

## Appendix C

# Low Oil Price case projections

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- *World energy consumption*
- *Gross domestic product*
- *Carbon dioxide emissions*

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**Table C1. World total primary energy consumption by region, Low Oil Price case, 2006-2035**  
(Quadrillion Btu)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>122.3</b>	<b>124.3</b>	<b>122.9</b>	<b>128.4</b>	<b>133.6</b>	<b>139.4</b>	<b>145.1</b>	<b>151.6</b>	<b>0.8</b>
United States <sup>a</sup>	99.8	101.7	100.2	103.5	106.5	110.0	112.8	116.2	0.6
Canada	14.0	14.3	14.3	15.0	16.4	17.3	18.6	19.7	1.2
Mexico/Chile	8.5	8.3	8.5	9.8	10.7	12.1	13.7	15.7	2.3
OECD Europe	<b>82.8</b>	<b>82.3</b>	<b>82.2</b>	<b>85.4</b>	<b>90.2</b>	<b>93.6</b>	<b>96.0</b>	<b>98.1</b>	<b>0.7</b>
OECD Asia	<b>39.2</b>	<b>39.4</b>	<b>39.2</b>	<b>41.9</b>	<b>45.0</b>	<b>47.1</b>	<b>48.5</b>	<b>49.8</b>	<b>0.9</b>
Japan	23.3	23.0	22.4	22.9	24.6	25.4	25.6	25.7	0.5
South Korea	9.4	9.8	10.0	11.4	12.3	13.2	14.1	14.9	1.5
Australia/New Zealand	6.5	6.6	6.8	7.6	8.1	8.4	8.9	9.2	1.1
<b>Total OECD</b>	<b>244.3</b>	<b>246.1</b>	<b>244.3</b>	<b>255.7</b>	<b>268.8</b>	<b>280.1</b>	<b>289.6</b>	<b>299.5</b>	<b>0.8</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>48.9</b>	<b>49.6</b>	<b>50.5</b>	<b>52.0</b>	<b>51.3</b>	<b>51.2</b>	<b>51.6</b>	<b>51.8</b>	<b>0.1</b>
Russia	29.1	29.7	30.6	31.5	30.8	30.7	31.3	31.8	0.2
Other	19.8	19.9	19.9	20.5	20.5	20.5	20.3	20.0	0.0
Non-OECD Asia	<b>121.0</b>	<b>128.6</b>	<b>137.9</b>	<b>192.0</b>	<b>214.2</b>	<b>235.3</b>	<b>249.4</b>	<b>257.3</b>	<b>2.3</b>
China	73.4	78.9	86.2	126.5	139.6	152.8	161.2	164.5	2.4
India	18.8	20.0	21.1	28.4	33.1	37.4	40.4	42.5	2.6
Other	28.8	29.7	30.7	37.1	41.6	45.1	47.8	50.4	1.9
Middle East	<b>24.0</b>	<b>24.0</b>	<b>25.6</b>	<b>31.5</b>	<b>33.8</b>	<b>35.7</b>	<b>37.5</b>	<b>39.0</b>	<b>1.6</b>
Africa	<b>17.2</b>	<b>17.8</b>	<b>18.8</b>	<b>22.2</b>	<b>23.8</b>	<b>25.0</b>	<b>26.0</b>	<b>26.9</b>	<b>1.3</b>
Central and South America	<b>25.9</b>	<b>26.5</b>	<b>27.7</b>	<b>31.8</b>	<b>33.4</b>	<b>35.3</b>	<b>37.3</b>	<b>39.5</b>	<b>1.3</b>
Brazil	11.5	12.1	12.7	16.0	17.3	18.8	20.6	22.5	2.1
Other	14.4	14.5	15.0	15.8	16.0	16.4	16.8	17.0	0.5
<b>Total Non-OECD</b>	<b>237.0</b>	<b>246.5</b>	<b>260.5</b>	<b>329.5</b>	<b>356.4</b>	<b>382.5</b>	<b>401.8</b>	<b>414.6</b>	<b>1.7</b>
<b>Total World</b>	<b>481.3</b>	<b>492.6</b>	<b>504.7</b>	<b>585.2</b>	<b>625.2</b>	<b>662.6</b>	<b>691.5</b>	<b>714.1</b>	<b>1.3</b>

