

High Economic Growth Case Projections:

- **World Energy Consumption**
- **Gross Domestic Product**
- **Carbon Dioxide Emissions**

Table B1. World Total Primary Energy Consumption by Region, High Economic Growth Case, 1990-2030
(Quadrillion Btu)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	100.7	120.6	121.3	127.7	136.0	144.5	153.3	162.6	1.2
United States ^a	84.7	100.1	100.1	104.5	110.2	116.0	122.1	128.4	1.0
Canada	11.0	14.0	14.3	15.8	17.1	18.4	19.7	21.2	1.6
Mexico	5.0	6.5	6.9	7.5	8.7	10.0	11.5	13.1	2.6
OECD Europe	70.0	81.0	81.4	84.5	89.1	92.3	95.8	99.3	0.8
OECD Asia	26.8	37.8	38.2	39.6	42.6	44.8	46.9	49.3	1.0
Japan	18.5	22.7	22.6	22.6	23.5	24.1	24.7	25.3	0.5
South Korea	3.8	9.0	9.3	10.4	12.0	13.1	14.1	15.4	2.0
Australia/New Zealand	4.5	6.1	6.3	6.6	7.1	7.5	8.1	8.6	1.2
Total OECD	197.5	239.4	240.9	251.9	267.7	281.5	296.0	311.2	1.0
Non-OECD									
Non-OECD Europe and Eurasia . . .	67.3	49.5	50.7	55.6	61.4	66.8	71.4	76.7	1.7
Russia	39.4	29.9	30.3	33.0	36.0	38.7	40.9	43.6	1.5
Other	28.0	19.6	20.4	22.6	25.4	28.1	30.5	33.0	2.0
Non-OECD Asia	47.4	101.0	109.9	139.4	171.0	201.2	233.2	265.8	3.6
China	27.0	59.9	67.1	89.0	108.6	128.2	149.3	170.4	3.8
India	7.9	15.5	16.2	19.7	24.1	28.2	32.3	36.4	3.3
Other Non-OECD Asia	12.5	25.6	26.6	30.7	38.3	44.8	51.6	59.0	3.2
Middle East	11.2	20.9	22.9	26.6	30.6	34.6	37.9	41.4	2.4
Africa	9.5	14.0	14.4	16.6	19.6	22.2	24.5	26.8	2.5
Central and South America	14.5	22.5	23.4	27.9	31.6	35.3	39.0	43.0	2.5
Brazil	5.7	9.0	9.3	11.2	13.1	15.0	16.9	19.1	2.9
Other Central and South America . .	8.8	13.5	14.1	16.7	18.5	20.3	22.1	23.9	2.1
Total Non-OECD	149.9	207.9	221.3	266.1	314.0	360.1	406.0	453.7	2.9
Total World	347.4	447.3	462.2	518.0	581.7	641.5	701.9	764.9	2.0

^aIncludes the 50 States and the District of Columbia.

