

Results of the energy supply and demand forecast for the world, Asia, and Asian countries

- World
- Asia
- China
- Japan
- South Korea
- India
- Indonesia
- Taiwan
- Malaysia
- Philippines
- Thailand
- Vietnam

World

Primary energy consumption	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	4,919	6,514	7,866	10,246	11,201	13,554	15,880	100	100	100	100	100	100	100	2.2	1.5	1.9	1.6	1.7
Coal	1438	1,787	2,197	2,804	3,210	3,724	4,260	29	27	28	27	29	27	27	2.0	2.3	1.5	1.4	1.6
Oil	2342	3,006	3,075	3,849	3,988	4,794	5,633	48	46	39	38	36	35	35	1.5	0.6	1.9	1.6	1.5
Natural gas	895	1,236	1,676	2,369	2,633	3,405	4,117	18	19	21	23	24	25	26	3.0	1.8	2.6	1.9	2.1
Nuclear	29	186	525	735	753	851	920	0.6	2.9	6.7	7.2	6.7	6.3	5.8	10.3	0.4	1.2	0.8	0.9
Hydro	104	147	185	240	272	318	355	2.1	2.3	2.3	2.3	2.4	2.3	2.2	2.6	2.1	1.6	1.1	1.5
Geothermal	4.2	12.4	33.6	46	54	82	113	0.1	0.2	0.4	0.4	0.5	0.6	0.7	7.5	3.0	4.2	3.2	3.6
Other renewables	76	103	135	203	283	375	479	1.5	1.6	1.7	2.0	2.5	2.8	3.0	3.0	5.7	2.8	2.5	3.3

Final energy demand	Mtoe							Share, %							AAGR(%)					
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030	
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030	
Total	3,657	4,710	5,426	6,846	7,286	8,814	10,350	100	100	100	100	100	100	100	1.9	1.0	1.9	1.6	1.6	
Industry	1464	1,902	2,035	2,425	2,581	3,078	3,554	40	40	38	35	35	35	34	1.5	1.0	1.8	1.4	1.5	
Transportation	860	1,144	1,432	2,009	2,155	2,647	3,130	24	24	26	29	30	30	30	2.6	1.2	2.1	1.7	1.7	
Residential/Commercial	1207	1,488	1,748	2,188	2,301	2,786	3,317	33	32	32	32	32	32	32	1.8	0.8	1.9	1.8	1.6	
Non-energy, etc.	125	176	210	225	261	314	362	3.4	3.7	3.9	3.3	3.6	3.6	3.5	1.8	2.5	1.9	1.4	1.8	
Energy source																				
Total	3,657	4,710	5,426	6,846	7,286	8,814	10,350	100	100	100	100	100	100	100	1.9	1.0	1.9	1.6	1.6	
Coal	614	698	762	643	612	611	579	17	15	14	9.4	8.4	6.9	5.6	0.1	-0.8	0.0	-0.5	-0.4	
Oil	1892	2,346	2,540	3,288	3,461	4,203	4,972	52	50	47	48	47	48	48	1.7	0.9	2.0	1.7	1.6	
Natural gas	604	830	1,001	1,263	1,345	1,639	1,920	17	18	18	18	18	19	19	2.3	1.1	2.0	1.6	1.6	
Electricity	377	585	826	1,260	1,440	1,880	2,357	10	12	15	18	20	21	23	3.7	2.3	2.7	2.3	2.4	
Heat	68	121	176	257	275	307	335	1.9	2.6	3.2	3.8	3.8	3.5	3.2	4.1	1.1	1.1	0.9	1.0	
Renewables	73	97	84	135	146	166	180	2.0	2.1	1.6	2.0	2.0	1.9	1.7	1.9	1.4	1.3	0.8	1.1	

Power generation	TWh							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	5,215	8,240	11,781	17,727	20,540	26,850	33,663	100	100	100	100	100	100	100	3.8	2.5	2.7	2.3	2.5
Coal	2093	3,136	4,495	7,060	8,481	10,855	13,869	40	38	38	40	41	40	41	3.8	3.1	2.5	2.5	2.6
Oil	1099	1,651	1,340	1,178	1,068	1,226	1,461	21	20	11	6.6	5.2	4.6	4.3	0.2	-1.6	1.4	1.8	0.8
Natural gas	696	996	1,624	3,527	4,370	6,910	9,406	13	12	14	20	21	26	28	5.0	3.6	4.7	3.1	3.8
Nuclear	111	713	2,013	2,817	2,888	3,265	3,531	2.1	8.7	17	16	14	12	10	10.3	0.4	1.2	0.8	0.9
Hydro	1204	1,714	2,146	2,796	3,160	3,696	4,125	23	21	18	15.8	15.4	13.8	12.3	2.6	2.1	1.6	1.1	1.5
Geothermal	4.5	14	36	56	68	108	153	0.1	0.2	0.3	0.3	0.3	0.4	0.5	7.9	3.5	4.7	3.5	4.0
Other renewables	32	46	151	293	541	883	1,310	0.6	0.6	1.3	1.7	2.6	3.3	3.9	6.9	10.8	5.0	4.0	5.9

CO ₂ emissions	Mt-C							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	3,927	5,031	5,776	7,354	8,126	9,767	11,390	100	100	100	100	100	100	100	1.9	1.7	1.9	1.5	1.7
Coal-derived	1553	1,930	2,373	3,029	3,466	4,022	4,601	40	38	41	41	43	41	40	2.0	2.3	1.5	1.4	1.6
Oil-derived	1801	2,308	2,329	2,807	2,972	3,563	4,150	46	46	40	38	37	36	36	1.4	1.0	1.8	1.5	1.5
Natural-gas-derived	573	792	1,074	1,518	1,687	2,182	2,639	15	16	19	21	21	22	23	3.0	1.8	2.6	1.9	2.2

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	12,970	18,109	24,308	35,945	43,813	59,650	79,068	3.1	3.4	3.1	2.9	3.1
Population (millions of people)	3,827	4,519	5,364	6,502	6,968	7,716	8,390	1.6	1.2	1.0	0.8	1.0
GDP per capita (US dollars at 2000 value/person)	3,389	4,008	4,532	5,528	6,288	7,730	9,424	1.5	2.2	2.1	2.0	2.1
Primary energy consumption per capita (toe/person)	1.29	1.44	1.47	1.58	1.61	1.76	1.89	0.6	0.3	0.9	0.7	0.7
Primary energy consumption per unit of GDP*	379	360	324	285	256	227	201	-0.9	-1.8	-1.2	-1.2	-1.3
CO ₂ emissions per unit of GDP**	303	278	238	205	185	164	144	-1.2	-1.6	-1.2	-1.3	-1.3
CO ₂ emissions per unit of primary energy consumption***	0.798	0.772	0.734	0.718	0.725	0.721	0.717	-0.3	0.2	-0.1	0.0	0.0
Automobile ownership volume (millions of vehicles)	263	419	584	829	1,022	1,343	1,685	3.5	3.5	2.8	2.3	2.8
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	69	93	109	128	147	174	201	1.9	2.4	1.7	1.4	1.8

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

Asia

Primary energy consumption	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	669	1,060	1,684	3,063	3,828	5,007	6,209	100	100	100	100	100	100	100	4.7	3.8	2.7	2.2	2.8
Coal	312	475	816	1,475	1,849	2,245	2,579	47	45	48	48	48	45	42	4.8	3.8	2.0	1.4	2.2
Oil	329	486	625	1,069	1,243	1,650	2,105	49	46	37	35	32	33	34	3.6	2.5	2.9	2.5	2.6
Natural gas	11	52	121	300	417	632	890	1.7	4.9	7.2	9.8	11	13	14	10.5	5.7	4.2	3.5	4.3
Nuclear	2.4	25	77	136	195	284	357	0.4	2.4	4.6	4.4	5.1	5.7	5.7	13.0	6.1	3.9	2.3	3.8
Hydro	15	20	32	55	67	89	100	2.2	1.9	1.9	1.8	1.8	1.8	1.6	4.1	3.2	2.9	1.2	2.3
Geothermal	0	2.6	7.2	18	18	25	31	0	0.2	0.4	0.6	0.5	0.5	0.5	-	0.3	3.4	2.1	2.2
Other renewables	0	0	6.9	9.9	39	86	156	0	0	0.4	0.3	1.0	1.7	2.5	-	25.8	8.2	6.1	11.2