<sup>a</sup>Includes 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:** U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies); and International Energy Agency, "Balances of OECD and Non-OECD Statistics" (2010), website [www.iea.org](http://www.iea.org) (subscription site). **Projections:** EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011) (Washington, DC: May 2011); AEO2011 National Energy Modeling System, run LP20011LNO. D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C2. World total energy consumption by region and fuel, Low Oil Price case, 2006-2035**  
(Quadrillion Btu)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
<b>OECD Americas</b>									
Liquids	49.6	49.9	47.7	50.6	51.8	53.4	55.2	58.1	0.7
Natural gas	28.2	29.5	29.6	32.3	33.5	34.3	35.9	38.1	0.9
Coal	24.4	24.7	24.3	21.0	22.2	24.1	24.7	24.9	0.1
Nuclear	9.4	9.6	9.5	10.1	10.6	10.7	10.9	11.0	0.5
Other	10.7	10.7	11.8	14.3	15.6	16.9	18.4	19.5	1.9
<b>Total</b>	<b>122.3</b>	<b>124.3</b>	<b>122.9</b>	<b>128.4</b>	<b>133.6</b>	<b>139.4</b>	<b>145.1</b>	<b>151.6</b>	<b>0.8</b>
<b>OECD Europe</b>									
Liquids	32.5	32.1	32.0	30.9	32.4	33.2	33.6	34.1	0.2
Natural gas	19.7	19.6	20.1	20.9	21.8	22.5	23.8	24.8	0.8
Coal	13.2	13.5	12.5	11.6	11.3	10.9	10.6	10.3	-0.7
Nuclear	9.7	9.2	9.1	10.0	10.3	11.1	11.5	11.8	1.0
Other	7.6	8.1	8.4	12.0	14.3	15.9	16.6	17.1	2.7
<b>Total</b>	<b>82.8</b>	<b>82.3</b>	<b>82.2</b>	<b>85.4</b>	<b>90.2</b>	<b>93.6</b>	<b>96.0</b>	<b>98.1</b>	<b>0.7</b>
<b>OECD Asia</b>									
Liquids	17.5	17.3	16.8	16.7	18.2	19.0	19.3	19.7	0.6
Natural gas	6.2	6.6	6.6	7.1	7.8	8.5	9.1	9.4	1.3
Coal	9.2	9.6	9.9	9.8	9.6	9.6	9.4	9.4	-0.2
Nuclear	4.3	3.9	3.9	5.1	5.7	6.0	6.5	7.0	2.2
Other	2.0	1.9	1.9	3.2	3.6	4.0	4.1	4.4	3.1
<b>Total</b>	<b>39.2</b>	<b>39.4</b>	<b>39.2</b>	<b>41.9</b>	<b>45.0</b>	<b>47.1</b>	<b>48.5</b>	<b>49.8</b>	<b>0.9</b>
<b>Total OECD</b>									
Liquids	99.6	99.3	96.5	98.1	102.4	105.6	108.1	111.9	0.6
Natural gas	54.1	55.7	56.3	60.3	63.1	65.4	68.8	72.2	0.9
Coal	46.8	47.8	46.8	42.5	43.1	44.6	44.7	44.6	-0.2
Nuclear	23.4	22.6	22.6	25.2	26.7	27.7	29.0	29.7	1.0
Other	20.4	20.7	22.1	29.6	33.6	36.8	39.1	41.1	2.3
<b>Total</b>	<b>244.3</b>	<b>246.1</b>	<b>244.3</b>	<b>255.7</b>	<b>268.8</b>	<b>280.1</b>	<b>289.6</b>	<b>299.5</b>	<b>0.8</b>
<b>Non-OECD</b>									
<b>Non-OECD Europe and Eurasia</b>									
Liquids	8.8	9.5	10.1	11.0	10.6	10.4	10.4	10.3	0.1
Natural gas	25.2	25.4	25.4	25.0	24.4	23.9	23.6	23.5	-0.3
Coal	8.8	8.6	8.9	8.6	8.1	7.7	7.4	7.1	-0.8
Nuclear	2.9	3.0	3.0	3.7	4.5	5.4	6.1	6.5	2.9
Other	3.3	3.1	3.0	3.7	3.8	3.8	4.1	4.4	1.4
<b>Total</b>	<b>48.9</b>	<b>49.6</b>	<b>50.5</b>	<b>52.0</b>	<b>51.3</b>	<b>51.2</b>	<b>51.6</b>	<b>51.8</b>	<b>0.1</b>
<b>Non-OECD Asia</b>									
Liquids	33.4	34.0	35.0	48.6	55.0	61.5	64.1	64.4	2.3
Natural gas	9.8	10.8	11.6	18.1	21.1	24.4	27.0	28.8	3.4
Coal	66.3	71.4	77.5	101.3	104.4	110.3	114.2	115.2	1.5
Nuclear	1.1	1.2	1.2	3.7	6.5	8.9	11.0	13.3	9.2
Other	10.5	11.2	12.6	20.3	27.2	30.2	33.1	35.6	3.9
<b>Total</b>	<b>121.0</b>	<b>128.6</b>	<b>137.9</b>	<b>192.0</b>	<b>214.2</b>	<b>235.3</b>	<b>249.4</b>	<b>257.3</b>	<b>2.3</b>

See notes at end of table.

(continued on page 193)

**Table C2. World total energy consumption by region and fuel, Low Oil Price case, 2006-2035 (continued)**  
(Quadrillion Btu)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>Middle East</b>									
Liquids	12.5	12.1	12.8	15.7	16.2	16.9	18.2	18.9	1.5
Natural gas	10.8	11.2	12.2	15.0	16.4	17.3	17.8	18.5	1.5
Coal	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-0.3
Nuclear	0.0	0.0	0.0	0.1	0.3	0.5	0.5	0.6	0
Other	0.3	0.3	0.1	0.4	0.6	0.6	0.7	0.7	6.2
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>25.6</b>	<b>31.5</b>	<b>33.8</b>	<b>35.7</b>	<b>37.5</b>	<b>39.0</b>	<b>1.6</b>
<b>Africa</b>									
Liquids	6.2	6.4	6.5	7.1	7.2	7.3	7.3	7.5	0.5
Natural gas	3.1	3.3	3.9	5.3	6.4	7.2	8.0	8.4	2.9
Coal	4.2	4.4	4.6	5.2	5.4	5.5	5.5	5.6	0.7
Nuclear	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	3.8
Other	3.5	3.6	3.7	4.4	4.7	4.9	5.0	5.1	1.2
<b>Total</b>	<b>17.2</b>	<b>17.8</b>	<b>18.8</b>	<b>22.2</b>	<b>23.8</b>	<b>25.0</b>	<b>26.0</b>	<b>26.9</b>	<b>1.3</b>
<b>Central and South America</b>									
Liquids	11.2	11.5	12.1	14.1	14.2	14.2	14.4	14.5	0.7
Natural gas	4.5	4.5	4.8	5.5	5.8	6.3	6.7	7.2	1.5
Coal	0.7	0.8	0.8	1.1	1.2	1.3	1.5	1.7	2.9
Nuclear	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.7	4.1
Other	9.2	9.6	9.8	10.8	11.8	13.0	14.3	15.5	1.7
<b>Total</b>	<b>25.9</b>	<b>26.5</b>	<b>27.7</b>	<b>31.8</b>	<b>33.4</b>	<b>35.3</b>	<b>37.3</b>	<b>39.5</b>	<b>1.3</b>
<b>Total Non-OECD</b>									
Liquids	72.1	73.4	76.4	96.6	103.1	110.2	114.3	115.5	1.5
Natural gas	53.4	55.2	58.0	68.8	74.0	79.1	83.1	86.4	1.5
Coal	80.4	85.6	92.2	116.5	119.4	125.2	129.0	130.0	1.3
Nuclear	4.4	4.5	4.6	7.9	11.8	15.5	18.3	21.4	5.9
Other	26.8	27.8	29.2	39.7	48.1	52.5	57.1	61.3	2.8
<b>Total</b>	<b>237.0</b>	<b>246.5</b>	<b>260.5</b>	<b>329.5</b>	<b>356.4</b>	<b>382.5</b>	<b>401.8</b>	<b>414.6</b>	<b>1.7</b>
<b>Total World</b>									
Liquids	171.7	172.7	173.0	194.7	205.5	215.8	222.4	227.5	1.0
Natural gas	107.5	110.9	114.3	129.1	137.1	144.5	151.9	158.6	1.2
Coal	127.2	133.3	139.0	159.0	162.5	169.8	173.7	174.6	0.9
Nuclear	27.8	27.1	27.2	33.2	38.5	43.2	47.3	51.1	2.4
Other	47.1	48.5	51.3	69.2	81.7	89.3	96.2	102.3	2.6
<b>Total</b>	<b>481.3</b>	<b>492.6</b>	<b>504.7</b>	<b>585.2</b>	<b>625.2</b>	<b>662.6</b>	<b>691.5</b>	<b>714.1</b>	<b>1.3</b>