Notes: Energy totals include net imports of coal coke and electricity generated from biomass in the United States. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B2. World Total Energy Consumption by Region and Fuel, High Economic Growth Case, 1990-2030
(Quadrillion Btu)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America									
Liquids	40.5	48.9	49.1	50.2	53.2	55.2	57.5	60.6	0.8
Natural Gas	23.2	28.1	28.0	30.3	32.1	32.6	33.8	35.1	0.9
Coal	20.6	24.5	24.8	25.3	27.1	30.2	32.8	35.7	1.5
Nuclear.....	6.9	9.3	9.3	9.7	9.8	10.8	11.7	12.7	1.3
Other	9.5	9.8	10.2	12.3	13.9	15.7	17.5	18.5	2.4
Total.....	100.7	120.6	121.3	127.7	136.0	144.5	153.3	162.6	1.2
OECD Europe									
Liquids	28.4	32.0	32.1	32.1	33.8	34.6	35.3	36.1	0.5
Natural Gas	11.2	19.4	19.9	21.5	24.0	26.5	28.2	30.1	1.7
Coal	17.7	13.3	13.2	13.9	14.1	13.9	13.7	13.5	0.1
Nuclear.....	7.9	9.9	9.8	9.8	9.8	9.1	9.5	9.9	0.1
Other	4.8	6.3	6.5	7.3	7.5	8.3	9.1	9.6	1.6
Total.....	70.0	81.0	81.4	84.5	89.1	92.3	95.8	99.3	0.8
OECD Asia									
Liquids	14.7	17.3	17.5	17.2	18.5	19.3	20.1	20.9	0.7
Natural Gas	2.9	5.6	5.6	6.2	6.9	7.4	7.7	8.1	1.5
Coal	5.2	9.2	9.3	9.7	9.9	10.1	10.4	10.9	0.6
Nuclear.....	2.5	4.0	4.2	4.5	5.2	5.8	6.3	6.9	2.0
Other	1.6	1.8	1.6	1.9	2.1	2.2	2.4	2.5	2.0
Total.....	26.8	37.8	38.2	39.6	42.6	44.8	46.9	49.3	1.0
Total OECD									
Liquids	83.6	98.2	98.7	99.5	105.4	109.1	112.9	117.5	0.7
Natural Gas	37.2	53.1	53.4	57.9	63.0	66.4	69.8	73.4	1.3
Coal	43.5	47.0	47.3	49.0	51.1	54.2	56.9	60.1	1.0
Nuclear.....	17.3	23.1	23.2	24.0	24.8	25.7	27.5	29.5	1.0
Other	15.9	17.9	18.2	21.5	23.4	26.1	28.9	30.6	2.1
Total.....	197.5	239.4	240.9	251.9	267.7	281.5	296.0	311.2	1.0
Non-OECD									
Non-OECD Europe and Eurasia									
Liquids	19.6	9.8	10.0	11.3	12.6	13.7	14.8	15.9	1.9
Natural Gas	27.5	25.1	26.0	28.4	31.0	33.5	35.5	38.2	1.5
Coal	15.1	8.7	8.8	9.0	10.3	10.9	11.3	12.3	1.3
Nuclear.....	2.5	2.9	2.8	3.1	3.6	4.6	5.5	5.7	2.9
Other	2.8	3.0	3.1	3.8	3.9	4.0	4.3	4.5	1.5
Total.....	67.3	49.5	50.7	55.6	61.4	66.8	71.4	76.7	1.7
Non-OECD Asia									
Liquids	14.0	30.5	31.5	37.7	45.7	53.6	61.8	71.1	3.3
Natural Gas	3.0	8.9	9.8	13.4	18.3	23.6	27.9	32.1	4.9
Coal	27.0	54.9	60.9	78.1	94.7	109.0	124.8	140.6	3.4
Nuclear.....	0.4	1.1	1.1	1.6	3.2	4.9	6.5	7.4	7.9
Other	3.0	5.6	6.6	8.6	9.1	10.1	12.4	14.6	3.2
Total.....	47.4	101.0	109.9	139.4	171.0	201.2	233.2	265.8	3.6

See notes at end of table.

Table B2. World Total Energy Consumption by Region and Fuel, High Economic Growth Case, 1990-2030
(Continued)
 (Quadrillion Btu)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
Non-OECD (Continued)									
Middle East									
Liquids	7.2	11.3	12.0	14.0	15.9	18.0	20.0	22.1	2.5
Natural Gas	3.8	9.0	10.2	11.9	13.8	15.7	17.0	18.4	2.4
Coal	0.1	0.4	0.4	0.5	0.5	0.5	0.5	0.5	1.1
Nuclear.....	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	—
Other	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	2.8
Total.....	11.2	20.9	22.9	26.6	30.6	34.6	37.9	41.4	2.4
Africa									
Liquids	4.3	5.8	6.0	7.0	7.8	8.7	9.3	9.9	2.0
Natural Gas	1.5	2.8	3.2	3.9	5.0	6.3	7.4	8.4	4.0
Coal	3.0	4.3	4.2	4.5	5.3	5.6	6.0	6.2	1.6
Nuclear.....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	2.7
Other	0.6	0.9	0.9	1.1	1.3	1.4	1.6	2.0	3.2
Total.....	9.5	14.0	14.4	16.7	19.6	22.2	24.5	26.8	2.5
Central and South America									
Liquids	7.8	11.0	11.2	13.0	14.1	15.3	16.6	18.1	1.9
Natural Gas	2.2	4.4	4.7	6.1	7.4	8.3	9.4	10.4	3.2
Coal	0.6	0.8	0.9	1.4	1.7	1.8	1.9	2.1	3.5
Nuclear.....	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	3.4
Other	3.9	6.1	6.4	7.2	8.2	9.4	10.7	12.0	2.5
Total.....	14.5	22.5	23.4	27.9	31.6	35.3	39.0	43.0	2.5
Total Non-OECD									
Liquids	52.9	68.4	70.8	83.1	96.1	109.3	122.5	137.1	2.7
Natural Gas	38.0	50.2	53.9	63.7	75.4	87.4	97.1	107.5	2.8
Coal	45.7	69.1	75.2	93.3	112.4	127.9	144.5	161.8	3.1
Nuclear.....	3.1	4.3	4.2	5.1	7.3	10.2	12.6	13.9	4.9
Other	10.3	15.9	17.2	20.9	22.8	25.3	29.3	33.5	2.7
Total.....	149.9	207.9	221.3	266.2	314.0	360.1	406.0	453.6	2.9
Total World									
Liquids	136.4	166.6	169.4	182.6	201.5	218.4	235.3	254.6	1.6
Natural Gas	75.2	103.3	107.4	121.6	138.4	153.8	166.8	180.9	2.1
Coal	89.2	116.1	122.5	142.3	163.5	182.0	201.4	221.9	2.4
Nuclear.....	20.4	27.4	27.5	29.1	32.1	35.9	40.2	43.3	1.8
Other	26.2	33.8	35.5	42.5	46.2	51.4	58.2	64.1	2.4
Total.....	347.4	447.3	462.2	518.0	581.7	641.6	702.0	764.8	2.0

