

Table 8. Commercial energy use

	Energy use (oil equivalent)								Net energy imports		Carbon dioxide emissions ^a			
	Total		Per capita		Avg. annual		GDP per kg		as % of energy		Total		Per capita	
	(thous. metric tons)		(kg)		growth rate (%)		(1987 \$)		consumption		(mill. metric tons)		(metric tons)	
	1980	1994	1980	1994	1980-94		1980	1994	1980	1994	1980	1992	1980	1992
Low-income economies	587,124 t	1,154,712 t	248 w	369 w	4.4 w	0.9 w	1.1 w				2,063 t	3,880 t	0.9 w	1.3 w
Excluding China and India	80,087 t	137,034 t	114 w	134 w	2.3 w	..	2.6 w				223 t	443 t	0.3 w	0.5 w
1 Mozambique	1,123	619	93	40	-2.5	1.4	3.3		-15	74	3	1	0.3	0.1
2 Ethiopia	624	1,193	17	22	5.2	..	6.9		91	87	2	3	0.0	0.1
3 Tanzania	1,023	975	55	34	0.7	..	4.5		92	83	2	2	0.1	0.1
4 Burundi	58	143	14	23	6.8	13.9	8.3		98	97	0	0	0.0	0.0
5 Malawi	334	370	54	39	1.5	3.2	3.4		70	59	1	1	0.1	0.1
6 Chad	93	100	21	16	0.6	6.2	10.9		100	100	0	0	0.0	0.0
7 Rwanda	190	209	37	34	-0.4	9.3	4.9		85	78	0	0	0.0	0.1
8 Sierra Leone	310	323	96	77	0.5	2.3	2.4		100	100	1	0	0.2	0.1
9 Nepal	174	582	12	28	8.7	12.5	7.3		91	88	1	1	0.0	0.1
10 Niger	210	327	38	37	2.1	12.1	7.3		93	83	1	1	0.1	0.1
11 Burkina Faso	144	160	21	16	1.1	11.2	16.0		100	100	0	1	0.1	0.1
12 Madagascar	391	479	45	36	1.7	6.7	5.6		90	83	2	1	0.2	0.1
13 Bangladesh	2,809	7,566	32	64	7.7	4.5	3.1		60	28	8	17	0.1	0.2
14 Uganda	320	425	25	23	1.3	..	22.6		52	58	1	1	0.1	0.1
15 Vietnam	4,024	7,267	75	101	3.1	..	7.5		32	-55	17	22	0.3	0.3
16 Guinea-Bissau	31	39	38	37	2.1	3.8	5.8		100	100	0	0	0.2	0.2
17 Haiti	240	200	45	29	1.2	9.5	7.9		77	93	1	1	0.1	0.1
18 Mali	164	205	25	22	1.8	11.2	11.5		87	80	0	0	0.1	0.0
19 Nigeria	9,879	17,503	139	162	3.8	3.1	2.2		-968	-484	68	97	1.0	0.9
20 Yemen, Rep.	1,364	3,044	160	206	4.1	..	..		100	-463	3	10	0.4	0.7
21 Cambodia	393	512	60	52	2.2	..	2.4		97	96	0	0	0.0	0.1
22 Kenya	1,991	2,872	120	110	3.1	3.1	3.3		95	83	6	5	0.4	0.2
23 Mongolia	1,943	2,550	1,168	1,058	2.0	1.2	1.2		38	15	7	9	4.0	4.0
24 Togo	195	183	75	46	1.8	6.3	6.9		99	100	1	1	0.2	0.2
25 Gambia, The	53	60	83	56	0.9	3.5	4.9		100	100	0	0	0.2	0.2
26 Central African Republic	59	93	26	29	2.7	16.2	12.1		71	76	0	0	0.0	0.1
27 India	93,907	226,638	137	248	6.6	1.9	1.6		21	21	350	769	0.5	0.9