Final energy demand	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	504	756	1,143	1,888	2,224	2,906	3,639	100	100	100	100	100	100	100	4.1	2.8	2.7	2.3	2.6
Industry	268	394	549	920	1,045	1,241	1,418	53	52	48	49	47	43	39	3.8	2.1	1.7	1.3	1.7
Transportation	86	133	213	394	491	698	941	17	18	19	21	22	24	26	4.7	3.7	3.6	3.0	3.4
Residential/Commercial	137	209	335	498	615	872	1,163	27	28	29	26	28	30	32	4.0	3.6	3.5	2.9	3.3
Non-energy, etc.	13	21	46	77	85	108	130	2.6	2.8	4.0	4.1	3.8	3.7	3.6	5.5	1.7	2.4	1.9	2.0
Energy source																			
Total	504	756	1,143	1,888	2,224	2,906	3,639	100	100	100	100	100	100	100	4.1	2.8	2.7	2.3	2.6
Coal	200	303	441	469	441	435	401	40	40	39	25	20	15	11	2.6	-1.0	-0.1	-0.8	-0.6
Oil	244	333	476	882	1,056	1,418	1,823	48	44	42	47	47	49	50	4.0	3.1	3.0	2.5	2.8
Natural gas	11	25	49	127	168	256	367	2.1	3.3	4.3	6.7	7.6	8.8	10	7.8	4.8	4.3	3.7	4.2
Electricity	50	88	157	364	483	687	910	9.9	12	14	19	22	24	25	6.2	4.8	3.6	2.8	3.6
Heat	0	7.5	14	42	71	105	133	0	1.0	1.3	2.2	3.2	3.6	3.7	-	9.1	4.0	2.5	4.5
Renewables	0	0	4.6	4.6	4.7	5.6	5.9	0	0	0.4	0.2	0.2	0.2	0.2	-	0.3	1.8	0.4	0.9

Power generation	TWh							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	667	1,192	2,209	5,183	7,045	10,006	13,191	100	100	100	100	100	100	100	6.4	5.3	3.6	2.8	3.7
Coal	179	300	864	2,878	4,035	5,573	7,213	27	25	39	56	57	56	55	8.8	5.8	3.3	2.6	3.6
Oil	300	471	428	384	334	351	423	45	39	19	7.4	4.7	3.5	3.2	0.8	-2.3	0.5	1.9	0.4
Natural gas	9.9	90	231	709	1,063	1,756	2,625	1.5	7.6	10	14	15	18	20	13.8	7.0	5.2	4.1	5.2
Nuclear	9.3	97	294	523	747	1,091	1,369	1.4	8.2	13	10	11	11	10	13.0	6.1	3.9	2.3	3.8
Hydro	169	232	372	644	780	1,034	1,164	25	19	17	12	11	10	8.8	4.1	3.2	2.9	1.2	2.3
Geothermal	0	3.0	8.3	20	21	29	36	0	0.2	0.4	0.4	0.3	0.3	0.3	-	0.3	3.5	2.1	2.2
Other renewables	0.3	0.3	12	24	85	249	541	0	0	0.5	0.5	1.2	2.5	4.1	14.7	23.4	11.3	8.1	12.7

CO ₂ emissions	Mt-C							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	589	914	1,422	2,526	3,157	4,015	4,843	100	100	100	100	100	100	100	4.5	3.8	2.4	1.9	2.5
Coal-derived	337	513	881	1,593	1,997	2,424	2,785	57	56	62	63	63	60	58	4.8	3.8	2.0	1.4	2.2
Oil-derived	245	368	464	740	892	1,186	1,487	42	40	33	29	28	30	31	3.4	3.2	2.9	2.3	2.7
Natural-gas-derived	7.2	33	77	192	267	405	570	1.2	3.6	5.4	7.6	8.5	10	12	10.5	5.7	4.2	3.5	4.3

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	2,506	3,820	6,007	9,845	13,017	18,960	26,523	4.2	4.8	3.8	3.4	3.9
Population (millions of people)	2,036	2,434	2,905	3,499	3,749	4,116	4,424	1.7	1.2	0.9	0.7	0.9
GDP per capita (US dollars at 2000 value/person)	1,231	1,569	2,068	2,814	3,472	4,607	5,995	2.5	3.6	2.9	2.7	3.0
Primary energy consumption per capita (toe/person)	0.33	0.44	0.58	0.88	1.02	1.22	1.40	3.0	2.6	1.8	1.4	1.8
Primary energy consumption per unit of GDP*	267	277	280	311	294	264	234	0.5	-0.9	-1.1	-1.2	-1.1
CO ₂ emissions per unit of GDP**	235	239	237	257	243	212	183	0.3	-0.9	-1.3	-1.5	-1.3
CO ₂ emissions per unit of primary energy consumption***	0.880	0.862	0.844	0.825	0.825	0.802	0.780	-0.2	0.0	-0.3	-0.3	-0.2
Automobile ownership volume (millions of vehicles)	25	48	86	165	220	341	510	5.9	4.9	4.5	4.1	4.4
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	12	20	30	47	59	83	115	4.2	3.7	3.5	3.3	3.5

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

China

Primary energy consumption	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	237	419	680	1,389	1,869	2,416	2,857	100	100	100	100	100	100	100	5.5	5.1	2.6	1.7	2.8
Coal	192	313	542	993	1,321	1,527	1,588	81	75	80	71	71	63	56	5.1	4.9	1.5	0.4	1.8
Oil	40	89	110	311	410	610	803	17	21	16	22	22	25	28	6.4	4.7	4.0	2.8	3.7
Natural gas	3.1	12	16	42	55	108	193	1.3	2.9	2.3	3.0	2.9	4.5	6.8	8.2	4.6	7.0	6.0	6.1
Nuclear	0	0	0	13	22	55	84	0	0	0	0.9	1.2	2.3	3.0	-	9.2	9.4	4.5	7.4
Hydro	2.6	5.0	11	30	37	52	58	1.1	1.2	1.6	2.2	2.0	2.2	2.0	7.8	3.3	3.5	1.1	2.5
Geothermal	0	0	0	0	0.3	0.5	1.0	0	0	0	0	0	0	0	-	-	7.2	7.2	-
Other renewables	0	0	0	0	23	65	129	0	0	0	0	1.2	2.7	4.5	-	-	11.1	7.1	-

Final energy demand	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	177	313	482	819	961	1,249	1,503	100	100	100	100	100	100	100	4.8	2.7	2.7	1.9	2.4
Industry	101	188	272	469	515	552	536	57	60	56	57	54	44	36	4.8	1.5	0.7	-0.3	0.5
Transportation	14	25	38	104	155	268	402	7.7	7.9	7.8	13	16	21	27	6.3	6.9	5.7	4.1	5.3
Residential/Commercial	59	92	146	201	257	384	512	34	29	30	25	27	31	34	3.8	4.2	4.1	2.9	3.7
Non-energy, etc.	2.4	8.3	26	45	47	58	66	1.4	2.7	5.4	5.5	4.9	4.7	4.4	9.3	0.5	2.2	1.2	1.5
Energy source																			
Total	177	313	482	819	961	1,249	1,503	100	100	100	100	100	100	100	4.8	2.7	2.7	1.9	2.4
Coal	132	218	332	349	304	266	199	75	70	69	43	32	21	13	3.0	-2.2	-1.3	-2.9	-2.1
Oil	33	60	83	254	344	524	710	19	19	17	31	36	42	47	6.4	5.2	4.3	3.1	4.0
Natural gas	1.4	6.8	12	32	40	67	109	0.8	2.2	2.5	3.9	4.1	5.4	7.3	9.9	3.6	5.4	4.9	4.8
Electricity	9.8	21	41	148	209	296	361	5.6	6.8	8.6	18.1	22	24	24	8.6	5.9	3.5	2.0	3.5
Heat	0	7.4	13	36	64	96	124	0	2.4	2.7	4.4	6.6	7.7	8.2	-	9.9	4.2	2.6	4.8
Renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-

Power generation	TWh							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	138	301	621	2,197	3,298	4,625	5,632	100	100	100	100	100	100	100	8.7	7.0	3.4	2.0	3.7
Coal	98	164	442	1,713	2,668	3,488	3,944	70	55	71	78	81	75	70	9.1	7.7	2.7	1.2	3.3
Oil	11	78	49	72	57	57	57	7.9	26	7.9	3.3	1.7	1.2	1.0	5.9	-3.6	0.0	0.0	-0.9
Natural gas	0	0.7	3.1	8.0	36	158	368	0	0.2	0.5	0.4	1.1	3.4	6.5	-	28.3	16.0	8.9	15.9
Nuclear	0	0	0	50	86	209	324	0	0	0	2.3	2.6	4.5	5.8	-	9.2	9.4	4.5	7.4
Hydro	30	58	127	354	430	605	677	22	19	20	16	13	13	12	7.8	3.3	3.5	1.1	2.5
Geothermal	0	0	0	0	0.3	0.6	1.2	0	0	0	0	0	0	0	-	-	7.2	7.2	-
Other renewables	0	0	0	0	34	173	415	0.2	0.1	0.1	0	1.0	3.7	7.4	-100.0	-	17.5	9.1	-

CO ₂ emissions	Mt-C							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	241	411	676	1,311	1,775	2,184	2,445	100	100	100	100	100	100	100	5.3	5.2	2.1	1.1	2.4
Coal-derived	207	338	586	1,072	1,427	1,649	1,715	86	82	87	82	80	76	70	5.1	4.9	1.5	0.4	1.8
Oil-derived	31	66	80	212	313	466	606	13	16	12	16	18	21	25	6.0	6.7	4.1	2.7	4.1
Natural-gas-derived	2.0	7.7	10	27	35	69	124	0.8	1.9	1.5	2.0	2.0	3.2	5.1	8.2	4.6	7.0	6.0	6.1

