# **Short-Term Energy Outlook**

### **Highlights**

- Brent crude oil spot prices have increased at a relatively steady pace from their 2012 low of \$89 per barrel on June 25 to their recent high of \$117 per barrel on August 23 because of the seasonal tightening of oil markets and continuing unexpected production outages. EIA expects Brent crude oil prices to fall from recent highs over the rest of 2012, averaging \$111 per barrel over the last 4 months of 2012 and \$103 per barrel in 2013. West Texas Intermediate (WTI) crude oil spot prices rose by a more modest \$17 per barrel between June 25 and August 23, as the WTI discount to Brent crude oil widened from \$10 per barrel to \$22 per barrel. EIA expects WTI spot prices to average \$93 per barrel in 2013, with the WTI discount to Brent narrowing to \$9 per barrel by the end of the 2013.
- Higher crude oil prices, refinery outages, a pipeline disruption, and concerns over Hurricane Isaac's impact on the Gulf Coast, the United States' major refining region, contributed to higher gasoline prices during August. EIA has increased the average regular-gasoline retail price forecast for the third quarter of 2012 to \$3.66 per gallon from \$3.49 per gallon in last month's Outlook. EIA expects retail gasoline prices to begin declining later this month as the gasoline market recovers and transitions from summergrade to winter-grade gasoline specifications. Forecast regular gasoline retail prices average \$3.58 per gallon over the fourth quarter of 2012 and \$3.43 per gallon in 2013.
- EIA expects U.S. total crude oil production to average 6.3 million barrels per day (bbl/d) in 2012, an increase of 0.7 million bbl/d from last year. Projected U.S. domestic crude oil production increases to 6.8 million bbl/d in 2013, the highest level of production since 1993.
- Because of the projected increase in natural gas prices relative to coal, EIA expects the recent trend of substituting coal-fired electricity generation with natural gas generation to slow and likely reverse over the next year. From April through August 2012, average monthly natural gas prices to electric generators increased by 34 percent, while coal prices fell slightly. EIA expects that coal-fired electricity generation will increase by 9 percent in 2013, while natural gas generation will fall by about 10 percent.

- EIA expects carbon dioxide emissions from fossil fuels, which fell by 2.3 percent in 2011, to further decline by 2.4 percent in 2012. However, projected emissions increase by 2.8 percent in 2013, as coal regains some of its electric-power-generation market share.
- Natural gas working inventories ended August 2012 at an estimated 3.4 trillion cubic feet (Tcf), about 13 percent above the same time last year. EIA expects the Henry Hub natural gas spot price, which averaged \$4.00 per million British thermal units (MMBtu) in 2011, to average \$2.65 per MMBtu in 2012 and \$3.34 per MMBtu in 2013.

### **Global Crude Oil and Liquid Fuels**

Global Crude Oil and Liquid Fuels Overview. The oil market has tightened in recent months as the seasonal increase in global demand outpaced supply in August and unplanned production outages in countries outside of the Organization of the Petroleum Exporting Countries (OPEC) persist. Most recently, Hurricane Isaac led to the shut-in of 13 million barrels of crude oil production from August 25 through September 10 in the Gulf of Mexico. EIA expects oil markets to begin to loosen, with non-OPEC liquid fuels production growing by 1.2 million bbl/d in 2013 compared with world consumption growth of 1.0 million bbl/d. The possibility of a deteriorating economic situation in the countries of the European Union and slowing growth in China adds significant downside risk to future prices, though supply disruptions and lower-than-expected supply growth could raise prices. EIA expects stock builds during 2013, reflecting a looser oil market over that time period.

Global Crude Oil and Liquid Fuels Consumption. World liquid fuels consumption grew by an estimated 1.0 million bbl/d in 2011. EIA expects consumption growth of 0.8 million bbl/d in 2012 and 1.0 million bb/d in 2013, with China, Russia, the Middle East, Brazil, and other countries outside of the Organization for Economic Cooperation and Development (OECD) accounting for most of the consumption growth. Although forecast liquid fuels consumption in the United States increases by 0.1 million bbl/d in 2013, total OECD liquid fuels consumption falls by 0.2 million bbd/d in 2013, led by declines in consumption in Europe and Japan.