28 Lao PDR	107	182	33	38	2.6	..	9.1		-121	-18	0	0	0.1	0.1
29 Benin	149	107	43	20	-3.5	8.3	18.0		93	-194	0	1	0.1	0.1
30 Nicaragua	756	1,273	270	300	3.3	5.1	2.7		83	63	2	2	0.7	0.6
31 Ghana	1,303	1,542	121	93	2.5	3.6	4.4		57	66	2	4	0.2	0.2
32 Zambia	1,685	1,296	294	149	-2.6	1.3	1.8		32	31	4	2	0.6	0.3
33 Angola	937	931	133	89	0.3	..	7.0		-722	-2,576	5	5	0.8	0.5
34 Georgia	..	3,325	..	614	..	..	0.7		..	85	..	14	..	2.5
35 Pakistan	11,698	32,133	142	254	7.4	1.8	1.5		38	40	32	72	0.4	0.6
36 Mauritania	214	229	138	103	0.5	3.8	4.8		100	100	1	3	0.4	1.4
37 Azerbaijan	15,001	16,274	2,433	2,182	-2.7	..	0.2		1	1	..	64	..	8.7
38 Zimbabwe	2,797	4,722	399	438	3.9	1.5	1.4		28	24	10	19	1.4	1.8
39 Guinea	356	418	80	65	1.3	..	6.1		89	86	1	1	0.2	0.2
40 Honduras	843	1,173	230	204	2.1	4.2	4.4		76	82	2	3	0.6	0.6
41 Senegal	875	803	158	97	-0.1	4.2	6.3		100	100	3	3	0.5	0.4
42 China	413,130	791,040	421	664	5.0	0.3	0.7		-4	-1	1,489	2,668	1.5	2.3
43 Cameroon	774	1,335	89	103	2.6	10.0	6.9		-269	-333	4	2	0.4	0.2
44 Côte d'Ivoire	1,435	1,406	175	103	1.4	6.8	6.8		87	70	5	6	0.6	0.5
45 Albania	3,058	1,093	1,145	341	-4.8	0.6	2.4		0	3	7	4	2.8	1.2
46 Congo	262	847	157	331	3.7	5.7	2.8		-1,193	-1,013	0	4	0.2	1.6
47 Kyrgyz Republic	..	2,755	..	616	..	..	0.9		..	47	..	15	..	3.4
48 Sri Lanka	1,411	1,728	96	97	1.9	3.4	5.1		91	80	3	5	0.2	0.3
49 Armenia	1,071	1,441	346	384	1.6	4.3	1.4		..	79	..	4	..	1.1
Middle-income economies	1,873,142 t	2,313,337 t	1,537 w	1,475 w	-1.7 w	..	..				2,831 t	7,221 t	2.9 w	4.8 w
Lower-middle-income	1,448,776 t	1,647,009 t	1,632 w	1,449 w	-3.0 w	..	..				1,664 t	5,565 t	2.6 w	5.1 w
50 Lesotho	..	..	..	..	..	..	..		..	..	..	0	..	0.0
51 Egypt, Arab Rep.	15,176	34,071	371	600	5.7	1.6	1.2		-120	-79	45	84	1.1	1.5
52 Bolivia	1,713	2,698	320	373	1.6	2.7	2.1		-107	-61	5	7	0.8	1.0
53 Macedonia, FYR	..	2,686	..	1,279	..	..	..		..	44	..	4	..	2.0
54 Moldova	..	4,763	..	1,095	..	..	..		..	99	0	14	0.0	3.3
55 Uzbekistan	..	41,825	..	1,869	..	..	0.3		..	0	..	123	..	5.7
56 Indonesia	25,028	69,740	169	366	8.3	2.1	1.8		-275	-120	95	185	0.6	1.0
57 Philippines	13,406	21,199	277	316	3.5	2.4	1.9		79	71	37	50	0.8	0.8
58 Morocco	4,927	8,509	254	327	4.1	3.1	2.9		87	95	16	27	0.8	1.1
59 Syrian Arab Republic	5,343	13,675	614	997	6.1	1.9	1.2		-78	-130	19	42	2.2	3.3
