46,100	52,378	4,682	5,167	1.6	2.9	3.2	83	78	127.2	103.8	12.9	10.2
Benin	149	107	43	20	-3.3	7.9	18.4	100	-117	0.5	0.6	0.1	0.1
Bolivia	1,599	2,939	299	396	3.2	2.9	2.0	-122	-52	4.5	10.5	0.8	1.4
Brazil	73,041	122,928	602	772	4.2	3.4	2.7	65	40	183.4	249.2	1.5	1.6
Bulgaria	28,476	22,878	3,213	2,724	-2.5	0.7	1.0	74	57	75.3	56.7	8.5	6.7
Burkina Faso	144	162	21	16	1.1	11.2	16.4	100	100	0.4	1.0	0.1	0.1
Burundi	58	144	14	23	6.4	13.9	7.7	98	97	0.1	0.2	0.0	0.0
Cambodia	393	517	60	52	2.1	..	2.6	97	96	0.3	0.5	0.0	0.0
Cameroon	774	1,556	89	117	3.3	9.7	6.1	-269	-246	3.9	4.1	0.4	0.3
Canada	192,942	233,328	7,845	7,879	1.6	1.7	2.0	-7	-50	420.9	435.7	17.1	14.7
Central African Republic	59	94	26	29	2.6	18.2	13.6	71	74	0.1	0.2	0.0	0.1
Chad	93	101	21	16	0.6	6.2	10.7	100	100	0.2	0.1	0.0	0.0
Chile	7,732	15,131	694	1,065	5.4	2.3	2.4	50	71	27.9	44.1	2.5	3.1
China	413,176	850,521	421	707	5.1	0.3	0.7	-4	-2	1,476.8	3,192.5	1.5	2.7
Hong Kong, China	5,628	13,615	1,117	2,212	6.2	5.3	5.4	100	100	16.4	31.0	3.3	5.0
Colombia	13,962	24,120	501	655	3.5	2.1	2.1	7	-125	39.8	67.5	1.4	1.8
Congo, Dem. Rep.	1,487	2,058	55	47	2.2	4.4	2.3	1	5	3.5	2.1	0.1	0.0
Congo, Rep.	262	367	157	139	2.6	5.7	6.6	-1,193	-2,361	0.4	1.3	0.2	0.5
Costa Rica	949	1,971	415	584	6.0	4.2	3.3	81	81	2.5	5.2	1.1	1.6
Côte d'Ivoire	1,435	1,362	175	97	1.2	6.7	8.4	87	68	4.7	10.4	0.6	0.7
Croatia	..	6,852	..	1,435	..	..	..	..	43	..	17.0	..	3.6
Czech Republic	45,766	39,013	4,473	3,776	-1.2	..	0.8	13	22	..	112.0	..	10.8
Denmark	19,734	20,481	3,852	3,918	0.7	4.4	5.7	95	24	62.9	54.9	12.3	10.5
Dominican Republic	2,211	3,801	388	486	4.3	2.1	1.9	98	96	6.4	11.8	1.1	1.5
Ecuador	4,209	6,343	529	553	2.6	2.3	2.2	-156	-231	13.4	22.6	1.7	2.0
Egypt, Arab Rep.	15,176	34,678	371	596	5.4	1.8	1.6	-120	-71	45.2	91.7	1.1	1.6
El Salvador	1,004	2,322	221	410	5.7	4.4	2.5	59	70	2.1	5.2	0.5	0.9
Estonia	..	5,126	..	3,454	..	..	0.8	..	39	..	16.4	..	11.1
Ethiopia	624	1,178	17	21	4.9	..	7.4	91	87	1.8	3.5	0.0	0.1
Finland	25,022	28,670	5,235	5,613	1.5	2.9	3.3	72	55	54.9	51.0	11.5	10.0
France	190,109	241,322	3,528	4,150	2.1	4.1	4.3	75	47	482.7	340.1	9.0	5.8
Gabon	831	644	1,203	587	-4.3	5.1	7.9	-994	-2,804	4.8	3.5	6.9	3.2
Georgia	4,474	1,850	882	342	-3.3	..	..	-5	74	..	7.7	..	1.4
Germany	358,995	339,287	4,585	4,156	-0.2	..	..	49	58	..	835.1	..	10.2
Ghana	1,303	1,564	121	92	2.7	3.6	4.6	57	66	2.4	4.0	0.2	0.2
Greece	15,960	23,698	1,655	2,266	3.2	3.3	2.8	77	62	51.7	76.3	5.4	7.3
Guatemala	1,443	2,191	209	206	3.6	5.0	4.4	84	73	4.5	7.2	0.6	0.7
Guinea	356	422	80	64	1.3	..	6.7	89	86	0.9	1.1	0.2	0.2
Guinea-Bissau	31	40	38	37	2.1	3.9	5.8	100	100	0.1	0.2	0.2	0.2
Haiti	241	357	45	50	0.1	6.8	3.3	92	91	0.8	0.6	0.1	0.1