Non-OPEC Supply. EIA expects non-OPEC liquid fuels production to rise by 0.5 million bbl/d in 2012 and by a further 1.2 million bbl/d in 2013. The largest area of non-OPEC growth is North America, where production increases by 1.0 million bbl/d and 0.6 million bbl/d in 2012 and 2013, respectively, due to continued production growth from U.S. onshore shale and other tight oil formations and from Canadian oil sands. EIA expects that Kazakhstan will commence commercial production in the Kashagan field next year, increasing its total production by 160 thousand bbl/d in 2013. In Brazil, EIA projects output to rise by 200 thousand bbl/d in 2013, with increased output from its offshore, pre-salt oil fields. Forecast production also rises in Columbia, Russia, and China over the next two years, while production declines in Mexico and the North Sea.

Unplanned non-OPEC disruptions declined in recent months, from almost 1 million bbl/d in June to around 0.8 million bbl/d in August, mainly due to the temporary completion of unplanned maintenance activities in the North Sea and the repair of the Marib pipeline in Yemen. Sudan and South Sudan reached an understanding on pipeline transit and processing fees, as well as having South Sudan pay compensation for loss of oil revenue due to the split. Also, both sides intend to reach an agreement on border security, particularly in the contested Abyei oil region, before resuming oil production and exports.

**OPEC Supply.** EIA expects that OPEC member countries will continue to produce more than 30 million bbl/d of crude oil over the next two years. Projected OPEC crude oil production increases by about 1.0 million bbl/d in 2012 and 0.1 million bbl/day 2013. The growth in OPEC supply is due in part to Iraq, where new infrastructure has enabled the country to increase production to the highest level since 1989. Following a disruption in early July, Libya restored oil production and exports to about 1.5 million bbl/d in August. OPEC non-crude oil liquids (condensates, natural gas liquids, and gas-to-liquids), which are not covered by OPEC's production quotas, averaged 5.3 million bbl/d in 2011. EIA forecasts that non-crude oil liquids will increase by 0.3 million bbl/d in 2012 and by 0.2 million bbl/d in 2013.

EIA's forecast of Iranian crude oil production is unchanged from last month's *Outlook*, with forecast production falling by about 1 million bbl/d by the end of 2012 relative to an estimated output level of 3.6 million bbl/d at the end of 2011, and by an additional 0.2 million bbl/d in 2013.

OPEC members serve as the swing producers in the world market because only OPEC producers possess surplus crude oil production capacity, most of which is in Saudi Arabia. EIA projects that OPEC surplus production capacity will average 2.2 million bbl/d in 2012 and rise to an average of just under 2.4 million bbl/d in 2013.

**OECD Petroleum Inventories.** EIA estimates that OECD commercial liquid fuel inventories ended 2011 at 2.60 billion barrels, equivalent to 56 days of forward cover. OECD stocks at the end of August 2012 are estimated to be about 22 million barrels higher than at the end of 2011, but are projected to fall back to 2.60 billion barrels by the end of 2012. OECD commercial inventories increase to 2.65 billion barrels and 57 days of forward cover by the end of 2013.

**Crude Oil Prices.** EIA projects the price of Brent crude oil will average \$112 per barrel in 2012 and \$103 per barrel in 2013, both about 3 percent higher than last month's *Outlook*. EIA expects the WTI price to average \$93 per barrel in the second half of 2012 and largely remain at this level throughout the forecast period. EIA expects that the WTI crude oil spot price discount to the Brent crude oil spot price will continue, averaging \$17 per barrel in the fourth quarter of 2012 and then falling to \$9 per barrel by the end of 2013.

Energy price forecasts are highly uncertain (*Market Prices and Uncertainty Report*). WTI futures for December 2012 delivery during the five-day period ending September 6, 2012 averaged \$96.11 per barrel. Implied volatility averaged 31 percent, establishing the lower and upper

limits of the 95-percent confidence interval for the market's expectations of monthly average WTI prices in December 2012 at \$74 per barrel and \$126 per barrel, respectively. Last year at this time, WTI for December 2011 delivery averaged \$89 per barrel and implied volatility averaged 40 percent. The corresponding lower and upper limits of the 95-percent confidence interval were \$62 per barrel and \$127 per barrel.