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	99	170	413	1,715	2,917	5,152	8,081	9.0	9.3	5.9	4.6	6.1
Population (millions of people)	852	987	1,143	1,296	1,355	1,442	1,486	1.3	0.7	0.6	0.3	0.5
GDP per capita (US dollars at 2000 value/person)	117	172	361	1,323	2,152	3,573	5,440	7.6	8.4	5.2	4.3	5.6
Primary energy consumption per capita (toe/person)	0.28	0.42	0.59	1.07	1.38	1.68	1.92	4.2	4.3	2.0	1.4	2.3
Primary energy consumption per unit of GDP*	2389	2,465	1,646	810	641	469	354	-3.2	-3.8	-3.1	-2.8	-3.1
CO ₂ emissions per unit of GDP**	2441	2,472	1,667	764	609	424	303	-3.5	-3.7	-3.6	-3.3	-3.5
CO ₂ emissions per unit of primary energy consumption***	1.022	1.003	1.013	0.944	0.950	0.904	0.856	-0.2	0.1	-0.5	-0.5	-0.4
Automobile ownership volume (millions of vehicles)	0.5	1.8	5.5	27	56	127	233	12.9	13.0	8.5	6.3	8.7
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	0.6	1.8	4.8	21	23	69	138	11.5	1.6	11.8	7.1	7.6

* Toe / millions of US dollar at 2000 value
 ** T-C / millions of US dollar at 2000 value
 *** T-C / toe

Japan

Primary energy consumption	Mtoe							Share, %							AAGR(%)							
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030			
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030			
Total	269	346	445	533	536	542	530	100	100	100	100	100	100	100	100	100	100	2.1	0.1	0.1	-0.2	0.0
Coal	56	60	78	116	105	107	103	21	17	17	22	20	20	19	2.2	-1.6	0.1	-0.4	-0.5			
Oil	201	236	254	255	237	218	198	75	68	57	48	44	40	37	0.7	-1.2	-0.9	-0.9	-1.0			
Natural gas	3.3	21	44	70	74	79	81	1.2	6.2	9.9	13	14	15	15	9.7	0.7	0.7	0.3	0.5			
Nuclear	2.1	22	53	74	101	118	126	0.8	6.2	12	14	19	22	24	11.4	5.4	1.6	0.7	2.1			
Hydro	7.2	7.6	7.7	8.1	7.5	7.4	7.5	2.7	2.2	1.7	1.5	1.4	1.4	1.4	0.3	-1.3	0.0	0.1	-0.3			
Geothermal	0	0.8	1.6	3.1	3.2	3.2	3.2	0	0.2	0.4	0.6	0.6	0.6	0.6	-	0.2	0.0	0.0	0.0			
Other renewables	0	0	6.8	6.9	8.7	10	11	0	0	1.5	1.3	1.6	1.9	2.1	-	3.9	1.7	0.9	1.9			

Final energy demand	Mtoe							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	199	233	292	354	356	352	340	100	100	100	100	100	100	100	100	100	1.8	0.1	-0.1	-0.4	-0.2
Industry	114	111	114	136	138	137	135	57	47	39	38	39	39	40	0.5	0.2	-0.1	-0.2	0.0		
Transportation	37	55	76	94	89	82	73	19	24	26	27	25	23	21	2.9	-1.0	-0.8	-1.1	-1.0		
Residential/Commercial	42	59	89	115	120	125	123	21	25	31	32	34	35	36	3.1	0.7	0.4	-0.1	0.3		
Non-energy, etc.	6.9	8.3	12	9.5	9.8	9.5	9.3	3.5	3.5	4.2	2.7	2.8	2.7	2.7	1.0	0.5	-0.3	-0.2	-0.1		
Energy source																					
Total	199	233	292	354	356	352	340	100	100	100	100	100	100	100	100	100	1.8	0.1	-0.1	-0.4	-0.2
Coal	19	21	24	27	23	22	21	9.7	9.2	8.2	7.6	6.5	6.3	6.2	1.0	-2.4	-0.5	-0.5	-0.9		
Oil	144	158	184	214	207	193	174	73	68	63	60	58	55	51	1.2	-0.5	-0.7	-1.0	-0.8		
Natural gas	6.2	9.7	15	27	30	33	36	3.1	4.2	5.1	7.5	8.3	9.4	11	4.5	1.7	1.1	1.0	1.2		
Electricity	29	44	64	83	91	99	103	15	19	22	23	26	28	30	3.2	1.5	0.8	0.4	0.8		
Heat	0	0.1	0.2	0.6	0.6	0.6	0.6	0	0	0.1	0.2	0.2	0.2	0.2	-	0.0	0.0	0.0	0.0		
Renewables	0	0	4.6	3.2	4.3	4.9	4.7	0	0	1.6	0.9	1.2	1.4	1.4	-	5.3	1.2	-0.4	1.5		

Power generation	TWh							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	383	573	835	1,071	1,146	1,242	1,289	100	100	100	100	100	100	100	100	100	3.2	1.1	0.8	0.4	0.7
Coal	45	55	120	294	290	317	317	12	9.6	14	27	25	26	25	5.8	-0.2	0.9	0.0	0.3		
Oil	240	265	247	133	108	86	69	63	46	30	12	9.4	7.0	5.4	-1.8	-3.4	-2.2	-2.2	-2.5		
Natural gas	5.5	81	162	244	244	258	277	1.4	14	19	23	21	21	22	12.2	0.0	0.6	0.7	0.5		
Nuclear	8.0	83	202	282	386	452	484	2.1	14	24	26	34	36	38	11.4	5.4	1.6	0.7	2.1		
Hydro	84	88	89	94	87	87	87	22	15	11	8.8	7.6	7.0	6.8	0.3	-1.3	0.0	0.1	-0.3		
Geothermal	0	0.9	1.7	3.4	3.4	3.4	3.4	0	0.2	0.2	0.3	0.3	0.3	0.3	-	0.2	0.0	0.0	0.0		
Other renewables	0	0	12	20	28	38	50	0	0	1.4	1.9	2.4	3.0	3.9	-	5.8	3.1	2.9	3.6		

CO ₂ emissions	Mt-C							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	207	255	299	349	326	319	303	100	100	100	100	100	100	100	100	100	1.6	-1.1	-0.2	-0.5	-0.5
Coal-derived	61	64	84	125	114	115	111	29	25	28	36	35	36	37	2.2	-1.6	0.1	-0.4	-0.5		
Oil-derived	144	177	186	179	165	153	140	70	69	62	51	51	48	46	0.7	-1.3	-0.8	-0.9	-0.9		
Natural-gas-derived	2.1	14	28	45	47	50	52	1.0	5.4	9.5	13	14	16	17	9.7	0.7	0.7	0.3	0.5		

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	1,888	2,791	4,108	4,933	5,597	6,498	7,285	3.0	2.1	1.5	1.1	1.5
Population (millions of people)	106	117	124	128	127	124	117	0.6	-0.1	-0.3	-0.5	-0.3
GDP per capita (US dollars at 2000 value/person)	17,865	23,897	33,252	38,609	44,012	52,603	62,307	2.4	2.2	1.8	1.7	1.9
Primary energy consumption per capita (toe/person)	2.55	2.97	3.60	4.17	4.22	4.39	4.54	2	0.2	0.4	0.3	0.3
Primary energy consumption per unit of GDP*	143	124	108	108	96	83	73	-0.8	-2.0	-1.4	-1.4	-1.5
CO ₂ emissions per unit of GDP**	109	91	73	71	58	49	42	-1.3	-3.2	-1.7	-1.6	-2.0
CO ₂ emissions per unit of primary energy consumption***	0.767	0.736	0.671	0.655	0.609	0.588	0.571	-0.5	-1.2	-0.4	-0.3	-0.5
Automobile ownership volume (millions of vehicles)	20	38	58	74	77	80	79	4.1	0.7	0.3	-0.1	0.2
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	188	324	467	581	609	645	671	3.5	0.8	0.6	0.4	0.6

* Toe / millions of US dollar at 2000 value
 ** T-C / millions of US dollar at 2000 value
 *** T-C / toe

South Korea

Primary energy consumption	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	17	41	93	213	241	296	339	100	100	100	100	100	100	100	8.0	2.1	2.1	1.4	1.8
Coal	6.3	13	26	50	58	66	78	37	33	28	24	24	22	23	6.5	2.4	1.4	1.7	1.7
Oil	11	27	50	101	106	120	130	62	65	54	48	44	41	38	7.1	0.8	1.2	0.8	1.0
Natural gas	0	0	2.7	25	33	47	59	0	0	2.9	12	14	16	17	-	4.5	3.6	2.3	3.3
Nuclear	0	0.9	14	34	39	56	63	0	2.2	15	16	16	19	19	-	2.4	3.6	1.2	2.4
Hydro	0.1	0.2	0.5	0.4	0.5	0.4	0.4	0.7	0.4	0.6	0.2	0.2	0.2	0.1	3.7	3.6	-0.2	0.0	0.7
Geothermal	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	-	2.2	23.2	23.2	18.0
Other renewables	0	0	0	1.8	4.1	5.7	8.2	0	0	0	0.9	1.7	1.9	2.4	-	14.4	3.5	3.6	6.0