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:** U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/](http://www.eia.gov/); and International Energy Agency, "Balances of OECD and Non-OECD Statistics" (2010), website [www.iea.org](http://www.iea.org) (subscription site). **Projections:** EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011) (Washington, DC: May 2011); AEO2011 National Energy Modeling System, run LP2001LNO. D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C3. World gross domestic product (GDP) by region expressed in purchasing power parity, Low Oil Price case, 2006-2035**  
(Billion 2005 dollars)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>15,536</b>	<b>15,864</b>	<b>15,889</b>	<b>18,470</b>	<b>21,071</b>	<b>24,250</b>	<b>27,705</b>	<b>31,599</b>	<b>2.6</b>
United States <sup>a</sup>	12,976	13,229	13,229	15,411	17,475	20,029	22,736	25,735	2.5
Canada	1,200	1,231	1,236	1,436	1,606	1,779	1,975	2,192	2.2
Mexico/Chile	1,359	1,405	1,424	1,624	1,990	2,442	2,994	3,672	3.6
OECD Europe	<b>14,412</b>	<b>14,849</b>	<b>14,969</b>	<b>16,208</b>	<b>18,035</b>	<b>19,864</b>	<b>21,771</b>	<b>23,807</b>	<b>1.7</b>
OECD Asia	<b>5,681</b>	<b>5,850</b>	<b>5,861</b>	<b>6,530</b>	<b>7,089</b>	<b>7,557</b>	<b>8,044</b>	<b>8,531</b>	<b>1.4</b>
Japan	3,951	4,041	4,014	4,258	4,437	4,520	4,601	4,665	0.6
South Korea	938	986	1,008	1,263	1,494	1,725	1,958	2,189	2.9
Australia/NewZealand	792	823	839	1,009	1,157	1,311	1,485	1,677	2.6
<b>Total OECD</b>	<b>35,629</b>	<b>36,563</b>	<b>36,718</b>	<b>41,208</b>	<b>46,195</b>	<b>51,671</b>	<b>57,521</b>	<b>63,937</b>	<b>2.1</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>3,218</b>	<b>3,481</b>	<b>3,664</b>	<b>4,141</b>	<b>4,476</b>	<b>4,753</b>	<b>5,109</b>	<b>5,444</b>	<b>1.5</b>
Russia	1,834	1,982	2,093	2,350	2,470	2,588	2,827	3,076	1.4
Other	1,384	1,499	1,571	1,791	2,006	2,165	2,283	2,368	1.5
Non-OECD Asia	<b>13,013</b>	<b>14,323</b>	<b>15,281</b>	<b>25,182</b>	<b>31,704</b>	<b>37,939</b>	<b>43,734</b>	<b>48,781</b>	<b>4.4</b>
China	6,035	6,820	7,431	13,218	17,021	20,677	23,912	26,492	4.8
India	2,676	2,918	3,096	5,137	6,619	7,975	9,197	10,290	4.6
Other	4,302	4,585	4,754	6,826	8,064	9,287	10,625	11,999	3.5
Middle East	<b>2,145</b>	<b>2,261</b>	<b>2,357</b>	<b>3,189</b>	<b>3,633</b>	<b>4,033</b>	<b>4,464</b>	<b>4,909</b>	<b>2.8</b>
Africa	<b>2,494</b>	<b>2,638</b>	<b>2,775</b>	<b>3,851</b>	<b>4,375</b>	<b>4,871</b>	<b>5,317</b>	<b>5,788</b>	<b>2.8</b>
Central and South America	<b>3,822</b>	<b>4,066</b>	<b>4,271</b>	<b>5,259</b>	<b>5,946</b>	<b>6,657</b>	<b>7,409</b>	<b>8,211</b>	<b>2.5</b>
Brazil	1,595	1,685	1,771	2,435	2,848	3,307	3,833	4,436	3.5
Other	2,227	2,381	2,500	2,824	3,098	3,350	3,577	3,775	1.5
<b>Total Non-OECD</b>	<b>24,692</b>	<b>26,769</b>	<b>28,348</b>	<b>41,622</b>	<b>50,133</b>	<b>58,253</b>	<b>66,034</b>	<b>73,134</b>	<b>3.6</b>
<b>Total World</b>	<b>60,321</b>	<b>63,333</b>	<b>65,066</b>	<b>82,830</b>	<b>96,328</b>	<b>109,923</b>	<b>123,555</b>	<b>137,071</b>	<b>2.8</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

Notes: Totals may not equal sum of components due to independent rounding. GDP growth rates for non-OECD Europe and Eurasia (excluding Russia), China, India, Africa, and Central and South America (excluding Brazil) were adjusted, based on the analyst's judgment.

Sources: History: IHS Global Insight, *World Overview* (Lexington, MA: various issues). Projections: IHS Global Insight, *World Overview*, Third Quarter 2010 (Lexington, MA: November 2010); and U.S. Energy Information Administration (EIA), *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo).