Notes: Energy totals include net imports of coal coke and electricity generated from biomass in the United States. Totals may not equal sum of components due to independent rounding. The electricity portion of the national fuel consumption values consists of generation for domestic use plus an adjustment for electricity trade based on a fuel's share of total generation in the exporting country.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B3. World Gross Domestic Product (GDP) by Region Expressed in Purchasing Power Parity, High Economic Growth Case, 1990-2030
(Billion 2000 Dollars)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	8,477	12,696	13,083	15,289	18,061	20,845	24,180	28,098	3.1
United States ^a	7,113	10,676	11,004	12,793	15,058	17,244	19,888	23,009	3.0
Canada	684	1,004	1,034	1,204	1,392	1,596	1,821	2,079	2.8
Mexico	680	1,016	1,045	1,291	1,610	2,005	2,471	3,010	4.3
OECD Europe	8,067	11,197	11,445	13,343	15,294	17,468	19,853	22,461	2.7
OECD Asia	3,621	4,775	4,887	5,647	6,413	7,112	7,826	8,611	2.3
Japan	2,862	3,377	3,440	3,844	4,207	4,490	4,741	5,005	1.5
South Korea	331	715	745	977	1,221	1,448	1,691	1,955	3.9
Australia/New Zealand	429	683	702	826	985	1,174	1,394	1,651	3.5
Total OECD	20,165	28,667	29,415	34,278	39,769	45,425	51,859	59,169	2.8
Non-OECD									
Non-OECD Europe and Eurasia	3,601	3,340	3,563	5,055	6,510	7,967	9,635	11,569	4.8
Russia	2,241	1,907	2,029	2,793	3,566	4,278	5,092	6,036	4.5
Other	1,360	1,433	1,534	2,263	2,944	3,689	4,543	5,533	5.3
Non-OECD Asia	5,792	15,102	16,436	25,125	34,740	45,965	59,131	74,646	6.2
China	1,805	6,961	7,685	12,674	17,832	23,942	31,350	40,087	6.8
India	1,697	3,714	4,056	6,177	8,797	11,728	14,855	18,423	6.2
Other Non-OECD Asia	2,291	4,428	4,695	6,275	8,111	10,295	12,926	16,136	5.1
Middle East	820	1,466	1,550	1,989	2,508	3,113	3,820	4,661	4.5
Africa	1,450	2,182	2,295	3,057	3,945	4,970	6,200	7,692	5.0
Central and South America	2,162	3,372	3,535	4,580	5,678	6,953	8,487	10,340	4.4
Brazil	1,022	1,581	1,627	2,041	2,487	3,006	3,621	4,353	4.0
Other Central and South America	1,140	1,791	1,908	2,539	3,191	3,948	4,866	5,988	4.7
Total Non-OECD	13,824	25,462	27,378	39,807	53,382	68,969	87,273	108,909	5.7
Total World	33,989	54,129	56,793	74,085	93,151	114,394	139,132	168,078	4.4

^aIncludes the 50 States and the District of Columbia.

Notes: Totals may not equal sum of components due to independent rounding. GDP growth rates for China and India were adjusted, based on the analyst's judgment.

Sources: **History:** Global Insight, Inc., *World Overview* (Lexington, MA, various issues). **Projections:** Global Insight, Inc., *World Overview*, Fourth Quarter 2007 (Lexington, MA, January 2008); and Energy Information Administration, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), Table B4.