Final energy demand	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	13	31	64	144	162	200	229	100	100	100	100	100	100	100	7.4	2.1	2.1	1.4	1.8
Industry	5.6	13	24	67	71	86	101	42	41	38	46	43	43	44	7.8	0.9	2.0	1.6	1.6
Transportation	2.1	5.1	15	34	41	49	53	16	16	23	24	25	25	23	8.8	3.0	1.9	0.7	1.7
Residential/Commercial	5.5	13	24	40	48	62	72	41	42	37	28	30	31	31	6.2	3.5	2.5	1.5	2.3
Non-energy, etc.	0.2	0.3	0.9	3.2	2.4	2.4	2.8	1.4	1.0	1.3	2.2	1.4	1.2	1.2	9.0	-4.8	0.3	1.6	-0.4
Energy source																			
Total	13	31	64	144	162	200	229	100	100	100	100	100	100	100	7.4	2.1	2.1	1.4	1.8
Coal	5.2	9.7	11	7.5	7.7	7.4	7.5	38	31	18	5.2	4.7	3.7	3.3	1.1	0.4	-0.4	0.2	0.0
Oil	7.5	19	44	87	94	108	116	56	60	68	60	58	54	51	7.7	1.3	1.4	0.7	1.1
Natural gas	0	0	0.7	15	21	33	43	0	0	1.1	10	13	17	19	-	6.4	4.7	2.4	4.2
Electricity	0.8	2.8	8.1	29	34	44	54	5.9	9.0	13	20	21	22	24	11.5	2.8	2.4	2.1	2.4
Heat	0	0	0	4.3	5.7	7.0	8.1	0	0	0	3.0	3.5	3.5	3.6	-	4.7	2.1	1.5	2.5
Renewables	0	0	0	1.5	0.1	0.2	0.5	0	0	0	1.0	0.1	0.1	0.2	-	-36.6	7.9	9.5	-4.0

Power generation	TWh							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	11	37	105	367	443	564	696	100	100	100	100	100	100	100	11.4	3.2	2.4	2.1	2.5
Coal	0.7	2.5	18	142	189	240	312	6.9	6.7	17	39	43	43	45	17.4	4.8	2.4	2.7	3.1
Oil	8.5	29	19	29	31	24	31	81	79	18	8.0	7.0	4.3	4.5	3.8	0.8	-2.5	2.7	0.2
Natural gas	0	0	9.6	59	64	76	99	0	0	9.1	16	15	13	14	-	1.4	1.6	2.7	2.0
Nuclear	0	3.5	53	131	151	214	242	0	9.3	50	36	34	38	35	-	2.4	3.6	1.2	2.4
Hydro	1.3	2.0	6.4	4.3	5.3	5.2	5.2	13	5.3	6.0	1.2	1.2	0.9	0.7	3.7	3.6	-0.2	0.0	0.7
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
Other renewables	0	0	0	0.4	2.7	4.3	7.0	0	0	0	0.1	0.6	0.8	1.0	-	36.0	4.7	5.0	11.3

CO ₂ emissions	Mt-C							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	15	34	65	128	145	169	194	100	100	100	100	100	100	100	6.7	2.1	1.6	1.4	1.6
Coal-derived	6.8	15	28	54	62	72	85	45	42	42	42	43	42	44	6.5	2.4	1.4	1.7	1.7
Oil-derived	8.4	20	36	58	62	68	71	55	58	55	45	43	40	37	6.0	1.1	0.9	0.5	0.8
Natural-gas-derived	0	0	1.7	16	21	30	38	0	0	2.7	13	14	18	20	-	4.5	3.6	2.3	3.3

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	66	123	284	613	799	1,129	1,496	7.0	4.5	3.5	2.9	3.5
Population (millions of people)	33	38	43	48	49	50	50	1.2	0.3	0.2	0.0	0.1
GDP per capita (US dollars at 2000 value/person)	2,027	3,221	6,615	12,752	16,281	22,604	30,098	5.7	4.2	3.3	2.9	3.4
Primary energy consumption per capita (toe/person)	0.52	1.09	2.16	4.43	4.91	5.92	6.83	6.7	1.7	1.9	1.4	1.7
Primary energy consumption per unit of GDP*	258	337	327	347	301	262	227	0.9	-2.3	-1.4	-1.4	-1.6
CO ₂ emissions per unit of GDP**	229	281	231	209	182	150	130	-0.3	-2.3	-1.9	-1.5	-1.8
CO ₂ emissions per unit of primary energy consumption***	0.890	0.833	0.707	0.602	0.603	0.573	0.571	-1.2	0.0	-0.5	0.0	-0.2
Automobile ownership volume (millions of vehicles)	0.1	0.5	3.4	15	20	26	29	15.4	5.3	2.6	0.9	2.6
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	4.1	14	79	311	415	530	580	14.1	4.9	2.5	0.9	2.4

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

India

Primary energy consumption	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	61	95	190	358	456	692	1,005	100	100	100	100	100	100	100	5.5	4.1	4.3	3.8	4.0
Coal	36	55	109	196	217	303	432	58	58	58	55	48	44	43	5.3	1.8	3.4	3.6	3.1
Oil	22	34	63	127	174	267	389	37	36	33	36	38	39	39	5.4	5.3	4.4	3.8	4.4
Natural gas	0.6	1.2	9.8	23	36	68	105	0.9	1.3	5.2	6.5	7.9	9.8	10	11.9	7.5	6.4	4.5	5.9
Nuclear	0.3	0.8	1.6	4.4	17	37	58	0.5	0.8	0.8	1.2	3.6	5.3	5.8	8.4	25	8.2	4.8	10.4
Hydro	2.4	4.0	6.2	7.3	11	16	18	3.9	4.2	3.3	2.0	2.5	2.3	1.8	3.4	7.4	3.4	1.5	3.6
Geothermal	0	0	0	0	0	0.9	0.9	0	0	0	0	0	0.1	0.1	-	-	-	0.0	-
Other renewables	0	0	0.1	0.5	1.0	1.6	2.7	0	0	0.1	0.1	0.2	0.2	0.3	-	14.8	4.5	5.1	7.0

Final energy demand	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	48	65	119	190	265	399	572	100	100	100	100	100	100	100	4.3	5.7	4.2	3.7	4.3
Industry	19	27	55	86	112	156	213	40	42	46	45	42	39	37	4.7	4.5	3.4	3.2	3.6
Transportation	15	18	28	36	61	93	135	30	28	24	19	23	23	24	2.8	8.9	4.4	3.7	5.2
Residential/Commercial	12	17	32	55	75	123	186	25	27	27	29	28	31	33	4.7	5.2	5.1	4.2	4.8
Non-energy, etc.	2.1	2.2	3.6	12	17	26	38	4.3	3.4	3.0	6.5	6.6	6.6	6.6	5.6	5.9	4.2	3.7	4.4
Energy source																			
Total	48	65	119	190	265	399	572	100	100	100	100	100	100	100	4.3	5.7	4.2	3.7	4.3
Coal	25	28	41	36	51	60	66	52	43	35	19	19	15	12	1.2	5.8	1.7	1.0	2.4
Oil	18	28	54	107	148	227	327	38	44	45	56	56	57	57	5.5	5.6	4.4	3.7	4.4
Natural gas	0.3	0.7	5.6	8.6	15	21	31	0.6	1.1	4.7	4.5	5.5	5.3	5.4	10.9	9.2	3.8	3.8	5.0
Electricity	4.4	7.7	18	38	52	91	148	9.3	12	15	20	19	23	26	6.8	5.0	5.8	5.0	5.3
Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
Renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-

Power generation	TWh							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	61	119	289	666	851	1,438	2,277	100	100	100	100	100	100	100	7.5	4.2	5.4	4.7	4.8
Coal	26	59	189	461	521	842	1,409	43	50	65	69	61	59	62	9.1	2.0	4.9	5.3	4.4
Oil	5.4	10	13	36	22	27	36	8.9	8.4	4.3	5.4	2.6	1.9	1.6	5.9	-7.8	2.0	2.9	0.0
Natural gas	0.4	0.6	10	63	103	228	367	0.6	0.5	3.4	9.5	12	16	16	16.9	8.5	8.2	4.9	7.0
Nuclear	1.2	3.0	6.1	17	64	140	224	2.0	2.5	2.1	2.6	7.5	9.7	9.8	8.4	24.6	8.2	4.8	10.4
Hydro	28	47	72	85	130	182	211	46	39	25	13	15	13	9.3	3.4	7.4	3.4	1.5	3.6
Geothermal	0	0	0	0	0	1.0	1.0	0	0	0	0	0	0.1	0	-	-	-	0.0	-
Other renewables	0	0	0	3.8	11	17	30	0	0	0	0.6	1.3	1.2	1.3	-	19.2	5.0	5.4	8.3

CO ₂ emissions	Mt-C							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	55	85	171	312	375	550	793	100	100	100	100	100	100	100	5.4	3.1	3.9	3.7	3.7
Coal-derived	38	59	118	211	235	327	466	70	70	69	68	63	59	59	5.3	1.8	3.4	3.6	3.1
Oil-derived	16	25	46	85	117	180	260	29	29	27	27	31	33	33	5.2	5.4	4.4	3.8	4.4
Natural-gas-derived	0.4	0.8	6.3	15	23	43	67	0.7	0.9	3.7	4.8	6.2	7.9	8.5	11.9	7.6	6.4	4.5	5.9