Honduras	636	1,401	174	236	5.1	5.6	3.8	89	83	2.1	3.9	0.6	0.7
Hungary	28,556	25,103	2,667	2,454	-1.0	0.8	1.0	49	47	82.5	55.9	7.7	5.5
India	93,897	241,291	137	260	6.5	1.9	1.7	21	18	347.3	908.7	0.5	1.0
Indonesia	25,904	85,785	175	442	8.9	2.0	1.6	-266	-97	94.6	296.1	0.6	1.5
Ireland	8,484	11,461	2,495	3,196	2.2	3.1	4.4	78	69	25.2	32.2	7.4	9.0
Israel	8,607	16,650	2,219	3,003	5.0	3.4	3.5	98	97	21.1	46.3	5.4	8.4
Italy	138,629	161,360	2,456	2,821	1.4	4.8	5.4	86	82	371.9	410.0	6.6	7.2
Jamaica	2,164	3,003	1,015	1,191	2.7	1.3	1.2	100	100	8.4	9.1	4.0	3.6
Japan	346,567	497,231	2,968	3,964	2.8	5.5	6.1	88	80	907.4	1,126.8	7.8	9.0
Jordan	1,713	4,323	785	1,031	5.2	2.7	1.9	100	96	4.7	13.3	2.2	3.2
Kazakhstan	76,799	55,432	5,153	3,337	-3.1	..	0.3	0	-16	..	221.5	..	13.3
Kenya	1,991	2,907	120	109	3.5	3.1	3.4	95	82	6.2	6.7	0.4	0.3
Korea, Rep.	41,426	145,099	1,087	3,225	9.6	1.8	1.8	77	86	125.2	373.6	3.3	8.3
Kyrgyz Republic	1,938	2,315	534	513	5.0	..	0.5	-13	41	..	5.5	..	1.2
Lao PDR	107	184	33	40	2.6	..	9.6	-121	-20	0.2	0.3	0.1	0.1
Latvia	566	3,702	222	1,471	22.9	12.1	1.3	54	91	..	9.3	..	3.7
Lebanon	2,376	4,486	791	1,120	3.2	0.0	1.3	97	98	6.2	13.3	2.1	3.3
Lesotho	..	..	..	..	..	..	..	..	..	..	..	..	..
Lithuania	11,353	8,510	3,326	2,291	-3.2	..	0.8	98	61	..	14.8	..	4.0
Macedonia, FYR	..	2,572	..	1,308	..	..	..	..	37	..	..	..	..
Madagascar	391	484	45	36	1.6	6.9	5.8	90	83	1.6	1.1	0.2	0.1
Malawi	334	374	54	38	1.6	3.1	3.8	70	59	0.7	0.7	0.1	0.1
Malaysia	9,522	33,252	692	1,655	9.8	2.4	1.9	-58	-88	28.0	106.6	2.0	5.3
Mali	164	207	25	21	1.7	10.8	12.1	87	80	0.4	0.5	0.1	0.0
Mauritania	214	231	138	102	0.5	3.8	5.0	100	100	0.6	3.1	0.4	1.3

Note: For data comparability and coverage, see the Technical Notes. Figures in italics are for years other than those specified.

ENVIRONMENT

Economy	Commercial energy use					GDP per unit of energy use 1987 \$ per kg	Net energy imports		Carbon dioxide emissions													
	Thousand metric tons of oil equivalent		Kg of oil equivalent per capita		Avg. annual % growth 1980-95		% of commercial energy use		Total		Per capita											
	1980	1995	1980	1995			1980	1995	1980	1995	1980	1995										
Mauritius	339	435	351	388	2.6	3.7	6.6	94	92	0.6	1.5	0.6	1.3									
Mexico	98,904	133,371	1,486	1,456	2.2	1.3	1.3	-51	-51	255.0	357.8	3.8	3.9									
Moldova	..	4,177	..	963	..	..	..	..	99	..	10.8	..	2.5					
Mongolia	1,943	2,576	1,168	1,045	1.8	..	..	38	15	6.8	8.5	4.1	3.4							
Morocco	4,518	8,253	233	311	4.4	3.4	2.8	86	95	15.9	29.3	0.8	1.1									
Mozambique	1,123	662	93	38	-1.6	1.2	3.4	-15	76	3.2	1.0	0.3	0.1									
Namibia	..	..	..	..	..	..	..	..	..	..	..	..	..