60 Papua New Guinea	705	990	228	236	2.4	3.9	4.8		89	-150	2	2	0.6	0.6
61 Bulgaria	28,476	20,568	3,213	2,438	-2.7	0.7	1.0		74	56	75	54	8.4	6.4
62 Kazakhstan	76,799	56,664	5,153	3,371	-2.3	..	0.3		0	-25	..	298	..	17.6
63 Guatemala	1,443	2,165	209	210	3.2	5.0	4.3		84	74	4	6	0.6	0.6
64 Ecuador	4,209	6,345	529	565	2.7	2.3	2.2		-156	-231	13	19	1.7	1.8
65 Dominican Republic	2,083	2,591	366	337	1.4	2.0	2.5		93	94	6	10	1.1	1.4
66 Romania	63,846	39,387	2,876	1,733	-3.1	0.5	0.7		19	27	191	122	8.6	5.4
67 Jamaica	2,169	2,703	1,017	1,083	2.3	1.3	1.5		99	100	8	8	4.0	3.3
68 Jordan	1,710	4,306	784	1,067	5.2	..	1.5		100	96	5	11	2.2	3.0
69 Algeria	12,078	24,834	647	906	4.9	4.1	2.6		-452	-318	66	79	3.5	3.0
70 El Salvador	1,000	2,032	220	370	4.0	4.5	2.6		63	70	2	4	0.5	0.7
71 Ukraine	108,290	165,132	2,164	3,180	-1.4	..	0.4		-1	48	..	611	..	11.7
72 Paraguay	550	1,402	175	299	6.9	6.0	3.5		88	-123	1	3	0.5	0.6

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

		Energy use (oil equivalent)							Net energy imports		Carbon dioxide emissions ^a			
		Total		Per capita		Avg. annual	GDP per kg		as % of energy consumption	Total		Per capita		
		(thous. metric tons)		(kg)		growth rate (%)	(1987 \$)			(mill. metric tons)		(metric tons)		
		1980	1994	1980	1994	1980-94	1980	1994		1980	1992	1980	1992	
73	Tunisia	..	7,555	..	595	..	..	0.8	..	70	..	22	..	5.9
74	Lithuania	13,972	22,470	501	2,030	3.5	2.1	2.1	7	-99	39	61	1.4	1.8
75	Colombia	..	..	..	622	..	..	..	..	..	..	0	..	0.0
76	Namibia	2,385	24,772	247	..	13.4	..	0.8	-8	88	..	102	..	9.9
77	Belarus	750,240	595,440	5,397	2,392	-2.6	0.6	0.5	0	-53	..	2,103	..	14.1
78	Russian Federation	..	3,997	..	4,014	..	..	1.2	..	90	..	15	..	5.6
79	Latvia	8,139	8,555	471	1,569	-0.2	2.5	2.7	-36	0	24	22	1.4	1.0
80	Peru	1,292	1,843	566	367	3.5	3.1	3.4	86	67	2	4	1.1	1.2
81	Costa Rica	2,376	3,790	840	558	2.3	..	..	97	98	6	11	2.2	2.9
82	Lebanon	12,093	44,395	259	964	13.4	2.8	2.2	96	61	40	112	0.9	2.0
83	Thailand	1,376	1,597	703	769	1.2	3.2	3.9	97	87	4	4	1.9	1.7
84	Panama	31,314	57,580	705	618	4.4	1.9	1.8	45	53	76	145	1.7	2.5
85	Turkey	124,500	92,537	3,499	957	-2.0	0.5	0.7	3	-2	460	342	12.9	8.9
86	Poland	..	5,560	..	2,401	..	..	0.7	..	39	0	21	0.3	13.5
87	Estonia	..	17,343	..	3,709	..	..	0.9	..	72	..	37	..	7.0