Table B4. World Liquids Consumption by Region, High Economic Growth Case, 1990-2030
(Million Barrels Oil Equivalent per Day)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	20.5	25.0	25.2	25.7	27.2	28.2	29.2	30.8	0.8
United States ^a	17.0	20.7	20.8	21.1	22.1	22.7	23.4	24.4	0.6
Canada	1.7	2.3	2.3	2.4	2.5	2.7	2.8	2.9	1.0
Mexico	1.8	2.0	2.1	2.2	2.5	2.8	3.1	3.5	2.1
OECD Europe	13.7	15.5	15.5	15.5	16.3	16.7	17.1	17.4	0.5
OECD Asia	7.2	8.5	8.6	8.5	9.1	9.5	9.8	10.2	0.7
Japan	5.3	5.3	5.4	5.0	5.2	5.3	5.3	5.4	0.0
South Korea	1.0	2.2	2.2	2.4	2.7	2.9	3.1	3.4	1.7
Australia/New Zealand	0.8	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.3
Total OECD	41.4	49.0	49.3	49.6	52.5	54.4	56.2	58.5	0.7
Non-OECD									
Non-OECD Europe and Eurasia ..	9.4	4.8	4.8	5.5	6.1	6.7	7.2	7.7	1.9
Russia	5.4	2.8	2.8	3.0	3.3	3.5	3.7	3.9	1.4
Other	3.9	2.0	2.1	2.5	2.8	3.1	3.5	3.8	2.5
Non-OECD Asia	6.6	14.8	15.3	18.3	22.1	25.9	29.9	34.4	3.3
China	2.3	6.4	6.7	8.9	10.4	12.5	14.8	17.4	3.9
India	1.2	2.4	2.4	2.8	3.5	4.1	4.7	5.4	3.2
Other Non-OECD Asia	3.1	6.0	6.1	6.6	8.3	9.3	10.4	11.6	2.6
Middle East	3.5	5.5	5.9	6.8	7.8	8.8	9.7	10.7	2.5
Africa	2.1	2.8	2.9	3.4	3.8	4.2	4.5	4.8	2.0
Central and South America	3.8	5.4	5.5	6.3	6.9	7.5	8.1	8.8	1.9
Brazil	1.5	2.1	2.2	2.5	2.8	3.0	3.3	3.7	2.2
Other Central and South America ..	2.3	3.2	3.3	3.9	4.1	4.4	4.7	5.1	1.8
Total Non-OECD	25.3	33.3	34.3	40.4	46.6	53.1	59.4	66.5	2.7
Total World	66.6	82.3	83.6	90.0	99.2	107.4	115.6	125.0	1.6

^aIncludes the 50 States and the District of Columbia.

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

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B5. World Natural Gas Consumption by Region, High Economic Growth Case, 1990-2030
(Trillion Cubic Feet)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	22.5	27.4	27.4	29.3	31.1	31.6	32.7	34.0	0.9
United States ^a	19.2	22.4	22.2	23.6	24.5	24.0	24.0	24.0	0.3
Canada	2.4	3.3	3.4	3.7	4.1	4.5	5.0	5.5	1.9
Mexico	0.9	1.7	1.7	2.0	2.4	3.1	3.8	4.5	3.9
OECD Europe	11.6	18.9	19.3	20.8	23.3	25.7	27.4	29.3	1.7
OECD Asia	2.8	5.2	5.2	5.9	6.5	6.9	7.3	7.6	1.5
Japan	1.9	3.1	3.1	3.4	3.6	3.8	3.8	3.9	1.0
South Korea	0.1	1.0	1.1	1.3	1.6	1.8	1.9	2.0	2.6
Australia/New Zealand	0.8	1.1	1.1	1.2	1.3	1.4	1.5	1.7	1.7
Total OECD	36.8	51.6	51.9	56.0	60.9	64.2	67.4	70.9	1.3
Non-OECD									
Non-OECD Europe and Eurasia ..	26.7	24.4	25.3	27.6	30.1	32.5	34.5	37.1	1.5
Russia	17.3	16.0	16.2	17.4	19.0	20.1	21.2	22.7	1.4
Other	9.5	8.4	9.1	10.1	11.1	12.4	13.3	14.4	1.8
Non-OECD Asia	2.9	8.5	9.3	12.8	17.4	22.4	26.4	30.5	4.8
China	0.5	1.4	1.7	2.8	4.0	5.2	6.1	6.9	5.9
India	0.4	1.1	1.3	1.9	2.5	3.1	3.8	4.3	5.0
Other Non-OECD Asia	2.0	6.1	6.4	8.2	10.9	14.0	16.6	19.3	4.5
Middle East	3.6	8.6	9.8	11.3	13.1	15.0	16.2	17.5	2.4
Africa	1.4	2.6	3.0	3.6	4.7	5.9	6.9	7.9	4.0
Central and South America	2.0	4.1	4.4	5.7	6.9	7.8	8.7	9.7	3.2
Brazil	0.1	0.6	0.7	1.0	1.3	1.5	1.7	2.0	4.6
Other Central and South America ..	1.9	3.5	3.7	4.7	5.6	6.3	7.0	7.7	2.9
Total Non-OECD	36.5	48.2	51.8	61.0	72.1	83.5	92.7	102.7	2.8
Total World	73.4	99.8	103.7	117.0	133.0	147.7	160.1	173.6	2.1