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	117	155	272	591	853	1,528	2,561	5.0	6.3	6.0	5.3	5.8
Population (millions of people)	560	687	850	1,080	1,174	1,313	1,456	2.0	1.4	1.1	1.0	1.2
GDP per capita (US dollars at 2000 value/person)	210	226	321	547	727	1,164	1,759	2.9	4.8	4.8	4.2	4.6
Primary energy consumption per capita (toe/person)	0.11	0.14	0.22	0.33	0.39	0.53	0.69	3.4	2.7	3.1	2.7	2.9
Primary energy consumption per unit of GDP*	521	612	696	607	535	453	393	0.5	-2.1	-1.6	-1.4	-1.7
CO ₂ emissions per unit of GDP**	465	545	626	527	439	360	310	0.4	-3.0	-2.0	-1.5	-2.0
CO ₂ emissions per unit of primary energy consumption***	0.892	0.891	0.900	0.869	0.821	0.795	0.789	-0.1	-0.9	-0.3	-0.1	-0.4
Automobile ownership volume (millions of vehicles)	1.1	1.7	4.3	15	22	42	73	8.1	6.8	6.8	5.7	6.4
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	2.0	2.4	5.1	14	19	32	50	6.0	5.3	5.6	4.6	5.2

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

Indonesia

Primary energy consumption	Mtoe							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	8.8	26	59	127	152	219	316	100	100	100	100	100	100	100	100	100	8.4	3.0	3.7	3.8	3.6
Coal	0.1	0.2	4.0	22	21	39	70	1.5	0.6	6.7	18	14	18	22	16.9	-0.6	6.1	6.1	4.5		
Oil	8.3	21	35	64	83	112	148	94	80	59	51	54	51	47	6.4	4.2	3.1	2.9	3.3		
Natural gas	0.2	4.9	19	34	45	64	93	2.7	19	31	27	29	29	29	16.1	4.8	3.7	3.8	4.0		
Nuclear	0	0	0	0	0	3.7	7.3	0	0	0	0	0	1.7	2.3	-	-	-	7.2	-		
Hydro	0.1	0.2	0.6	0.8	0.9	1.2	1.6	1.4	0.7	1.0	0.7	0.6	0.5	0.5	6.0	0.6	3.0	3.0	2.4		
Geothermal	0	0	0.9	5.7	2.1	2.8	3.7	0	0	1.6	4.5	1.4	1.3	1.2	-	-15.7	3.0	3.0	-1.6		
Other renewables	0	0	0	0	0.1	0.2	0.2	0	0	0	0	0.1	0.1	0.1	-	-	4.0	2.0	-		

Final energy demand	Mtoe							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	6.8	21	36	85	101	148	213	100	100	100	100	100	100	100	100	100	7.9	3.0	3.9	3.7	3.6
Industry	1.7	7.8	15	33	35	49	68	24	38	41	39	34	33	32	9.5	1.0	3.5	3.2	2.8		
Transportation	2.7	6.2	11	28	34	47	63	41	30	32	33	34	32	29	7.3	3.5	3.3	2.9	3.2		
Residential/Commercial	2.3	6.4	9.1	23	31	51	83	34	31	25	27	31	35	39	7.2	5.3	5.1	4.9	5.1		
Non-energy, etc.	0.1	0.3	0.8	1.2	0.7	0.7	0.7	1.2	1.2	2.1	1.4	0.7	0.5	0.3	8.4	-8.4	0.0	0.0	-2.0		
Energy source																					
Total	6.8	21	36	85	101	148	213	100	100	100	100	100	100	100	100	100	7.9	3.0	3.9	3.7	3.6
Coal	0.1	0.1	0.6	8.2	5.0	7.3	10	1.4	0.7	1.7	9.7	4.9	4.9	4.8	14.6	-8.0	3.9	3.5	0.9		
Oil	6.4	18	28	52	68	92	123	95	85	77	62	67	62	58	6.6	4.3	3.2	2.9	3.3		
Natural gas	0.1	2.4	5.3	15	15	23	33	1.5	11	15	18	15	16	16	16.5	-0.8	4.6	3.7	3.0		
Electricity	0.2	0.5	2.3	8.6	14	25	47	2.3	2.6	6.5	10	13	17	22	13.0	7.9	6.5	6.2	6.7		
Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		

Power generation	TWh							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	2.4	8.1	33	120	187	351	644	100	100	100	100	100	100	100	100	100	12.6	7.6	6.5	6.3	6.7
Coal	0	0	11	48	70	147	298	0	0	32	40	37	42	46	-	6.4	7.7	7.3	7.3		
Oil	1.0	5.8	14	36	36	40	45	40	72	43	30	19	11	7.0	11.7	0.0	0.9	1.4	0.9		
Natural gas	0	0	0.8	19	67	132	248	0	0	2.3	16	36	38	38	-	22.9	7.1	6.5	10.3		
Nuclear	0	0	0	0	0	14	28	0	0	0	0	0	4.0	4.4	-	-	-	7.2	-		
Hydro	1.4	2.3	6.7	9.7	10	13	18	60	28	20	8.1	5.3	3.8	2.8	6.0	0.6	3.0	3.0	2.4		
Geothermal	0	0	1.1	6.7	2.4	3.2	4.3	0	0	3.3	5.5	1.3	0.9	0.7	-	-15.7	3.0	3.0	-1.6		
Other renewables	0	0	0	0	1.5	2.3	2.8	0	0	0	0	0.8	0.6	0.4	-	-	4.0	2.0	-		

CO ₂ emissions	Mt-C							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	7.2	21	42	96	117	171	252	100	100	100	100	100	100	100	100	100	8.2	3.4	3.8	3.9	3.8
Coal-derived	0.1	0.2	4.3	24	23	42	76	1.9	0.9	10	25	20	24	30	16.9	-0.6	6.1	6.1	4.5		
Oil-derived	6.9	17	26	51	66	88	117	96	84	62	53	56	52	46	6.2	4.4	3.0	2.8	3.3		
Natural-gas-derived	0.2	3.2	12	22	29	41	59	2.2	15	28	22	24	24	24	16.1	4.8	3.7	3.8	4.0		

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	27	54	99	197	337	523	774	6.2	9.3	4.5	4.0	5.4
Population (millions of people)	120	148	178	218	232	254	270	1.8	1.1	0.9	0.6	0.8
GDP per capita (US dollars at 2000 value/person)	223	361	557	906	1,451	2,060	2,870	4.3	8.2	3.6	3.4	4.5
Primary energy consumption per capita (toe/person)	0.07	0.18	0.33	0.58	0.65	0.86	1.17	6.5	1.9	2.8	3.1	2.7
Primary energy consumption per unit of GDP*	329	492	592	644	451	418	409	2.1	-5.8	-0.7	-0.2	-1.7
CO ₂ emissions per unit of GDP**	268	387	424	489	349	328	325	1.8	-5.5	-0.6	-0.1	-1.6
CO ₂ emissions per unit of primary energy consumption***	0.816	0.787	0.716	0.759	0.774	0.784	0.795	-0.2	0.3	0.1	0.1	0.2
Automobile ownership volume (millions of vehicles)	0.4	1.3	2.8	6.1	9.1	12	15	8.7	7.0	2.8	2.4	3.6
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	3.3	8.7	16	28	39	47	56	6.7	5.8	1.8	1.8	2.7

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

Taiwan

Primary energy consumption	Mtoe							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	11	28	48	103	113	144	174	100	100	100	100	100	100	100	100	100	7.2	1.6	2.4	1.9	2.0
Coal	2.5	3.9	11	37	38	60	83	24	14	23	36	34	42	48	8.5	0.4	4.5	3.4	3.1		
Oil	6.8	21	26	46	46	52	60	65	72	54	45	41	36	34	6.0	0.2	1.1	1.4	1.0		
Natural gas	0.9	1.6	1.7	8.9	12	17	20	8.6	5.6	3.6	8.6	11	12	11	7.2	5.2	3.7	1.4	3.2		
Nuclear	0	2.1	8.6	10	15	13	9.0	0	7.5	18	10	14	9.1	5.2	-	7.0	-1.7	-3.6	-0.5		
Hydro	0.3	0.3	0.7	0.6	0.6	0.6	0.6	2.5	0.9	1.5	0.5	0.5	0.4	0.4	2.3	0.9	0.5	0.0	0.4		
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Other renewables	0	0	0	0	0.3	0.6	0.7	0	0	0	0	0.3	0.4	0.4	-	-	6.3	1.7	-		