88	Slovak Republic	35,011	46,300	2,354	3,243	2.3	1.3	1.2	-280	-269	90	116	6.0	5.7
89	Botswana	424,366	666,328	1,282	387	2.6	2.3	1.7	..	..	1,167	1,656	3.7	4.0
90	Venezuela	384	549	426	2,186	2.6	2.1	4.7	32	55	1	2	1.1	1.6
Upper-middle-income		424,366 t	666,328 t	1,282 w	1,544 w	2.6 w	2.3 w	1.7 w			1,167 t	1,656 t	3.7 w	4.0 w
91	South Africa	60,511	86,995	2,074	2,146	2.1	1.2	1.0	-14	-35	213	290	7.3	7.5
92	Croatia	..	6,667	..	1,395	..	..	..	..	43	..	16	..	3.4
93	Mexico	97,434	140,840	1,464	1,561	2.6	1.3	1.2	-49	-48	260	333	3.9	3.8
94	Mauritius	339	431	351	387	2.8	3.7	6.3	94	92	1	1	0.6	1.3
95	Gabon	759	692	1,098	652	-0.4	5.0	5.5	-1,106	-2,212	5	6	6.9	5.5
96	Brazil	72,141	112,795	595	718	3.9	3.4	2.8	65	39	184	217	1.5	1.4
97	Trinidad and Tobago	3,863	6,935	3,570	5,436	2.9	1.5	0.7	-240	-87	17	21	15.4	16.5
98	Czech Republic	29,394	39,982	2,873	3,868	45.2	..	0.8	-29	7	..	136	..	13.1
99	Malaysia	9,522	33,410	692	1,699	10.0	2.4	1.7	-58	-71	28	70	2.0	3.8
100	Hungary	28,322	24,450	2,645	2,383	-0.9	0.8	1.0	49	47	82	60	7.7	5.8
101	Chile	7,743	14,155	695	1,012	5.0	2.3	2.3	50	68	27	35	2.4	2.6
102	Oman	1,346	5,018	1,223	2,392	9.1	2.9	2.4	-1,024	-787	6	10	5.3	5.3
103	Uruguay	2,208	1,971	758	622	3.2	3.4	4.6	89	67	6	5	2.0	1.6
104	Saudi Arabia	35,496	83,772	3,787	4,566	5.5	2.7	1.1	-1,361	-463	131	221	14.0	13.1
105	Argentina	39,669	51,405	1,411	1,504	1.6	2.8	2.7	8	-18	107	117	3.8	3.5
106	Slovenia	..	5,195	..	2,612	..	..	..	..	51	..	6	..	2.8
107	Greece	15,973	23,560	1,656	2,260	3.3	2.8	2.2	77	62	51	74	5.3	7.2
Low-and middle-income		2,460,266 t	3,468,049 t	686 w	739 w	-0.1 w	1.4 w	1.1 w			4,893 t	11,101 t	1.5 w	2.4 w
Sub-Saharan Africa		94,721 t	133,471 t	249 w	237 w	1.2 w	2.2 w	2.0 w			353 t	472 t	0.9 w	0.9 w
East Asia and Pacific		514,066 t	1,000,586 t	378 w	593 w	4.8 w	0.7 w	0.9 w			1,846 t	3,378 t	1.4 w	2.1 w
South Asia		110,906 t	271,293 t	123 w	222 w	6.4 w	2.0 w	1.7 w			395 t	866 t	0.4 w	0.7 w
Europe and Central Asia		1,279,071 t	1,288,624 t	3,105 w	2,647 w	-4.6 w	..	0.6 w			944 t	4,506 t	..	9.3 w
Middle East and N. Africa		143,540 t	323,064 t	825 w	1,220 w	4.8 w	3.2 w	1.7 w			500 t	849 t	2.9 w	3.4 w
Latin America and Caribbean		317,962 t	451,011 t	888 w	960 w	2.9 w	2.3 w	2.0 w			855 t	1,029 t	2.4 w	2.3 w