**Table C4. World liquids consumption by region, Low Oil Price case, 2006-2035**  
(Million barrels per day)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>25.3</b>	<b>25.4</b>	<b>24.2</b>	<b>26.3</b>	<b>26.9</b>	<b>27.8</b>	<b>28.7</b>	<b>30.1</b>	<b>0.8</b>
United States <sup>a</sup>	20.7	20.6	19.5	21.3	21.7	22.3	22.9	23.8	0.7
Canada	2.3	2.3	2.2	2.4	2.5	2.5	2.6	2.7	0.7
Mexico/Chile	2.4	2.5	2.4	2.6	2.7	2.9	3.2	3.6	1.4
OECD Europe	<b>15.7</b>	<b>15.6</b>	<b>15.6</b>	<b>15.0</b>	<b>15.8</b>	<b>16.1</b>	<b>16.3</b>	<b>16.6</b>	<b>0.2</b>
OECD Asia	<b>8.6</b>	<b>8.5</b>	<b>8.3</b>	<b>8.2</b>	<b>9.0</b>	<b>9.3</b>	<b>9.5</b>	<b>9.7</b>	<b>0.6</b>
Japan	5.3	5.2	5.0	4.6	5.1	5.3	5.2	5.2	0.1
South Korea	2.2	2.2	2.1	2.4	2.6	2.7	2.9	3.1	1.4
Australia/New Zealand	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.4	0.8
<b>Total OECD</b>	<b>49.6</b>	<b>49.6</b>	<b>48.0</b>	<b>49.4</b>	<b>51.6</b>	<b>53.2</b>	<b>54.5</b>	<b>56.3</b>	<b>0.6</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>4.9</b>	<b>4.6</b>	<b>5.0</b>	<b>5.4</b>	<b>5.2</b>	<b>5.1</b>	<b>5.1</b>	<b>5.0</b>	<b>0.1</b>
Russia	2.8	2.6	2.8	3.0	2.8	2.7	2.7	2.7	-0.2
Other	2.1	2.1	2.1	2.4	2.3	2.4	2.4	2.4	0.4
Non-OECD Asia	<b>16.2</b>	<b>16.6</b>	<b>17.1</b>	<b>23.8</b>	<b>26.9</b>	<b>30.1</b>	<b>31.4</b>	<b>31.5</b>	<b>2.3</b>
China	7.3	7.5	7.8	12.5	14.0	15.7	16.1	15.7	2.6
India	2.7	2.8	3.0	3.9	4.7	5.7	6.3	6.5	3.0
Other	6.2	6.3	6.3	7.4	8.2	8.7	9.0	9.3	1.4
Middle East	<b>6.0</b>	<b>6.3</b>	<b>6.6</b>	<b>8.2</b>	<b>8.4</b>	<b>8.8</b>	<b>9.4</b>	<b>9.8</b>	<b>1.5</b>
Africa	<b>3.0</b>	<b>3.1</b>	<b>3.2</b>	<b>3.5</b>	<b>3.5</b>	<b>3.6</b>	<b>3.6</b>	<b>3.7</b>	<b>0.5</b>
Central and South America	<b>5.5</b>	<b>5.6</b>	<b>5.8</b>	<b>6.8</b>	<b>6.8</b>	<b>6.8</b>	<b>6.9</b>	<b>6.9</b>	<b>0.7</b>
Brazil	2.3	2.4	2.5	3.1	3.1	3.2	3.3	3.3	1.1
Other	3.2	3.3	3.3	3.7	3.7	3.6	3.6	3.6	0.3
<b>Total Non-OECD</b>	<b>35.7</b>	<b>36.3</b>	<b>37.7</b>	<b>47.6</b>	<b>50.8</b>	<b>54.3</b>	<b>56.3</b>	<b>57.0</b>	<b>1.5</b>
<b>Total World</b>	<b>85.3</b>	<b>85.9</b>	<b>85.7</b>	<b>97.0</b>	<b>102.4</b>	<b>107.5</b>	<b>110.8</b>	<b>113.3</b>	<b>1.0</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

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

Sources: History: U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies). Projections: EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C5. World natural gas consumption by region, Low Oil Price case, 2006-2035**  
(Trillion cubic feet)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>27.4</b>	<b>28.7</b>	<b>28.8</b>	<b>31.5</b>	<b>32.6</b>	<b>33.5</b>	<b>35.0</b>	<b>37.1</b>	<b>0.9</b>
United States <sup>a</sup>	21.7	23.1	23.2	25.3	25.4	25.0	25.6	26.5	0.5
Canada	3.3	3.4	3.4	3.6	4.0	4.5	4.9	5.3	1.6
Mexico/Chile	2.5	2.2	2.2	2.6	3.2	4.0	4.6	5.3	3.3
OECD Europe	<b>19.2</b>	<b>19.0</b>	<b>19.5</b>	<b>20.3</b>	<b>21.2</b>	<b>21.9</b>	<b>23.1</b>	<b>24.1</b>	<b>0.8</b>
OECD Asia	<b>5.8</b>	<b>6.2</b>	<b>6.2</b>	<b>6.6</b>	<b>7.3</b>	<b>8.0</b>	<b>8.5</b>	<b>8.8</b>	<b>1.3</b>
Japan	3.4	3.7	3.7	3.7	3.9	4.2	4.3	4.4	0.7
South Korea	1.1	1.2	1.3	1.6	1.7	2.0	2.1	2.1	2.0
Australia/New Zealand	1.2	1.2	1.3	1.4	1.6	1.8	2.1	2.2	2.1
<b>Total OECD</b>	<b>52.4</b>	<b>53.9</b>	<b>54.5</b>	<b>58.5</b>	<b>61.1</b>	<b>63.3</b>	<b>66.6</b>	<b>70.0</b>	<b>0.9</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>24.8</b>	<b>25.0</b>	<b>25.0</b>	<b>24.6</b>	<b>24.0</b>	<b>23.5</b>	<b>23.2</b>	<b>23.1</b>	<b>-0.3</b>
Russia	16.6	16.7	16.8	16.4	16.0	15.6	15.5	15.6	-0.3
Other	8.2	8.3	8.2	8.1	8.0	7.9	7.8	7.5	-0.3
Non-OECD Asia	<b>9.5</b>	<b>10.5</b>	<b>11.3</b>	<b>17.5</b>	<b>20.4</b>	<b>23.7</b>	<b>26.2</b>	<b>27.9</b>	<b>3.4</b>
China	2.0	2.5	2.7	5.5	6.7	8.1	9.4	10.3	5.1
India	1.4	1.5	1.5	3.3	3.8	4.3	4.5	4.6	4.2
Other	6.2	6.6	7.1	8.7	10.0	11.3	12.3	13.0	2.3
Middle East	<b>10.3</b>	<b>10.7</b>	<b>11.7</b>	<b>14.2</b>	<b>15.6</b>	<b>16.4</b>	<b>16.9</b>	<b>17.6</b>	<b>1.5</b>
Africa	<b>2.9</b>	<b>3.1</b>	<b>3.6</b>	<b>5.0</b>	<b>5.9</b>	<b>6.7</b>	<b>7.4</b>	<b>7.9</b>	<b>2.9</b>
Central and South America	<b>4.3</b>	<b>4.2</b>	<b>4.6</b>	<b>5.2</b>	<b>5.5</b>	<b>5.9</b>	<b>6.4</b>	<b>6.8</b>	<b>1.5</b>
Brazil	0.7	0.7	0.8	1.2	1.4	1.6	1.9	2.1	3.5
Other	3.6	3.5	3.7	3.9	4.1	4.3	4.5	4.7	0.9
<b>Total Non-OECD</b>	<b>51.8</b>	<b>53.5</b>	<b>56.2</b>	<b>66.5</b>	<b>71.4</b>	<b>76.3</b>	<b>80.1</b>	<b>83.3</b>	<b>1.5</b>
<b>Total World</b>	<b>104.1</b>	<b>107.4</b>	<b>110.7</b>	<b>124.9</b>	<b>132.5</b>	<b>139.6</b>	<b>146.7</b>	<b>153.3</b>	<b>1.2</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

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

Sources: **History:** U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies). **Projections:** EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).