Final energy demand	Mtoe							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	7.8	19	31	64	70	87	104	100	100	100	100	100	100	100	100	100	6.6	1.6	2.2	1.8	1.9
Industry	4.5	12	17	36	38	47	57	57	61	53	56	54	54	55	6.5	1.0	2.1	2.0	1.8		
Transportation	1.3	3.4	7.5	15	16	18	19	17	18	24	23	23	21	19	7.6	1.3	1.3	0.8	1.1		
Residential/Commercial	1.6	3.6	6.3	12	14	19	24	21	19	20	18	20	22	24	6.1	3.2	3.2	2.5	2.9		
Non-energy, etc.	0.4	0.4	0.9	1.6	2.2	2.7	3.2	5.1	2.2	2.8	2.6	3.1	3.1	3.1	4.4	4.8	2.2	1.8	2.6		
Energy source																					
Total	7.8	19	31	64	70	87	104	100	100	100	100	100	100	100	100	100	6.6	1.6	2.2	1.8	1.9
Coal	2.2	2.2	4.0	7.0	8.3	9.6	10	29	11	13	11	12	11	10	3.5	2.9	1.4	0.9	1.5		
Oil	3.7	12	20	38	42	49	56	48	65	64	60	60	56	54	7.3	1.4	1.5	1.4	1.5		
Natural gas	0.7	1.4	0.9	1.8	1.9	2.3	2.7	8.4	7.1	3.0	2.8	2.7	2.7	2.6	3.1	1.2	2.0	1.7	1.7		
Electricity	1.2	3.2	6.5	16	18	26	34	15	17	21	26	26	30	33	8.4	1.6	3.7	2.9	2.9		
Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Renewables	0	0	0	0	0.3	0.6	0.7	0	0	0	0	0.4	0.6	0.6	-	-	6.2	1.7	-		

Power generation	TWh							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	16	43	90	215	246	352	466	100	100	100	100	100	100	100	100	100	8.2	2.3	3.7	2.8	3.0
Coal	1.9	6.0	26	116	118	212	327	12	14	29	54	48	60	70	13.2	0.3	6.0	4.5	4.1		
Oil	11	26	22	16	9.5	3.5	3.6	68	60	25	7.2	3.9	1.0	0.8	1.1	-7.8	-9.4	0.3	-5.4		
Natural gas	0	0	1.1	37	52	80	93	0	0	1.3	17	21	23	20	-	5.6	4.4	1.6	3.6		
Nuclear	0	8.2	33	39	59	50	35	0	19	36	18	24	14	7.4	-	7.0	-1.7	-3.6	-0.5		
Hydro	3.1	2.9	8.2	6.6	6.9	7.2	7.2	20	6.9	9.1	3.1	2.8	2.1	1.6	2.3	0.9	0.5	0.0	0.4		
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Other renewables	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	-	-	13.1	5.0	-		

CO ₂ emissions	Mt-C							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	8.7	21	32	74	75	102	129	100	100	100	100	100	100	100	100	100	6.7	0.3	3.1	2.4	2.2
Coal-derived	2.7	4.2	12	40	42	65	90	32	20	38	55	55	64	70	8.5	0.4	4.5	3.4	3.1		
Oil-derived	5.3	16	19	27	26	26	27	62	75	58	37	34	26	21	5.1	-1.1	0.1	0.2	-0.1		
Natural-gas-derived	0.6	1.0	1.1	5.7	7.7	11	13	6.7	4.9	3.5	7.7	10	11	9.9	7.2	5.2	3.7	1.4	3.2		

Energy and economic indicators								AAGR(%)					
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030	
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030	
GDP (billions of US dollars at 2000 value)	34	75	161	349	430	619	800	7.4	3.6	3.7	2.6	3.2	
Population (millions of people)	15	18	20	23	23	24	23	1.3	0.4	0.2	-0.1	0.1	
GDP per capita (US dollars at 2000 value/person)	2,262	4,270	7,979	15,444	18,591	26,251	34,396	6.0	3.1	3.5	2.7	3.1	
Primary energy consumption per capita (toe/person)	0.71	1.62	2.38	4.57	4.89	6.09	7.46	5.8	1.2	2.2	2.1	1.9	
Primary energy consumption per unit of GDP*	313	378	298	296	263	232	217	-0.2	-1.9	-1.3	-0.7	-1.2	
CO ₂ emissions per unit of GDP**	258	277	197	211	174	165	162	-0.6	-3.2	-0.6	-0.2	-1.0	
CO ₂ emissions per unit of primary energy consumption***	0.826	0.732	0.662	0.714	0.661	0.710	0.746	-0.4	-1.3	0.7	0.5	0.2	
Automobile ownership volume (millions of vehicles)	0.1	0.5	2.8	6.7	7.0	8.1	8.8	13.2	0.8	1.5	0.8	1.1	
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	0	27	137	296	303	346	379	-	0.4	1.3	0.9	1.0	

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

Malaysia

Primary energy consumption	Mtoe							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	4.8	11	21	54	103	141	171	100	100	100	100	100	100	100	100	100	7.6	11.4	3.2	1.9	4.5
Coal	0	0	1.0	5.7	19	30	39	0.2	0.4	5.1	11	18	21	23	21.8	21.8	4.8	2.8	7.7		
Oil	4.6	8.4	13	27	33	43	53	96	79	63	50	32	31	31	5.5	3.3	2.7	2.1	2.6		
Natural gas	0.1	2.0	6.1	20	51	67	76	1.5	19	30	38	49	47	45	18.7	16.3	2.8	1.3	5.2		
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Hydro	0.1	0.1	0.3	0.5	0.7	1.1	1.8	1.9	1.1	1.7	0.9	0.7	0.8	1.0	5.3	5.1	5.0	5.0	5.0		
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Other renewables	0	0	0	0	0.1	0.2	0.3	0	0.1	0	0	0.1	0.2	0.2	-	-	9.3	4.7	-		

Final energy demand	Mtoe							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	3.9	6.4	13	37	63	86	105	100	100	100	100	100	100	100	100	100	7.1	9.2	3.2	2.1	4.1
Industry	2.1	2.9	5.7	16	36	50	58	54	45	44	44	58	58	55	6.4	14.5	3.2	1.6	5.0		
Transportation	1.5	2.5	5.5	15	18	23	29	39	38	42	42	28	27	28	7.3	2.3	2.7	2.4	2.5		
Residential/Commercial	0.3	0.8	1.7	4.8	6.3	9.6	14	7.0	13	13	13	10	11	14	9.1	4.4	4.4	4.1	4.3		
Non-energy, etc.	0	0.3	0.2	0.6	2.3	3.2	3.8	0	4.2	1.7	1.7	3.7	3.8	3.6	21.5	24.8	3.3	1.6	7.2		
Energy source																					
Total	3.9	6.4	13	37	63	86	105	100	100	100	100	100	100	100	100	100	7.1	9.2	3.2	2.1	4.1
Coal	0	0	0.4	1.0	2.7	3.8	4.5	0.2	0.6	3.2	2.7	4.3	4.4	4.3	15.5	17.9	3.5	1.8	6.0		
Oil	3.6	5.6	10	23	29	36	44	92	87	76	62	46	43	42	5.8	3.9	2.4	1.9	2.6		
Natural gas	0	0	1.0	6.5	14	19	23	0.2	0.5	7.5	18	22	23	22	23.4	13.7	3.3	2.0	5.1		
Electricity	0.3	0.7	1.7	6.6	17	26	33	7.3	12	13	18	27	30	32	10.0	17.1	4.3	2.5	6.4		
Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		

Power generation	TWh							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	3.8	10	23	83	224	341	435	100	100	100	100	100	100	100	100	100	9.8	18.0	4.3	2.5	6.6
Coal	0	0	2.8	23	69	117	163	0	0	12	28	31	34	38	-	19.9	5.5	3.4	7.8		
Oil	2.7	8.5	11	2.7	0.6	0.3	0.2	72	85	50	3.3	0.3	0.1	0	0.0	-21.4	-6.6	-4.5	-9.5		
Natural gas	0	0.1	4.7	51	146	208	246	0	1.1	20	62	65	61	57	-	19.0	3.6	1.7	6.2		
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Hydro	1.0	1.4	4.0	5.8	7.8	13	21	28	14	17	7.0	3.5	3.7	4.8	5.3	5.1	5.0	5.0	5.0		
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-		
Other renewables	0	0	0	0	1.1	2.6	4.1	0	0	0	0	0.5	0.7	0.9	-	-	9.3	4.7	-		

CO ₂ emissions	Mt-C							Share, %							AAGR(%)						
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030		
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030		
Total	3.9	8.1	16	41	78	108	133	100	100	100	100	100	100	100	100	100	7.4	11.2	3.3	2.0	4.6
Coal-derived	0	0	1.1	6.2	20	32	43	0.2	0.5	7.1	15	26	30	32	21.8	21.8	4.8	2.8	7.7		
Oil-derived	3.9	6.8	11	22	26	33	41	99	84	68	53	33	31	31	5.4	2.6	2.6	2.2	2.4		
Natural-gas-derived	0	1.3	3.9	13	33	43	49	1.2	16	25	32	41	39	37	18.7	16.3	2.8	1.3	5.2		