High-income economies		3,789,479 t	4,543,482 t	4,644 w	5,066 w	1.9 w	2.9 w	3.4 w			9,877 t	10,246 t	12.4 w	11.9 w
108	Korea, Rep.	41,426	132,538	1,087	2,982	9.5	1.8	1.8	77	86	126	290	3.3	6.6
109	Portugal	10,291	18,090	1,054	1,827	4.7	3.5	2.8	86	88	27	47	2.8	4.8
110	Spain	68,692	96,200	1,837	2,458	2.8	3.6	3.6	77	69	200	223	5.4	5.7
111	New Zealand	9,202	15,070	2,956	4,245	4.1	3.4	2.8	39	15	18	26	5.7	7.6
112	Ireland	8,485	11,200	2,495	3,137	2.2	3.1	3.9	78	68	25	31	7.4	8.7
113 +	Israel	8,616	14,624	2,222	2,717	4.9	3.4	3.7	98	96	21	42	5.4	8.1
114 +	Kuwait	9,500	13,968	6,909	8,622	0.3	2.7	2.0	-739	-693	25	16	18.0	11.2
115 +	United Arab Emirates	8,558	25,137	8,205	10,531	6.3	3.6	..	-996	-454	36	71	34.8	33.9
116	United Kingdom	201,200	220,270	3,572	3,772	0.8	2.8	3.5	2	-10	588	566	10.4	9.8
117	Australia	70,399	95,280	4,792	5,341	2.3	2.4	2.6	-22	-83	203	268	13.8	15.3
118	Italy	139,190	154,600	2,466	2,707	1.4	4.8	5.5	86	81	372	408	6.6	7.2
119	Canada	193,170	229,730	7,854	7,854	1.5	1.7	2.0	-7	-47	430	410	17.5	14.4
120	Finland	24,998	30,520	5,230	5,997	1.7	2.9	3.0	72	58	55	41	11.5	8.2
121 +	Hong Kong	5,628	13,243	1,117	2,185	6.4	5.3	5.3	100	100	16	29	3.3	5.0
122	Sweden	40,992	50,250	4,933	5,723	1.3	3.4	3.3	61	38	71	57	8.6	6.6
123	Netherlands	65,106	70,440	4,601	4,580	1.3	3.0	3.7	-10	7	153	139	10.8	9.2
124	Belgium	46,122	51,790	4,684	5,120	1.5	2.8	3.2	83	78	128	102	13.0	10.1
125	France	190,660	234,160	3,539	4,042	2.0	4.1	4.4	75	95	484	362	9.0	6.3
126 +	Singapore	6,049	23,743	2,651	8,103	9.9	2.2	1.6	100	100	30	50	13.2	17.7
127	Austria	23,449	26,500	3,105	3,301	1.6	4.6	5.4	67	66	52	57	6.9	7.2
128	United States	1,801,000	2,037,980	7,908	7,819	1.6	2.1	2.6	14	19	4,623	4,881	20.3	19.1
129	Germany	359,170	336,490	4,587	4,128	-0.1	..	..	49	58	1,068	878	13.6	10.9
130	Denmark	19,488	20,700	3,804	3,977	0.8	4.4	5.5	97	28	63	54	12.3	10.4
131	Norway	18,865	23,060	4,611	5,318	1.6	3.9	4.6	-195	-638	40	60	9.8	14.1
132	Japan	347,120	481,850	2,972	3,856	2.8	5.5	6.2	88	81	934	1,093	8.0	8.8
133	Switzerland	20,840	25,380	3,298	3,629	1.7	7.3	7.4	66	57	41	44	6.5	6.4
World		6,249,745 t	8,011,531 t	1,419 w	1,433 w	1.0 w	2.3 w	2.4 w			14,770 t	21,347 t	3.6 w	4.0 w

a. From industrial processes.