Nepal	174	700	12	33	9.3	12.6	6.4	91	86	0.5	1.5	0.0	0.1									
Netherlands	65,000	73,292	4,594	4,741	1.4	3.0	3.7	-11	10	152.6	135.9	10.8	8.8									
New Zealand	9,190	15,409	2,952	4,290	3.9	3.3	2.7	39	19	17.6	27.4	5.6	7.6									
Nicaragua	696	1,159	248	265	3.4	5.5	3.1	94	74	2.0	2.7	0.7	0.6									
Niger	210	330	38	37	2.0	12.1	7.5	93	83	0.6	1.1	0.1	0.1									
Nigeria	9,879	18,393	139	165	3.4	2.6	1.9	-968	-468	68.1	90.7	1.0	0.8									
Norway	18,819	23,715	4,600	5,439	1.8	3.9	4.7	-196	-669	90.4	72.5	22.1	16.6									
Oman	1,010	4,013	917	1,880	9.2	3.9	3.1	-1,361	-1,031	5.9	11.4	5.3	5.3									
Pakistan	11,451	31,536	139	243	7.0	1.9	1.6	39	41	31.6	85.4	0.4	0.7									
Panama	1,419	1,783	725	678	1.6	3.3	3.9	94	89	3.5	6.9	1.8	2.6									
Papua New Guinea	705	1,000	228	232	2.4	3.9	4.6	89	-150	1.8	2.5	0.6	0.6									
Paraguay	544	1,487	173	308	7.1	6.0	3.4	89	-141	1.5	3.8	0.5	0.8									
Peru	8,233	10,035	476	421	0.6	0.7	0.7	-36	16	23.5	30.6	1.4	1.3									
Philippines	13,357	21,542	276	307	3.6	2.5	2.0	79	72	36.5	61.2	0.8	0.9									
Poland	124,557	94,472	3,501	2,448	-2.0	0.5	0.7	3	0	456.2	338.0	12.8	8.8									
Portugal	10,291	19,245	1,054	1,939	4.6	3.5	2.7	86	90	27.1	51.9	2.8	5.2									
Romania	63,751	44,026	2,872	1,941	-2.9	0.5	0.7	19	32	191.8	121.1	8.6	5.3									
Russian Federation	764,349	604,461	5,499	4,079	-3.0	0.5	0.5	2	-54	..	1,818.0	..	12.3									
Rwanda	190	211	37	33	-0.7	9.2	6.3	85	78	0.3	0.5	0.1	0.1									
Saudi Arabia	35,355	82,742	3,772	4,360	5.2	2.7	1.2	-1,408	-468	130.7	254.3	14.0	13.4									
Senegal	875	866	158	104	-0.3	4.2	6.1	100	95	2.8	3.1	0.5	0.4									
Sierra Leone	310	326	96	72	0.5	2.7	2.2	100	100	0.6	0.4	0.2	0.1									
Singapore	6,049	21,389	2,651	7,162	10.0	2.3	2.0	100	100	30.1	63.7	13.2	21.3									
Slovak Republic	20,646	17,447	4,142	3,272	-1.3	..	0.9	84	72	..	38.0	..	7.1									
Slovenia	4,269	5,583	2,245	2,806	0.7	..	..	62	54	..	11.7	..	5.9							
South Africa	59,051	88,882	2,175	2,405	1.8	1.3	1.0	-13	-31	211.3	305.8	7.8	8.3									
Spain	68,583	103,491	1,834	2,639	3.2	3.6	3.5	77	70	200.0	231.6	5.3	5.9									
Sri Lanka	1,411	2,469	96	136	2.7	3.4	3.8	91	84	3.4	5.9	0.2	0.3									
Sweden	40,984	50,658	4,932	5,736	1.3	3.4	3.4	61	38	71.4	44.6	8.6	5.0									
Switzerland	20,814	25,142	3,294	3,571	1.7	7.4	7.5	66	56	40.9	38.9	6.5	5.5									
Syrian Arab Republic	5,343	14,121	614	1,001	5.9	1.9	1.3	-78	-143	19.3	46.0	2.2	3.3									
Tajikistan	1,650	3,283	416	563	8.9	..	0.5	-20	60	..	3.7	..	0.6									
Tanzania	1,023	947	55	32	0.8	..	..	92	86	1.9	2.4	0.1	0.1							
Thailand	12,093	52,125	259	878	11.1	2.8	2.1	96	63	40.1	175.0	0.9	2.9									