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	13	25	45	107	180	294	457	6.7	9.1	5.0	4.5	5.7
Population (millions of people)	11	14	18	25	28	32	36	2.5	1.9	1.4	1.1	1.4
GDP per capita (US dollars at 2000 value/person)	1,137	1,848	2,498	4,290	6,485	9,201	12,828	4.1	7.1	3.6	3.4	4.3
Primary energy consumption per capita (toe/person)	0.43	0.77	1.13	2.17	3.71	4.42	4.80	5.0	9.4	1.8	0.8	3.1
Primary energy consumption per unit of GDP*	378	414	451	505	572	480	374	0.9	2.1	-1.7	-2.5	-1.1
CO ₂ emissions per unit of GDP**	309	319	346	388	435	369	291	0.7	1.9	-1.6	-2.4	-1.1
CO ₂ emissions per unit of primary energy consumption***	0.819	0.769	0.768	0.768	0.760	0.769	0.777	-0.2	-0.2	0.1	0.1	0.0
Automobile ownership volume (millions of vehicles)	0.4	0.9	2.4	6.7	8.0	10	12	9.0	3.0	2.2	1.7	2.2
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	35	65	133	270	289	312	332	6.4	1.1	0.8	0.6	0.8

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

Philippines

Primary energy consumption	Mtoe							Share, %							AAGR(%)							
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030			
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030			
Total	8.6	13	19	34	45	68	98	100	100	100	100	100	100	100	100	100	100	4.2	4.8	4.3	3.8	4.2
Coal	0	0.4	1.3	5.4	6.5	8.5	16	0.3	2.7	7.0	16	15	13	16	17.2	3.1	2.7	6.4	4.2			
Oil	8.4	11	12	17	18	28	43	98	82	65	50	41	42	44	2.1	1.4	4.5	4.3	3.7			
Natural gas	0	0	0	2.0	6.4	12	16	0	0	0	6.0	14	17	16	-	21.3	6.2	3.1	8.3			
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-			
Hydro	0.2	0.3	0.5	0.7	0.9	1.3	1.4	1.9	2.3	2.8	2.2	2.1	1.9	1.5	4.6	3.9	3.1	1.3	2.6			
Geothermal	0	1.8	4.7	8.8	13	18	22	0	13.3	25.4	26.2	28.2	26.6	22.7	-	6.0	3.7	2.2	3.6			
Other renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	7.3	3.7	-			

Final energy demand	Mtoe							Share, %							AAGR(%)							
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030			
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030			
Total	6.1	7.9	9.5	19	25	39	59	100	100	100	100	100	100	100	100	100	100	3.5	5.2	4.5	4.1	4.5
Industry	1.8	3.0	3.1	4.3	6.2	8.1	10	30	38	33	23	25	20	17	2.6	6.4	2.6	2.2	3.3			
Transportation	2.4	1.9	2.7	9.2	12	21	34	40	25	28	49	47	54	58	4.2	4.5	5.8	5.0	5.2			
Residential/Commercial	1.6	2.7	3.5	4.9	6.8	9.9	14	27	34	37	26	27	25	24	3.4	5.7	3.9	3.6	4.2			
Non-energy, etc.	0.2	0.2	0.2	0.4	0.3	0.3	0.3	3.7	3.2	2.4	1.9	1.3	0.8	0.6	1.4	-1.7	0.0	0.6	-0.2			
Energy source																						
Total	6.1	7.9	9.5	19	25	39	59	100	100	100	100	100	100	100	100	100	100	3.5	5.2	4.5	4.1	4.5
Coal	0	0.2	0.4	1.2	1.3	1.7	2.0	0.1	2.6	4.7	6.3	5.3	4.3	3.4	18.1	2.3	2.4	1.6	2.1			
Oil	5.4	6.2	7.3	14	17	27	41	88	79	76	73	67	68	69	2.9	3.6	4.6	4.2	4.2			
Natural gas	0	0	0	0	1.5	2.0	2.5	0	0	0	0	5.8	5.0	4.2	-	-	3.0	2.3	-			
Electricity	0.7	1.5	1.8	3.8	5.5	9.0	14	12	19	19	20	22	23	24	5.2	6.4	5.1	4.5	5.1			
Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-			
Renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-100.0	-	-	-100.0			

Power generation	TWh							Share, %							AAGR(%)							
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030			
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030			
Total	9.1	18	25	56	81	134	209	100	100	100	100	100	100	100	100	100	100	5.6	6.3	5.2	4.5	5.2
Coal	0	0.2	1.9	16	21	29	62	0.1	1.0	7.7	29	26	22	30	24.4	4.5	3.3	7.9	5.3			
Oil	7.2	12	12	8.5	2.9	4.1	8.7	79	68	47	15	3.7	3.0	4.2	0.5	-16.2	3.3	7.9	0.1			
Natural gas	0	0	0	12	31	65	95	0	0	0	22	38	49	45	-	16.5	7.7	3.9	8.2			
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-			
Hydro	1.9	3.5	6.1	8.6	11	15	17	21	20	24	15	13	11	8.0	4.6	3.9	3.1	1.3	2.6			
Geothermal	0	2.1	5.5	10	15	21	26	0	12	22	18	18	16	12	-	6.0	3.7	2.2	3.6			
Other renewables	0	0	0	0	0.3	0.6	0.8	0	0	0	0	0.4	0.4	0.4	-	-	7.0	3.6	-			

CO ₂ emissions	Mt-C							Share, %							AAGR(%)							
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030			
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030			
Total	6.8	9.3	11	21	26	40	63	100	100	100	100	100	100	100	100	100	100	3.4	3.9	4.3	4.6	4.3
Coal-derived	0	0.4	1.4	5.8	7.0	9.1	17	0.5	4.2	12	28	27	23	27	17.2	3.1	2.7	6.4	4.2			
Oil-derived	6.8	8.9	9.9	14	15	23	36	99.5	96	88	66	57	58	57	2.1	1.5	4.5	4.3	3.7			
Natural-gas-derived	0	0	0	1.3	4.1	7.5	10	0	0	0	6.2	16	19	16	-	21.3	6.2	3.1	8.3			

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	28	48	56	89	113	171	253	3.5	4.2	4.2	4.0	4.1
Population (millions of people)	38	48	61	82	92	105	116	2.4	2.0	1.4	1.0	1.4
GDP per capita (US dollars at 2000 value/person)	751	990	921	1,085	1,235	1,625	2,178	1.1	2.2	2.8	3.0	2.7
Primary energy consumption per capita (toe/person)	0.23	0.28	0.30	0.41	0.49	0.64	0.85	1.8	2.8	2.8	2.8	2.8
Primary energy consumption per unit of GDP*	303	281	329	380	394	396	388	0.7	0.6	0.1	-0.2	0.1
CO ₂ emissions per unit of GDP**	242	195	200	235	231	234	248	-0.1	-0.3	0.1	0.6	0.2
CO ₂ emissions per unit of primary energy consumption***	0.799	0.691	0.608	0.618	0.586	0.591	0.639	-0.8	-0.9	0.1	0.8	0.1
Automobile ownership volume (millions of vehicles)	0.5	0.9	1.2	2.9	3.3	7.2	12	5.6	2.0	8.3	5.6	5.8
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	13	18	20	35	36	69	107	3.2	0.1	6.8	4.5	4.3

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

Thailand

Primary energy consumption	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	6.5	12	29	81	100	159	233	100	100	100	100	100	100	100	7.9	3.6	4.7	3.9	4.1
Coal	0.1	0.5	3.8	10	15	30	62	1.7	3.9	13	13	15	19	27	14.7	6.1	7.5	7.4	7.1
Oil	6.2	12	20	46	47	73	102	96	95	68	56	47	46	44	6.2	0.5	4.5	3.4	3.2
Natural gas	0	0	5.1	24	36	54	67	0	0	17	30	36	34	29	-	6.9	4.0	2.2	3.9
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
Hydro	0.2	0.1	0.4	0.5	0.6	0.6	0.6	2.7	0.9	1.5	0.6	0.6	0.4	0.3	3.3	3.2	0.0	0.0	0.7
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-100.0	-	-	-100.0	-
Other renewables	0	0.1	0.1	0.3	1.6	1.6	2.7	0.0	0.5	0.2	0.3	1.6	1.0	1.1	-	35.3	0.2	5.1	9.4

Final energy demand	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	5.4	9.2	22	54	70	110	165	100	100	100	100	100	100	100	7.2	4.3	4.7	4.1	4.4
Industry	1.6	2.7	6.0	21	30	52	80	30	29	28	38	43	47	49	8.0	6.2	5.7	4.5	5.4
Transportation	2.3	4.0	11	22	26	38	54	43	43	51	40	37	35	33	7.0	3.1	4.0	3.5	3.6
Residential/Commercial	1.1	2.4	4.5	11	13	19	29	21	26	21	20	19	17	18	7.0	3.4	3.8	4.5	4.0
Non-energy, etc.	0.3	0.2	0.2	1.0	1.0	1.0	1.0	5.0	1.7	1.0	1.9	1.4	0.9	0.6	4.2	-0.4	0.0	0.0	-0.1
Energy source																			
Total	5.4	9.2	22	54	70	110	165	100	100	100	100	100	100	100	7.2	4.3	4.7	4.1	4.4
Coal	0	0.1	1.3	5.6	8.1	13	18	0.4	1.0	6.1	10	12	12	11	18.7	6.2	4.6	3.4	4.5
Oil	5.0	8.0	17	36	43	65	92	93	87	78	67	62	59	56	6.2	3.0	4.1	3.6	3.6
Natural gas	0	0	0.2	2.1	3.4	6.7	12	0	0	1.1	4.0	4.8	6.1	7.2	-	7.8	7.1	5.9	6.8
Electricity	0.4	1.1	3.3	9.9	15	26	43	7.0	12	15	18	21	23	26	10.4	6.9	5.7	5.3	5.8
Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
Renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-