^aIncludes the 50 States and the District of Columbia.

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

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B6. World Coal Consumption by Region, High Economic Growth Case, 1990-2030
(Quadrillion Btu)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	20.6	24.5	24.8	25.3	27.1	30.2	32.8	35.7	1.5
United States ^a	19.2	22.6	22.8	23.1	24.7	27.7	30.2	33.0	1.5
Canada	1.2	1.6	1.7	1.8	1.9	2.0	2.1	2.2	1.0
Mexico	0.2	0.3	0.4	0.5	0.5	0.5	0.6	0.6	1.7
OECD Europe	17.7	13.3	13.2	13.9	14.1	13.9	13.7	13.5	0.1
OECD Asia	5.2	9.2	9.3	9.7	9.9	10.1	10.4	10.9	0.6
Japan	2.7	4.8	4.6	4.6	4.5	4.5	4.5	4.5	-0.1
South Korea	1.0	2.1	2.1	2.5	2.6	2.7	2.8	3.2	1.6
Australia/New Zealand	1.5	2.4	2.6	2.7	2.7	2.9	3.1	3.3	0.9
Total OECD	43.5	47.0	47.3	49.0	51.1	54.2	56.9	60.1	1.0
Non-OECD									
Non-OECD Europe and Eurasia ..	15.1	8.7	8.8	8.9	10.3	10.9	11.3	12.3	1.3
Russia	7.2	4.6	4.8	4.8	5.2	5.6	5.6	6.2	1.0
Other	7.9	4.1	4.0	4.1	5.1	5.3	5.7	6.1	1.7
Non-OECD Asia	27.0	54.9	60.9	78.1	94.7	109.0	124.8	140.6	3.4
China	20.3	41.4	46.9	61.8	75.5	87.9	100.8	113.4	3.6
India	4.2	8.4	8.6	10.1	12.0	13.6	15.1	16.9	2.7
Other Non-OECD Asia	2.6	5.1	5.3	6.2	7.2	7.6	8.9	10.4	2.7
Middle East	0.1	0.4	0.4	0.5	0.5	0.5	0.5	0.5	1.1
Africa	3.0	4.3	4.2	4.5	5.3	5.6	6.0	6.2	1.6
Central and South America	0.6	0.8	0.9	1.4	1.7	1.8	1.9	2.1	3.5
Brazil	0.3	0.5	0.4	0.8	1.0	1.1	1.2	1.3	4.5
Other Central and South America ..	0.2	0.4	0.4	0.5	0.7	0.7	0.7	0.7	2.2
Total Non-OECD	45.7	69.1	75.2	93.3	112.4	127.9	144.5	161.8	3.1
Total World	89.2	116.1	122.5	142.3	163.5	182.0	201.4	221.9	2.4

^aIncludes the 50 States and the District of Columbia.