**Table C6. World coal consumption by region, Low Oil Price case, 2006-2035**  
(Quadrillion Btu)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>24.4</b>	<b>24.7</b>	<b>24.3</b>	<b>21.0</b>	<b>22.2</b>	<b>24.1</b>	<b>24.7</b>	<b>24.9</b>	<b>0.1</b>
United States <sup>a</sup>	22.5	22.7	22.4	19.4	20.5	22.3	22.8	23.0	0.1
Canada	1.4	1.4	1.4	1.0	1.0	1.1	1.1	1.1	-0.8
Mexico/Chile	0.6	0.6	0.5	0.6	0.6	0.7	0.7	0.9	1.8
OECD Europe	<b>13.2</b>	<b>13.5</b>	<b>12.5</b>	<b>11.6</b>	<b>11.3</b>	<b>10.9</b>	<b>10.6</b>	<b>10.3</b>	<b>-0.7</b>
OECD Asia	<b>9.2</b>	<b>9.6</b>	<b>9.9</b>	<b>9.8</b>	<b>9.6</b>	<b>9.6</b>	<b>9.4</b>	<b>9.4</b>	<b>-0.2</b>
Japan	4.6	4.9	4.8	4.7	4.5	4.3	4.1	3.9	-0.8
South Korea	2.1	2.3	2.6	2.7	2.7	2.8	2.9	3.0	0.5
Australia/New Zealand	2.4	2.5	2.6	2.5	2.5	2.5	2.5	2.5	-0.1
<b>Total OECD</b>	<b>46.8</b>	<b>47.8</b>	<b>46.8</b>	<b>42.5</b>	<b>43.1</b>	<b>44.6</b>	<b>44.7</b>	<b>44.6</b>	<b>-0.2</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>8.8</b>	<b>8.6</b>	<b>8.9</b>	<b>8.6</b>	<b>8.1</b>	<b>7.7</b>	<b>7.4</b>	<b>7.1</b>	<b>-0.8</b>
Russia	4.4	4.2	4.5	4.5	4.3	4.1	4.0	3.9	-0.5
Other	4.4	4.5	4.5	4.0	3.8	3.6	3.4	3.2	-1.2
Non-OECD Asia	<b>66.3</b>	<b>71.4</b>	<b>77.5</b>	<b>101.3</b>	<b>104.4</b>	<b>110.3</b>	<b>114.2</b>	<b>115.2</b>	<b>1.5</b>
China	51.2	55.2	60.4	82.0	84.0	88.7	91.4	91.3	1.5
India	9.2	10.1	10.9	12.6	13.4	14.4	15.2	16.1	1.5
Other	5.8	6.1	6.3	6.7	7.0	7.3	7.5	7.8	0.8
Middle East	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>-0.3</b>
Africa	<b>4.2</b>	<b>4.4</b>	<b>4.6</b>	<b>5.2</b>	<b>5.4</b>	<b>5.5</b>	<b>5.5</b>	<b>5.6</b>	<b>0.7</b>
Central and South America	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>1.1</b>	<b>1.2</b>	<b>1.3</b>	<b>1.5</b>	<b>1.7</b>	<b>2.9</b>
Brazil	0.4	0.5	0.5	0.8	0.9	1.1	1.2	1.5	4.2
Other	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	-0.8
<b>Total Non-OECD</b>	<b>80.4</b>	<b>85.6</b>	<b>92.2</b>	<b>116.5</b>	<b>119.4</b>	<b>125.2</b>	<b>129.0</b>	<b>130.0</b>	<b>1.3</b>
<b>Total World</b>	<b>127.2</b>	<b>133.3</b>	<b>139.0</b>	<b>159.0</b>	<b>162.5</b>	<b>169.8</b>	<b>173.7</b>	<b>174.6</b>	<b>0.9</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

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

Sources: History: U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies). Projections: EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C7. World nuclear energy consumption by region, Low Oil Price case, 2006-2035**  
(Billion kilowatthours)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>891</b>	<b>905</b>	<b>905</b>	<b>963</b>	<b>1,010</b>	<b>1,013</b>	<b>1,039</b>	<b>1,046</b>	<b>0.5</b>
United States <sup>a</sup>	787	806	806	839	869	869	869	866	0.3
Canada	93	89	89	113	131	134	152	162	2.2
Mexico/Chile	10	10	9	10	10	10	18	18	2.4
OECD Europe	<b>935</b>	<b>884</b>	<b>882</b>	<b>965</b>	<b>998</b>	<b>1,067</b>	<b>1,111</b>	<b>1,136</b>	<b>0.9</b>
OECD Asia	<b>430</b>	<b>386</b>	<b>389</b>	<b>502</b>	<b>560</b>	<b>591</b>	<b>641</b>	<b>683</b>	<b>2.1</b>
Japan	288	251	245	319	342	358	388	417	2.0
South Korea	141	136	143	183	218	233	253	266	2.3
Australia/New Zealand	0	0	0	0	0	0	0	0	--
<b>Total OECD</b>	<b>2,255</b>	<b>2,176</b>	<b>2,175</b>	<b>2,430</b>	<b>2,568</b>	<b>2,672</b>	<b>2,791</b>	<b>2,865</b>	<b>1.0</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>263</b>	<b>272</b>	<b>276</b>	<b>342</b>	<b>416</b>	<b>504</b>	<b>567</b>	<b>614</b>	<b>3.0</b>
Russia	144	152	154	197	242	308	366	388	3.5
Other	119	120	121	145	174	196	201	225	2.3
Non-OECD Asia	<b>111</b>	<b>119</b>	<b>119</b>	<b>360</b>	<b>631</b>	<b>855</b>	<b>1,063</b>	<b>1,281</b>	<b>9.2</b>
China	55	63	65	223	419	585	749	916	10.3
India	16	16	13	66	119	157	187	211	10.8
Other	40	41	41	71	92	113	127	153	5.0
Middle East	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>24</b>	<b>51</b>	<b>52</b>	<b>54</b>	<b>--</b>
Africa	<b>10</b>	<b>12</b>	<b>11</b>	<b>15</b>	<b>15</b>	<b>21</b>	<b>21</b>	<b>31</b>	<b>3.8</b>
Central and South America	<b>21</b>	<b>19</b>	<b>21</b>	<b>25</b>	<b>35</b>	<b>44</b>	<b>44</b>	<b>63</b>	<b>4.2</b>
Brazil	14	12	14	18	22	31	31	41	4.1
Other	7	7	7	7	13	13	13	22	4.4
<b>Total Non-OECD</b>	<b>405</b>	<b>422</b>	<b>427</b>	<b>748</b>	<b>1,121</b>	<b>1,474</b>	<b>1,747</b>	<b>2,043</b>	<b>6.0</b>
<b>Total World</b>	<b>2,660</b>	<b>2,598</b>	<b>2,602</b>	<b>3,178</b>	<b>3,690</b>	<b>4,146</b>	<b>4,538</b>	<b>4,908</b>	<b>2.4</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