Togo	195	185	75	45	0.9	6.4	7.1	99	100	0.6	0.7	0.2	0.2									
Trinidad and Tobago	3,860	6,925	3,567	5,381	4.0	1.5	0.7	-240	-88	16.7	17.1	15.4	13.3									
Tunisia	3,083	5,314	483	591	4.0	2.4	2.4	-99	14	9.4	15.3	1.5	1.7									
Turkey	31,314	62,187	704	1,009	4.9	1.9	1.8	45	58	76.3	165.9	1.7	2.7									
Turkmenistan	7,948	13,737	2,778	3,047	-6.9	..	..	-1	-137	..	28.3	..	6.3							
Uganda	320	430	25	22	2.8	..	24.8	52	57	0.6	1.0	0.1	0.1									
Ukraine	97,893	161,586	1,956	3,136	2.1	..	0.2	-12	50	..	438.2	..	8.5									
United Arab Emirates	8,576	28,454	8,222	11,567	7.5	3.6	..	-995	-388	36.3	68.3	34.8	27.8									
United Kingdom	201,168	221,911	3,571	3,786	1.0	2.8	3.5	2	-15	585.1	542.1	10.4	9.3									
United States	1,801,406	2,078,265	7,928	7,905	1.3	2.1	2.6	14	20	4,515.3	5,468.6	19.9	20.8									
Uruguay	2,206	2,035	757	639	0.7	3.4	4.4	89	77	5.8	5.4	2.0	1.7									
Uzbekistan	4,821	46,543	302	2,043	11.6	..	0.3	4	-6	..	98.9	..	4.3									
Venezuela	35,011	47,140	2,354	2,158	1.7	1.3	1.2	-280	-298	89.6	180.2	6.0	8.3									
Vietnam	4,024	7,694	75	104	4.1	..	7.8	32	-79	16.8	31.7	0.3	0.4									
Yemen, Rep.	1,364	2,933	160	192	5.3	..	..	100	-493	1.2	..	0.1	..							
Zambia	1,685	1,302	294	145	-2.1	1.3	1.7	32	31	3.5	2.4	0.6	0.3									
Zimbabwe	2,797	4,673	399	424	4.4	1.6	1.4	28	24	9.6	9.7	1.4	0.9									
World	6,325,980	t8,244,516	t	1,456	w	1,474	w	3.2	w	2.2	w	2.4	w	0 w	0 w	13,585.7	22,700.2	t	3.4	w	4.0	w
Low income	182,583	388,774	133	198	6.2	2.4	1.9	-36	-20	560.6	1,334.4	0.4	0.7									
Middle income	2,335,343	3,175,039	1,064	1,139	5.5	1.0	1.0	-39	-37	4,252.9	10,231.4	2.2	3.7									
Lower middle income	1,695,439	2,296,701	953	1,030	7.5	0.8	0.8	-14	-23	2,513.1	7,733.7	1.6	3.5									
Upper middle income	639,904	876,338	1,536	1,579	2.1	1.7	1.5	-103	-74	1,739.8	2,497.7	4.3	4.5									
Low & middle income	2,517,926	3,563,813	705	751	5.6	1.1	1.1	-38	-35	4,813.5	11,565.9	1.5	2.5									
East Asia & Pacific	514,939	1,082,697	391	657	5.3	..	0.9	-12	-8	1,832.7	4,140.0	1.4	2.5									
Europe & Central Asia	1,336,389	1,279,103	3,340	2,712	8.8	..	0.6	8	-10	886.9	3,722.0	..	7.9									
Latin America & Carib.	319,888	463,321	893	969	2.7	2.2	2.0	-26	-39	850.5	1,219.8	2.4	2.6									
Middle East & N. Africa	142,738	315,726	822	1,178	5.2	3.3	1.8	-591	-240	500.5	982.9	2.9	3.9									
South Asia	110,649	286,730	123	231	6.6	2.0	1.7	23	21	392.4	1,024.1	0.4	0.8									
Sub-Saharan Africa	93,323	136,236	248	238	2.0	2.1	1.9	-118	-113	350.5	477.1	0.9	0.8									
High income	3,808,064	4,680,703	4,808	5,118	1.7	2.9	3.3	27	24	8,772.1	11,134.4	12.0	12.5									