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

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B7. World Nuclear Energy Consumption by Region, High Economic Growth Case, 1990-2030
(Billion Kilowatthours)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	649	883	880	918	934	1,024	1,113	1,206	1.3
United States ^a	577	789	782	797	807	888	966	1,047	1.2
Canada	69	86	87	110	116	125	135	147	2.1
Mexico	3	9	10	11	11	11	12	12	0.6
OECD Europe	743	941	929	927	930	867	904	943	0.1
OECD Asia	242	392	418	449	511	575	626	683	2.0
Japan	192	268	278	304	329	351	379	408	1.5
South Korea	50	124	139	144	182	224	247	275	2.8
Australia/New Zealand	0	0	0	0	0	0	0	0	—
Total OECD	1,635	2,216	2,227	2,294	2,375	2,466	2,643	2,832	1.0
Non-OECD									
Non-OECD Europe and Eurasia ..	219	263	264	292	337	431	507	532	2.8
Russia	115	137	140	157	196	248	311	329	3.5
Other	104	125	124	136	141	183	196	203	2.0
Non-OECD Asia	38	103	106	152	303	470	615	702	7.8
China	0	48	50	66	170	281	377	447	9.1
India	6	15	16	38	68	109	143	162	9.8
Other Non-OECD Asia	32	40	40	48	65	79	95	93	3.4
Middle East	0	0	0	0	6	6	6	6	—
Africa	8	14	12	14	16	16	23	24	2.7
Central and South America	9	19	16	23	29	36	37	38	3.4
Brazil	2	12	10	15	19	23	24	25	3.8
Other Central and South America ..	7	7	6	8	10	13	12	13	2.8
Total Non-OECD	274	399	399	481	691	959	1,188	1,302	4.8
Total World	1,909	2,615	2,626	2,775	3,066	3,424	3,831	4,133	1.8

^aIncludes the 50 States and the District of Columbia.

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

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B8. World Consumption of Hydroelectricity and Other Renewable Energy by Region, High Economic Growth Case, 1990-2030
(Quadrillion Btu)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	9.5	9.8	10.2	12.3	13.9	15.7	17.5	18.5	2.4
United States ^a	6.1	6.0	6.0	7.7	8.6	9.9	11.3	11.7	2.7
Canada	3.1	3.5	3.7	4.1	4.7	5.1	5.5	6.0	2.0
Mexico	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.7	2.0
OECD Europe	4.8	6.3	6.5	7.3	7.5	8.2	9.1	9.6	1.6
OECD Asia	1.6	1.8	1.6	1.9	2.1	2.2	2.4	2.5	1.9
Japan	1.1	1.2	1.0	1.2	1.3	1.4	1.5	1.6	1.8
South Korea	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	8.2
Australia/New Zealand	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	1.1
Total OECD	15.9	17.9	18.2	21.5	23.4	26.1	28.9	30.6	2.1
Non-OECD									
Non-OECD Europe and Eurasia . . .	2.8	3.0	3.1	3.8	3.9	4.0	4.3	4.5	1.5
Russia	1.8	1.8	1.8	2.4	2.4	2.4	2.5	2.5	1.4
Other	1.0	1.3	1.3	1.4	1.5	1.6	1.8	2.0	1.6
Non-OECD Asia	3.0	5.6	6.6	8.6	9.1	10.1	12.4	14.6	3.2
China	1.3	3.3	4.0	5.2	5.4	5.9	7.3	8.8	3.2
India	0.7	0.9	1.1	1.5	1.6	1.7	1.9	2.1	2.7
Other Non-OECD Asia	0.9	1.4	1.6	1.8	2.1	2.6	3.1	3.7	3.5
Middle East	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	2.8
Africa	0.6	0.9	0.9	1.1	1.3	1.4	1.6	2.0	3.2
Central and South America	3.9	6.1	6.4	7.2	8.2	9.4	10.7	12.0	2.5
Brazil	2.2	3.4	3.5	4.0	4.9	5.8	6.8	7.8	3.2
Other Central and South America . .	1.7	2.8	2.9	3.2	3.2	3.6	3.9	4.2	1.5
Total Non-OECD	10.3	15.9	17.2	20.9	22.8	25.3	29.3	33.5	2.7
Total World	26.2	33.8	35.5	42.5	46.2	51.4	58.2	64.1	2.4

^aIncludes the 50 States and the District of Columbia.