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

Sources: **History:** U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies). **Projections:** EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C8. World consumption of hydroelectricity and other renewable energy by region,  
Low Oil Price case, 2006-2035**  
(Quadrillion Btu)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>10.7</b>	<b>10.7</b>	<b>11.8</b>	<b>14.3</b>	<b>15.6</b>	<b>16.9</b>	<b>18.4</b>	<b>19.5</b>	<b>1.9</b>
United States <sup>a</sup>	6.4	6.2	7.1	8.6	9.3	10.2	10.9	11.4	1.8
Canada	3.7	3.9	4.0	4.4	4.9	5.2	5.7	6.0	1.5
Mexico/Chile	0.6	0.6	0.7	1.3	1.4	1.5	1.8	2.1	4.1
OECD Europe	<b>7.6</b>	<b>8.1</b>	<b>8.4</b>	<b>12.0</b>	<b>14.3</b>	<b>15.9</b>	<b>16.6</b>	<b>17.1</b>	<b>2.7</b>
OECD Asia	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>	<b>3.2</b>	<b>3.6</b>	<b>4.0</b>	<b>4.1</b>	<b>4.4</b>	<b>3.1</b>
Japan	1.2	1.1	1.1	1.8	2.0	2.3	2.3	2.5	3.0
South Korea	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	3.1
Australia/NewZealand	0.7	0.7	0.7	1.2	1.4	1.4	1.5	1.6	3.3
<b>Total OECD</b>	<b>20.4</b>	<b>20.7</b>	<b>22.1</b>	<b>29.6</b>	<b>33.6</b>	<b>36.8</b>	<b>39.1</b>	<b>41.1</b>	<b>2.3</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>3.3</b>	<b>3.1</b>	<b>3.0</b>	<b>3.7</b>	<b>3.8</b>	<b>3.8</b>	<b>4.1</b>	<b>4.4</b>	<b>1.4</b>
Russia	1.9	1.9	1.7	2.1	2.1	2.1	2.4	2.6	1.6
Other	1.4	1.2	1.3	1.5	1.7	1.7	1.8	1.8	1.3
Non-OECD Asia	<b>10.5</b>	<b>11.2</b>	<b>12.6</b>	<b>20.3</b>	<b>27.2</b>	<b>30.2</b>	<b>33.1</b>	<b>35.6</b>	<b>3.9</b>
China	4.7	5.3	6.4	11.2	15.8	17.7	19.6	21.0	4.5
India	2.4	2.5	2.4	3.6	4.7	5.2	5.6	5.9	3.4
Other	3.5	3.5	3.7	5.6	6.7	7.3	7.9	8.8	3.2
Middle East	<b>0.3</b>	<b>0.3</b>	<b>0.1</b>	<b>0.4</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>	<b>6.2</b>
Africa	<b>3.5</b>	<b>3.6</b>	<b>3.7</b>	<b>4.4</b>	<b>4.7</b>	<b>4.9</b>	<b>5.0</b>	<b>5.1</b>	<b>1.2</b>
Central and South America	<b>9.2</b>	<b>9.6</b>	<b>9.8</b>	<b>10.8</b>	<b>11.8</b>	<b>13.0</b>	<b>14.3</b>	<b>15.5</b>	<b>1.7</b>
Brazil	5.5	5.9	6.0	7.3	8.2	9.1	10.2	11.4	2.4
Other	3.7	3.7	3.8	3.5	3.6	3.9	4.0	4.0	0.3
<b>Total Non-OECD</b>	<b>26.8</b>	<b>27.8</b>	<b>29.2</b>	<b>39.7</b>	<b>48.1</b>	<b>52.5</b>	<b>57.1</b>	<b>61.3</b>	<b>2.8</b>
<b>Total World</b>	<b>47.1</b>	<b>48.5</b>	<b>51.3</b>	<b>69.2</b>	<b>81.7</b>	<b>89.3</b>	<b>96.2</b>	<b>102.3</b>	<b>2.6</b>

<sup>a</sup>Includes 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: U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies); and International Energy Agency, "Balances of OECD and Non-OECD Statistics" (2010), website [www.iea.org](http://www.iea.org) (subscription site). Projections: EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C9. World carbon dioxide emissions by region, Low Oil Price case, 2006-2035**  
(Million metric tons carbon dioxide)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>7,014</b>	<b>7,123</b>	<b>6,926</b>	<b>6,907</b>	<b>7,127</b>	<b>7,457</b>	<b>7,733</b>	<b>8,074</b>	<b>0.6</b>
United States <sup>a</sup>	5,918	6,022	5,838	5,778	5,913	6,136	6,304	6,497	0.4
Canada	594	607	595	588	625	662	692	733	0.8
Mexico/Chile	502	494	493	541	589	659	737	844	2.0
OECD Europe	<b>4,428</b>	<b>4,413</b>	<b>4,345</b>	<b>4,226</b>	<b>4,346</b>	<b>4,400</b>	<b>4,459</b>	<b>4,518</b>	<b>0.2</b>
OECD Asia	<b>2,165</b>	<b>2,206</b>	<b>2,201</b>	<b>2,206</b>	<b>2,310</b>	<b>2,384</b>	<b>2,418</b>	<b>2,446</b>	<b>0.4</b>
Japan	1,240	1,254	1,215	1,159	1,223	1,237	1,218	1,195	-0.1
South Korea	484	503	522	571	595	637	670	705	1.1
Australia/New Zealand	440	449	464	476	493	511	530	546	0.6
<b>Total OECD</b>	<b>13,606</b>	<b>13,742</b>	<b>13,472</b>	<b>13,339</b>	<b>13,784</b>	<b>14,241</b>	<b>14,610</b>	<b>15,038</b>	<b>0.4</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>2,823</b>	<b>2,790</b>	<b>2,832</b>	<b>2,834</b>	<b>2,730</b>	<b>2,656</b>	<b>2,612</b>	<b>2,571</b>	<b>-0.4</b>
Russia	1,668	1,618	1,663	1,672	1,600	1,550	1,529	1,530	-0.3
Other	1,155	1,172	1,169	1,162	1,130	1,106	1,083	1,041	-0.4
Non-OECD Asia	<b>8,835</b>	<b>9,416</b>	<b>10,100</b>	<b>13,529</b>	<b>14,381</b>	<b>15,528</b>	<b>16,187</b>	<b>16,398</b>	<b>1.8</b>
China	5,817	6,257	6,801	9,572	10,018	10,753	11,125	11,126	1.8
India	1,281	1,367	1,462	1,846	2,049	2,289	2,457	2,573	2.1
Other	1,737	1,793	1,838	2,111	2,314	2,486	2,605	2,699	1.4
Middle East	<b>1,446</b>	<b>1,479</b>	<b>1,581</b>	<b>1,931</b>	<b>2,038</b>	<b>2,135</b>	<b>2,251</b>	<b>2,339</b>	<b>1.5</b>
Africa	<b>984</b>	<b>1,016</b>	<b>1,078</b>	<b>1,249</b>	<b>1,324</b>	<b>1,384</b>	<b>1,433</b>	<b>1,479</b>	<b>1.2</b>
Central and South America	<b>1,064</b>	<b>1,085</b>	<b>1,128</b>	<b>1,324</b>	<b>1,356</b>	<b>1,392</b>	<b>1,445</b>	<b>1,494</b>	<b>1.1</b>
Brazil	380	397	423	553	581	611	655	699	1.9
Other	684	688	705	771	775	781	789	795	0.4
<b>Total Non-OECD</b>	<b>15,152</b>	<b>15,786</b>	<b>16,718</b>	<b>20,867</b>	<b>21,829</b>	<b>23,095</b>	<b>23,928</b>	<b>24,281</b>	<b>1.4</b>
<b>Total World</b>	<b>28,758</b>	<b>29,529</b>	<b>30,190</b>	<b>34,206</b>	<b>35,613</b>	<b>37,336</b>	<b>38,538</b>	<b>39,319</b>	<b>1.0</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