### **U.S. Crude Oil and Liquid Fuels**

**U.S. Liquid Fuels Consumption.** Total liquid fuels consumption fell 230 thousand bbl/d (1.2 percent) in 2011. Motor gasoline consumption accounted for the bulk of the decline, shrinking 240 thousand bbl/d (2.7 percent). In 2012, total consumption decreases an additional 280 thousand bbl/d (1.5 percent). The year-over-year decline in total consumption narrowed from 660 thousand bbl/d in the first quarter of 2012 to 140 thousand bbl/d in the second quarter. EIA expects some in total liquid fuels consumption in 2013, with a projected year-over-year increase of 80 thousand bbl/d (0.5 percent). Most of the recovery comes from distillate fuel oil and natural gas liquids consumption, which rise because of continued growth in freight shipments and industrial use and because of the assumption of near-normal weather this coming winter.

Despite higher assumed growth in U.S. real disposable income and projected declines in retail pump prices of almost 6 percent in 2013, forecast motor gasoline consumption is flat because of slow growth in the driving-age population, improvements in the average fuel economy of new vehicles, and increased rates of retirement of older, less-fuel-efficient vehicles.

**U.S. Liquid Fuels Supply and Imports.** Domestic crude oil production increased by an estimated 180 thousand bbl/d (3.3 percent) to 5.66 million bbl/d in 2011. Forecast crude oil production increases to 6.34 million bbl/d in 2012. Forecast lower-48 crude oil production grows by a robust 740 thousand bbl/d in 2012, primarily from the Bakken, Permian basin, and Eagle Ford producing areas. In 2013, total crude oil output rises a further 490 thousand bbl/d, most of which is accounted for by increases in lower-48 production. The number of onshore oil-directed drilling rigs reported by Baker Hughes has increased from 777 at the beginning of 2011 to 1,191 at the start of 2012, and to 1,409 as of September 7, 2012.

Significant events have occurred since last month's *Outlook*. There have been fires at Chevron's Richmond, California refinery (*This Week In Petroleum*, An Update on West Coast Gasoline Markets, August 22, 2012) and PDVSA's Amuay refinery in Venezuela. The Richmond fire contributed to gasoline price increases in California, while the fire at the Amuay refinery caused a short-term increase in the price of gasoline and diesel fuel in the eastern United States. Hurricane Isaac led to a peak shut-in of 1.3 million bbl/d of U.S. crude oil production (a total of 13.0 million barrels from August 25 through September 10) in the Gulf of Mexico and curtailed Gulf Coast refinery runs with a decline in crude oil inputs of 0.7 million bbl/d for the week ending August 31.

The share of total U.S. consumption met by total liquid fuel net imports of both crude oil and products has been falling since peaking at over 60 percent in 2005. In 2011, it averaged 45 percent, down from 49 percent in 2010. EIA expects that the total net import share of consumption will continue to decline to 41 percent in 2012 and to 39 percent in 2013 because of the substantial increases in domestic crude oil production. If the 2013 forecast holds true, it would be the first time the share of total U.S. consumption met by total liquid fuel imports is less than 40 percent since 1991.

**U.S. Petroleum Product Prices.** After a sharp increase in retail gasoline prices earlier this year, the monthly average price for regular grade gasoline reached \$3.90 per gallon in April. Prices then fell for three consecutive months, averaging \$3.44 per gallon in July. Rising crude prices contributed to an increase in regular gasoline retail prices to \$3.84 per gallon on September 3. EIA expects retail gasoline prices to begin declining later this month as the gasoline market recovers and transitions from summer-grade to winter-grade gasoline specifications. Projected regular gasoline retail prices average \$3.58 per gallon during the fourth quarter of 2012, up from the \$3.30 per gallon projected in last month's *Outlook*. Projected regular gasoline retail prices average \$3.64 per gallon in 2012 and \$3.43 per gallon in 2013, both about 11 cents per gallon higher than in last month's *Outlook*. EIA expects that on-highway diesel fuel retail prices, which averaged \$3.84 per gallon in 2011, will average \$3.96 per gallon and \$3.73 per gallon in 2012 and 2013, respectively.