Notes: Totals may not equal sum of components due to independent rounding. U.S. totals include net electricity imports, methanol, and liquid hydrogen.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B9. World Carbon Dioxide Emissions by Region, High Economic Growth Case, 1990-2030
(Million Metric Tons Carbon Dioxide)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	5,754	6,959	7,008	7,175	7,623	8,063	8,503	9,067	1.0
United States ^a	4,989	5,957	5,982	6,069	6,401	6,721	7,032	7,452	0.9
Canada	465	623	628	672	718	763	811	861	1.3
Mexico	300	379	398	433	504	579	660	753	2.6
OECD Europe	4,101	4,373	4,383	4,543	4,800	4,966	5,093	5,223	0.7
OECD Asia	1,541	2,148	2,174	2,225	2,353	2,437	2,531	2,644	0.8
Japan	1,009	1,242	1,230	1,204	1,231	1,248	1,260	1,272	0.1
South Korea	241	488	500	564	634	669	715	777	1.8
Australia/New Zealand	291	418	444	457	487	520	556	595	1.2
Total OECD	11,396	13,480	13,565	13,942	14,776	15,465	16,126	16,933	0.9
Non-OECD									
Non-OECD Europe and Eurasia	4,198	2,797	2,865	3,093	3,438	3,703	3,924	4,236	1.6
Russia	2,376	1,669	1,696	1,803	1,962	2,090	2,177	2,337	1.3
Other	1,822	1,128	1,169	1,290	1,476	1,613	1,747	1,899	2.0
Non-OECD Asia	3,613	7,517	8,177	10,365	12,675	14,785	16,992	19,286	3.5
China	2,241	4,753	5,323	7,042	8,585	10,082	11,630	13,193	3.7
India	565	1,127	1,164	1,369	1,667	1,924	2,177	2,453	3.0
Other Non-OECD Asia	807	1,637	1,690	1,954	2,423	2,779	3,186	3,640	3.1
Middle East	700	1,290	1,400	1,634	1,868	2,114	2,319	2,535	2.4
Africa	649	943	966	1,099	1,286	1,448	1,578	1,697	2.3
Central and South America	669	1,042	1,078	1,319	1,484	1,631	1,784	1,950	2.4
Brazil	216	350	356	456	518	579	640	716	2.8
Other Central and South America	453	692	722	863	966	1,053	1,143	1,234	2.2
Total Non-OECD	9,830	13,589	14,486	17,510	20,752	23,681	26,597	29,704	2.9
Total World	21,226	27,070	28,051	31,453	35,527	39,146	42,723	46,637	2.1

^aIncludes the 50 States and the District of Columbia.

Note: The U.S. numbers include carbon dioxide emissions attributable to renewable energy sources.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B10. World Carbon Dioxide Emissions from Liquids Use by Region, High Economic Growth Case, 1990-2030
(Million Metric Tons Carbon Dioxide)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	2,633	3,142	3,169	3,173	3,358	3,470	3,606	3,820	0.8
United States ^a	2,178	2,597	2,615	2,591	2,716	2,777	2,858	3,008	0.6
Canada	224	291	290	305	321	337	352	369	1.0
Mexico	231	254	264	277	321	356	396	443	2.1
OECD Europe	1,867	2,097	2,103	2,101	2,211	2,266	2,315	2,365	0.5
OECD Asia	914	1,016	1,028	1,010	1,083	1,130	1,175	1,219	0.7
Japan	661	636	643	602	622	632	641	649	0.0
South Korea	144	238	240	261	297	321	345	370	1.7
Australia/New Zealand	110	142	144	147	164	177	188	200	1.3
Total OECD	5,414	6,255	6,300	6,284	6,652	6,867	7,096	7,404	0.6
Non-OECD									
Non-OECD Europe and Eurasia	1,355	666	673	768	852	931	1,005	1,080	1.9
Russia	783	379	379	418	458	490	515	538	1.4
Other	572	287	294	350	394	441	491	542	2.5
Non-OECD Asia	950	1,979	2,037	2,441	2,959	3,466	3,993	4,593	3.3
China	325	843	880	1,164	1,367	1,644	1,942	2,291	3.9
India	160	302	303	345	433	512	589	675	3.2
Other Non-OECD Asia	464	833	854	933	1,159	1,310	1,462	1,627	2.6
Middle East	488	780	824	966	1,096	1,240	1,376	1,517	2.5
Africa	298	400	413	485	541	601	641	685	2.0
Central and South America	503	734	749	872	941	1,023	1,110	1,209	1.9
Brazil	180	274	279	322	356	394	433	480	2.2
Other Central and South America	323	460	470	549	585	629	677	729	1.8
Total Non-OECD	3,594	4,558	4,697	5,531	6,388	7,261	8,125	9,084	2.7
Total World	9,009	10,813	10,996	11,815	13,040	14,128	15,221	16,488	1.6