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

Sources: **History:** U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies). **Projections:** EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.DO22511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C10. World carbon dioxide emissions from liquids use by region, Low Oil Price case, 2006-2035**  
(Million metric tons carbon dioxide)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>3,198</b>	<b>3,219</b>	<b>3,050</b>	<b>3,191</b>	<b>3,257</b>	<b>3,355</b>	<b>3,489</b>	<b>3,690</b>	<b>0.7</b>
United States <sup>a</sup>	2,603	2,603	2,444	2,548	2,587	2,653	2,743	2,872	0.6
Canada	281	292	283	300	313	320	328	342	0.7
Mexico/Chile	314	325	323	344	358	382	418	475	1.4
OECD Europe	<b>2,135</b>	<b>2,090</b>	<b>2,076</b>	<b>2,001</b>	<b>2,102</b>	<b>2,153</b>	<b>2,178</b>	<b>2,214</b>	<b>0.2</b>
OECD Asia	<b>993</b>	<b>966</b>	<b>934</b>	<b>924</b>	<b>1,010</b>	<b>1,051</b>	<b>1,068</b>	<b>1,084</b>	<b>0.6</b>
Japan	622	599	574	525	590	610	601	593	0.1
South Korea	221	216	206	234	249	264	282	301	1.4
Australia/New Zealand	149	152	153	165	171	178	184	190	0.8
<b>Total OECD</b>	<b>6,326</b>	<b>6,276</b>	<b>6,059</b>	<b>6,116</b>	<b>6,369</b>	<b>6,560</b>	<b>6,734</b>	<b>6,987</b>	<b>0.5</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>670</b>	<b>624</b>	<b>637</b>	<b>694</b>	<b>669</b>	<b>656</b>	<b>658</b>	<b>651</b>	<b>0.1</b>
Russia	368	328	340	363	343	328	325	324	-0.2
Other	302	296	297	331	326	328	334	328	0.4
Non-OECD Asia	<b>2,147</b>	<b>2,185</b>	<b>2,242</b>	<b>3,105</b>	<b>3,507</b>	<b>3,919</b>	<b>4,082</b>	<b>4,107</b>	<b>2.3</b>
China	928	959	995	1,585	1,782	1,998	2,042	2,002	2.6
India	349	354	372	497	596	716	794	824	3.0
Other	870	872	874	1,022	1,129	1,205	1,246	1,282	1.4
Middle East	<b>839</b>	<b>845</b>	<b>894</b>	<b>1,100</b>	<b>1,133</b>	<b>1,182</b>	<b>1,273</b>	<b>1,323</b>	<b>1.5</b>
Africa	<b>428</b>	<b>437</b>	<b>447</b>	<b>487</b>	<b>491</b>	<b>499</b>	<b>501</b>	<b>513</b>	<b>0.5</b>
Central and South America	<b>757</b>	<b>777</b>	<b>799</b>	<b>933</b>	<b>937</b>	<b>936</b>	<b>947</b>	<b>953</b>	<b>0.7</b>
Brazil	301	315	332	411	418	424	437	446	1.1
Other	456	462	467	522	520	513	511	507	0.3
<b>Total Non-OECD</b>	<b>4,841</b>	<b>4,868</b>	<b>5,018</b>	<b>6,320</b>	<b>6,737</b>	<b>7,192</b>	<b>7,462</b>	<b>7,547</b>	<b>1.5</b>
<b>Total World</b>	<b>11,167</b>	<b>11,144</b>	<b>11,077</b>	<b>12,435</b>	<b>13,107</b>	<b>13,752</b>	<b>14,196</b>	<b>14,534</b>	<b>1.0</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