Power generation	TWh							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	5.1	14	44	123	178	303	508	100	100	100	100	100	100	100	10.1	6.4	5.4	5.3	5.6
Coal	0.3	1.4	11	20	22	64	193	6.1	9.8	25	16	12	21	38	13.5	1.5	11.3	11.7	9.1
Oil	2.7	12	10	7.7	3.8	1.8	2.0	54	81	23	6.3	2.1	0.6	0.4	3.2	-11.2	-7.2	1.2	-5.0
Natural gas	0	0	18	89	145	229	293	0	0	40	73	82	76	58	-	8.5	4.7	2.5	4.7
Nuclear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
Hydro	2.0	1.3	5.0	6.0	7.3	7.3	7.3	40	8.8	11	4.9	4.1	2.4	1.4	3.3	3.2	0.0	0.0	0.7
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-100.0	-	-	-100.0	-
Other renewables	0	0	0	0	4.6	9.6	30	0	0	0	0	2.6	3.2	6.0	-	-	7.7	12.3	-

CO ₂ emissions	Mt-C							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
Total	5.1	10	24	63	76	120	166	100	100	100	100	100	100	100	7.9	3.2	4.6	3.3	3.8
Coal-derived	0.1	0.5	4.1	11	16	33	67	2.4	5.1	17	18	21	27	40	14.7	6.0	7.5	7.4	7.1
Oil-derived	5.0	9.5	16	37	37	53	56	98	95	69	58	49	44	34	6.2	0.2	3.6	0.6	1.7
Natural-gas-derived	0	0	3.3	16	23	34	43	0	0	14	25	31	29	26	-	6.9	4.0	2.2	4.0

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	1971	1980	1990	2004	2010	2020	2030	2004	2010	2020	2030	2030
GDP (billions of US dollars at 2000 value)	20	37	79	150	200	323	516	6.3	4.9	4.9	4.8	4.9
Population (millions of people)	37	47	56	64	66	70	73	1.7	0.5	0.6	0.4	0.5
GDP per capita (US dollars at 2000 value/person)	547	798	1,427	2,356	3,046	4,620	7,105	4.5	4.4	4.3	4.4	4.3
Primary energy consumption per capita (toe/person)	0.18	0.26	0.53	1.27	1.53	2.28	3.21	6.2	3.1	4.1	3.5	3.6
Primary energy consumption per unit of GDP*	324	326	368	541	502	494	452	1.6	-1.2	-0.2	-0.9	-0.7
CO ₂ emissions per unit of GDP**	254	269	300	423	383	373	322	1.6	-1.7	-0.2	-1.5	-1.0
CO ₂ emissions per unit of primary energy consumption***	0.785	0.823	0.815	0.782	0.762	0.755	0.712	0.0	-0.4	-0.1	-0.6	-0.4
Automobile ownership volume (millions of vehicles)	0.4	0.9	2.8	6.7	10	19	35	8.9	6.9	6.6	6.1	6.5
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	11	19	51	105	153	273	476	7.1	6.4	6.0	5.7	6.0

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

Vietnam

Primary energy consumption	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	Total	7.3	4.2	5.4	27	28	48	81	100	100	100	100	100	100	100	4.0	1.0	5.5	5.3
Coal	1.4	2.3	2.2	8.3	7.4	13	22	20	54	41	31	26	28	27	5.5	-2.0	6.2	4.8	3.7
Oil	5.8	1.8	2.7	12	14	24	38	80	43	50	45	50	50	47	2.2	2.8	5.3	4.6	4.5
Natural gas	0	0	0	4.6	4.1	7.2	13	0	0	0	17	15	15	16	-	-1.8	5.6	6.0	4.0
Nuclear	0	0	0	0	0	0	3.7	0	0	0	0	0	0	4.5	-	-	-	-	-
Hydro	0.1	0.1	0.5	1.5	2.7	4.0	5.1	0.7	3.0	8.5	5.7	9.7	8.2	6.3	10.7	10.2	3.8	2.5	4.8
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	-	-	0.0	0.0	-
Other renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0.0	0.0	-

Final energy demand	Mtoe							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	Total	6.9	3.4	4.2	22	23	40	65	100	100	100	100	100	100	100	3.5	1.1	5.5	5.1
Industry	0	1.5	1.7	9.1	8.8	17	30	0.1	45	41	42	38	42	47	25.7	-0.4	6.6	6.2	4.8
Transportation	3.3	0.6	1.4	7.1	7.3	11	16	48	19	33	33	32	28	25	2.3	0.6	4.2	4.0	3.3
Residential/Commercial	3.6	1.2	1.1	5.4	6.4	11	17	52	35	25	25	28	27	26	1.2	3.0	5.3	4.6	4.5
Non-energy, etc.	0	0	0	0.2	0.6	1.1	1.7	0.3	1.3	0.7	0.8	2.7	2.7	2.6	6.4	22.4	5.4	4.8	8.9
Energy source																			
Total	6.9	3.4	4.2	22	23	40	65	100	100	100	100	100	100	100	3.5	1.1	5.5	5.1	4.3
Coal	1.0	1.5	1.3	6.7	5.5	8.5	13	14	44	32	31	24	22	20	6.0	-3.0	4.4	4.2	2.6
Oil	5.8	1.7	2.4	12	13	23	37	84	49	56	53	56	58	56	2.1	2.0	5.7	4.9	4.5
Natural gas	0	0	0	0	0.1	0.4	2.6	0	0	0	0.1	0.3	1.1	4.0	-	21.8	20.0	20.0	20.4
Electricity	0.2	0.2	0.5	3.4	4.5	7.8	13	2.2	6.8	13	16	19	20	20	9.8	4.7	5.7	5.2	5.3
Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-
Renewables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-

Power generation	TWh							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	Total	2.3	3.6	8.7	46	62	107	177	100	100	100	100	100	100	100	9.5	5.1	5.6	5.1
Coal	1.7	1.4	2.0	7.0	8.3	25	49	73	40	23	15	13	23	28	4.4	2.9	11.7	6.8	7.7
Oil	0	0.7	1.3	1.7	3.2	4.2	5.5	0	18	15	3.7	5.2	3.9	3.1	-	11.3	2.7	2.7	4.6
Natural gas	0	0	0	20	19	34	55	0	0	0.1	43	31	32	31	-	-0.4	5.9	5.0	4.1
Nuclear	0	0	0	0	0	0	14	0	0	0	0	0	0	7.9	-	-	-	-	-
Hydro	0.6	1.5	5.4	18	32	46	59	27	42	62	38	51	43	33	10.7	10.2	3.8	2.5	4.8
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0.0	0.0	-
Other renewables	0	0	0	0	0.1	0.1	0.1	0	0	0	0	0.2	0.1	0.1	-	-	0.0	0.0	-

CO ₂ emissions	Mt-C							Share, %							AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	Total	6.4	4.0	4.7	22	22	39	63	100	100	100	100	100	100	100	3.8	0.2	5.8	4.9
Coal-derived	1.5	2.5	2.4	9.0	8.0	15	23	24	62	51	41	36	38	37	5.5	-2.1	6.2	4.8	3.7
Oil-derived	4.9	1.5	2.3	9.9	12	20	31	76	38	49	45	52	51	50	2.2	2.5	5.4	4.7	4.5
Natural-gas-derived	0	0	0	3.0	2.7	4.6	8.2	0	0	0	14	12	12	13	-	-1.8	5.6	6.0	4.0

Energy and economic indicators								AAGR(%)				
	1971	1980	1990	2004	2010	2020	2030	1971-2004	2004-2010	2010-2020	2020-2030	2004-2030
	GDP (billions of US dollars at 2000 value)	8.3	8.8	15	41	62	117	210	5.0	7.1	6.5	6.0
Population (millions of people)	44	54	66	82	89	99	107	1.9	1.3	1.1	0.8	1.0
GDP per capita (US dollars at 2000 value/person)	191	164	227	502	701	1,181	1,955	3.0	5.7	5.4	5.2	5.4
Primary energy consumption per capita (toe/person)	0.17	0.08	0.08	0.32	0.32	0.48	0.75	2.0	-0.3	4.3	4.5	3.3
Primary energy consumption per unit of GDP*	876	484	361	643	453	410	384	-0.9	-5.7	-1.0	-0.6	-2.0
CO ₂ emissions per unit of GDP**	767	451	311	530	355	331	298	-1.1	-6.5	-0.7	-1.0	-2.2
CO ₂ emissions per unit of primary energy consumption***	0.876	0.933	0.861	0.824	0.784	0.806	0.775	-0.2	-0.8	0.3	-0.4	-0.2
Automobile ownership volume (millions of vehicles)	0.2	0.2	0.2	0.4	0.7	1.3	2.4	2.5	8.5	6.5	6.0	6.8
Automobile ownership volume per 1,000 population (vehicles per 1,000 population)	4.4	4.0	3.6	5.2	7.9	13	22	0.5	7.1	5.4	5.2	5.7

* Toe / millions of US dollar at 2000 value

** T-C / millions of US dollar at 2000 value

*** T-C / toe

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