^aIncludes the 50 States and the District of Columbia.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B11. World Carbon Dioxide Emissions from Natural Gas Use by Region, High Economic Growth Case, 1990-2030
(Million Metric Tons Carbon Dioxide)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	1,207	1,471	1,476	1,590	1,685	1,715	1,777	1,850	0.9
United States ^a	1,026	1,194	1,193	1,276	1,325	1,296	1,297	1,299	0.3
Canada	127	181	185	200	222	244	268	296	1.9
Mexico	54	97	99	115	138	175	212	255	3.9
OECD Europe	590	1,027	1,048	1,132	1,267	1,396	1,491	1,591	1.7
OECD Asia	152	293	294	329	366	388	409	428	1.5
Japan	102	173	170	185	198	208	212	216	1.0
South Korea	6	60	63	79	97	103	111	119	2.6
Australia/New Zealand	44	60	61	65	71	77	85	93	1.7
Total OECD	1,949	2,791	2,819	3,051	3,318	3,499	3,677	3,869	1.3
Non-OECD									
Non-OECD Europe and Eurasia	1,450	1,328	1,375	1,498	1,634	1,767	1,874	2,018	1.5
Russia	928	868	875	944	1,028	1,091	1,150	1,231	1.4
Other	521	460	500	554	606	676	724	787	1.8
Non-OECD Asia	160	469	516	710	965	1,244	1,470	1,694	4.9
China	30	83	101	169	243	318	372	422	5.9
India	24	59	69	101	137	170	207	234	5.0
Other Non-OECD Asia	106	327	345	439	585	755	892	1,038	4.5
Middle East	199	476	541	626	727	828	896	971	2.4
Africa	80	149	167	205	266	334	389	446	4.0
Central and South America	116	231	249	321	388	439	494	548	3.2
Brazil	6	33	36	56	70	80	94	112	4.6
Other Central and South America	110	197	213	266	318	358	400	436	2.9
Total Non-OECD	2,005	2,651	2,847	3,360	3,980	4,611	5,123	5,676	2.8
Total World	3,954	5,443	5,666	6,411	7,299	8,110	8,800	9,545	2.1

^aIncludes the 50 States and the District of Columbia.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).

Table B12. World Carbon Dioxide Emissions from Coal Use by Region, High Economic Growth Case, 1990-2030
(Million Metric Tons Carbon Dioxide)

Region/Country	History			Projections					Average Annual Percent Change, 2005-2030
	1990	2004	2005	2010	2015	2020	2025	2030	
OECD									
OECD North America	1,913	2,333	2,351	2,400	2,568	2,866	3,108	3,384	1.5
United States ^a	1,784	2,155	2,162	2,190	2,348	2,636	2,865	3,133	1.5
Canada	114	151	153	168	174	181	191	197	1.0
Mexico	15	28	35	42	46	48	52	55	1.8
OECD Europe	1,644	1,250	1,232	1,309	1,322	1,303	1,287	1,267	0.1
OECD Asia	475	840	853	886	904	919	947	997	0.6
Japan	246	433	417	417	411	408	407	407	-0.1
South Korea	91	190	196	224	240	245	258	288	1.5
Australia/New Zealand	138	217	239	245	252	266	283	302	0.9
Total OECD	4,032	4,423	4,435	4,595	4,794	5,087	5,342	5,648	1.0
Non-OECD									
Non-OECD Europe and Eurasia	1,393	804	817	826	951	1,005	1,045	1,138	1.3
Russia	665	422	442	440	475	509	513	568	1.0
Other	729	381	376	386	476	496	532	570	1.7
Non-OECD Asia	2,503	5,070	5,624	7,215	8,751	10,075	11,529	12,999	3.4
China	1,886	3,827	4,341	5,709	6,975	8,120	9,316	10,479	3.6
India	380	765	791	923	1,097	1,242	1,381	1,544	2.7
Other Non-OECD Asia	237	477	492	582	680	713	833	975	2.8
Middle East	13	35	35	43	45	46	47	48	1.2
Africa	271	394	386	409	480	513	548	567	1.6
Central and South America	50	78	81	126	155	169	180	193	3.5
Brazil	30	43	41	77	92	104	113	124	4.5
Other Central and South America	20	35	40	49	63	65	67	69	2.2
Total Non-OECD	4,231	6,380	6,943	8,619	10,383	11,808	13,348	14,944	3.1
Total World	8,263	10,803	11,378	13,214	15,176	16,896	18,690	20,592	2.4

^aIncludes the 50 States and the District of Columbia.

Sources: **History:** Energy Information Administration (EIA), *International Energy Annual 2005* (June-October 2007), web site www.eia.doe.gov/iea. **Projections:** EIA, *Annual Energy Outlook 2008*, DOE/EIA-0383(2008) (Washington, DC, June 2008), AEO2008 National Energy Modeling System, run HM2008.D031608A, web site www.eia.doe.gov/oiaf/aeo; and World Energy Projection System (2008).