Sources: History: U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/ies](http://www.eia.gov/ies). Projections: EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C11. World carbon dioxide emissions from natural gas use by region, Low Oil Price case, 2006-2035**  
(Million metric tons carbon dioxide)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>1,473</b>	<b>1,540</b>	<b>1,549</b>	<b>1,701</b>	<b>1,760</b>	<b>1,807</b>	<b>1,894</b>	<b>2,009</b>	<b>1.0</b>
United States <sup>a</sup>	1,157	1,235	1,243	1,364	1,370	1,350	1,379	1,432	0.5
Canada	180	187	186	196	217	243	265	288	1.6
Mexico/Chile	136	118	120	141	174	214	250	288	3.3
OECD Europe	<b>1,047</b>	<b>1,045</b>	<b>1,070</b>	<b>1,115</b>	<b>1,164</b>	<b>1,202</b>	<b>1,268</b>	<b>1,322</b>	<b>0.8</b>
OECD Asia	<b>326</b>	<b>352</b>	<b>351</b>	<b>376</b>	<b>412</b>	<b>452</b>	<b>480</b>	<b>497</b>	<b>1.3</b>
Japan	193	210	205	206	221	233	242	245	0.7
South Korea	68	74	75	92	101	116	123	127	2.0
Australia/New Zealand	66	68	71	78	90	103	115	125	2.1
<b>Total OECD</b>	<b>2,847</b>	<b>2,937</b>	<b>2,970</b>	<b>3,192</b>	<b>3,337</b>	<b>3,461</b>	<b>3,642</b>	<b>3,828</b>	<b>1.0</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>1,332</b>	<b>1,353</b>	<b>1,354</b>	<b>1,330</b>	<b>1,297</b>	<b>1,273</b>	<b>1,257</b>	<b>1,248</b>	<b>-0.3</b>
Russia	889	897	899	878	853	833	826	833	-0.3
Other	443	456	454	453	445	440	431	416	-0.3
Non-OECD Asia	<b>518</b>	<b>573</b>	<b>617</b>	<b>959</b>	<b>1,119</b>	<b>1,297</b>	<b>1,433</b>	<b>1,528</b>	<b>3.4</b>
China	111	138	151	303	370	450	520	572	5.1
India	78	83	86	189	216	242	256	263	4.2
Other	330	352	380	467	532	604	657	693	2.3
Middle East	<b>572</b>	<b>595</b>	<b>650</b>	<b>793</b>	<b>868</b>	<b>916</b>	<b>943</b>	<b>982</b>	<b>1.5</b>
Africa	<b>166</b>	<b>176</b>	<b>206</b>	<b>282</b>	<b>338</b>	<b>383</b>	<b>423</b>	<b>448</b>	<b>2.9</b>
Central and South America	<b>241</b>	<b>238</b>	<b>256</b>	<b>290</b>	<b>309</b>	<b>333</b>	<b>358</b>	<b>383</b>	<b>1.5</b>
Brazil	38	39	46	68	80	89	103	117	3.5
Other	203	199	210	222	230	244	255	265	0.9
<b>Total Non-OECD</b>	<b>2,829</b>	<b>2,934</b>	<b>3,083</b>	<b>3,655</b>	<b>3,931</b>	<b>4,203</b>	<b>4,414</b>	<b>4,589</b>	<b>1.5</b>
<b>Total World</b>	<b>5,675</b>	<b>5,870</b>	<b>6,052</b>	<b>6,846</b>	<b>7,268</b>	<b>7,664</b>	<b>8,057</b>	<b>8,417</b>	<b>1.2</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

Sources: **History:** U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/](http://www.eia.gov/). **Projections:** EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

**Table C12. World carbon dioxide emissions from coal use by region, Low Oil Price case, 2006-2035**  
(Million metric tons carbon dioxide)

Region	History			Projections					Average annual percent change, 2008-2035
	2006	2007	2008	2015	2020	2025	2030	2035	
<b>OECD</b>									
OECD Americas	<b>2,331</b>	<b>2,352</b>	<b>2,315</b>	<b>2,003</b>	<b>2,098</b>	<b>2,283</b>	<b>2,338</b>	<b>2,363</b>	<b>0.1</b>
United States <sup>a</sup>	2,147	2,172	2,139	1,855	1,944	2,121	2,170	2,181	0.1
Canada	132	128	126	92	95	99	99	102	-0.8
Mexico/Chile	53	51	50	56	58	63	70	81	1.8
OECD Europe	<b>1,245</b>	<b>1,279</b>	<b>1,200</b>	<b>1,110</b>	<b>1,080</b>	<b>1,045</b>	<b>1,013</b>	<b>983</b>	<b>-0.7</b>
OECD Asia	<b>846</b>	<b>888</b>	<b>917</b>	<b>907</b>	<b>888</b>	<b>881</b>	<b>871</b>	<b>864</b>	<b>-0.2</b>
Japan	425	446	436	429	411	394	375	356	-0.8
South Korea	195	213	240	244	245	257	265	277	0.5
Australia/NewZealand	226	229	240	233	232	230	230	231	-0.1
<b>Total OECD</b>	<b>4,422</b>	<b>4,518</b>	<b>4,431</b>	<b>4,020</b>	<b>4,066</b>	<b>4,208</b>	<b>4,222</b>	<b>4,210</b>	<b>-0.2</b>
<b>Non-OECD</b>									
Non-OECD Europe and Eurasia	<b>821</b>	<b>813</b>	<b>841</b>	<b>810</b>	<b>764</b>	<b>728</b>	<b>697</b>	<b>672</b>	<b>-0.8</b>
Russia	412	393	424	431	405	389	378	374	-0.5
Other	410	420	417	379	359	339	319	298	-1.2
Non-OECD Asia	<b>6,170</b>	<b>6,659</b>	<b>7,241</b>	<b>9,465</b>	<b>9,755</b>	<b>10,311</b>	<b>10,672</b>	<b>10,764</b>	<b>1.5</b>
China	4,779	5,160	5,654	7,684	7,865	8,305	8,563	8,553	1.5
India	854	931	1,003	1,160	1,237	1,330	1,407	1,487	1.5
Other	537	569	583	622	652	677	702	724	0.8
Middle East	<b>36</b>	<b>39</b>	<b>37</b>	<b>38</b>	<b>37</b>	<b>36</b>	<b>35</b>	<b>34</b>	<b>-0.3</b>
Africa	<b>390</b>	<b>403</b>	<b>426</b>	<b>480</b>	<b>496</b>	<b>502</b>	<b>510</b>	<b>518</b>	<b>0.7</b>
Central and South America	<b>65</b>	<b>70</b>	<b>72</b>	<b>101</b>	<b>109</b>	<b>123</b>	<b>139</b>	<b>158</b>	<b>2.9</b>
Brazil	41	43	44	74	84	98	115	135	4.2
Other	25	27	28	27	26	25	24	23	-0.8
<b>Total Non-OECD</b>	<b>7,482</b>	<b>7,985</b>	<b>8,618</b>	<b>10,893</b>	<b>11,161</b>	<b>11,700</b>	<b>12,052</b>	<b>12,145</b>	<b>1.3</b>
<b>Total World</b>	<b>11,904</b>	<b>12,503</b>	<b>13,049</b>	<b>14,913</b>	<b>15,227</b>	<b>15,909</b>	<b>16,274</b>	<b>16,356</b>	<b>0.8</b>

<sup>a</sup>Includes the 50 States and the District of Columbia.

Sources: History: U.S. Energy Information Administration (EIA), International Energy Statistics database (as of March 2011), website [www.eia.gov/](http://www.eia.gov/). Projections: EIA, *Annual Energy Outlook 2011*, DOE/EIA-0383(2011), AEO2011 National Energy Modeling System, run LP20011LNO.D022511A, website [www.eia.gov/aeo](http://www.eia.gov/aeo), and World Energy Projection System Plus (2011).

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