#### **Natural Gas**

**U.S. Natural Gas Consumption.** EIA expects that natural gas consumption will average 69.8 billion cubic feet per day (Bcf/d) in 2012, an increase of 3.2 Bcf/d (4.8 percent) from 2011. Large gains in electric power use in 2012 more than offset declines in residential and commercial use. Projected consumption of natural gas in the electric power sector averages 25.2 Bcf/d in 2012, 21 percent higher than in 2011, primarily driven by the improved relative cost advantages of natural gas over coal for power generation in some regions. Consumption in the electric power sector during 2012 peaks at 31.1 Bcf/d in the third quarter, when electricity demand for air conditioning is highest.

Total natural gas consumption increases by 0.2 Bcf/d (0.2 percent) in 2013. Expected increases in residential, commercial, and industrial consumption offset expected declines in the electric power sector. A forecast of near-normal weather during the upcoming winter drives 2013 increases in residential and commercial consumption of 9.9 percent and 9.3 percent, respectively. Although higher natural gas prices contribute to an 8.4 percent decline in forecast natural gas consumption in the electric power sector in 2013, consumption in the power sector next year is still expected to be about 2.3 Bcf/d higher than 2011 levels.

**U.S. Natural Gas Production and Imports.** Total marketed production of natural gas grew by 4.8 Bcf/d (7.9 percent) in 2011. This strong growth was driven in large part by increases in shale gas

production. EIA expects continued year-over-year growth in 2012 of 2.6 Bcf/d. EIA, however, expects a small drop in production in the coming months, reflecting both losses from hurricanes (2012 Outlook for Hurricane-Related Production Outages in the Gulf of Mexico) and declines related to recent drops in the rig count. Hurricane Isaac hit the Gulf of Mexico on August 28 and has affected natural gas production for several days, with shut-ins in the Gulf of Mexico totaling 27.9 Bcf through September 10. According to Baker Hughes, the natural gas rig count was 452 as of September 7, 2012, compared with 811 at the start of 2012.

EIA forecasts that production growth will slow to 0.5 Bcf/d in 2013, as the slowdown in drilling activity is offset by growth in production from liquids-rich natural gas production areas such as the Eagle Ford and wet areas of the Marcellus Shale, and associated gas from the growth in domestic crude oil production.

EIA expects pipeline gross imports will fall by 0.1 Bcf/d (1.4 percent) in 2012, as domestic supply continues to displace Canadian sources. The warm winter in the United States early this year also added to the year-over-year decline in imports, particularly to the Northeast where imported natural gas can serve as additional supply in times of very cold weather. EIA expects little change in pipeline gross imports in 2013. Pipeline gross exports grew by 1.0 Bcf/d (33 percent) in 2011, driven by increased exports to Mexico, but are expected to remain flat in 2012, and grow by 0.1 Bcf/d in 2013.

Liquefied natural gas (LNG) imports are expected to fall by about one-half in 2012 from the year before. EIA expects that an average of about 0.4 Bcf/d will arrive in the United States (mainly at the Elba Island terminal in Georgia) both in 2012 and 2013, either to fulfill long-term contract obligations or to take advantage of temporarily high local prices due to cold snaps and disruptions. Higher prices for LNG, particularly in Asian markets, have made the United States a market of last resort for LNG suppliers.

**U.S. Natural Gas Inventories.** Working natural gas inventories remain at historically high levels for this time of year. As of August 31, 2012, according to EIA's <u>Weekly Natural Gas Storage</u>

<u>Report</u>, working inventories totaled 3,402 Bcf, which is 395 Bcf greater than last year's level and 329 Bcf above the five-year average. EIA expects that inventory levels at the end of October 2012 will set a new record of 3,950 Bcf. Because of very high inventories at the start of the summer injection season this year, working inventories have remained high and stock builds since April, with a few exceptions, have been below the five-year average and below last year's levels. The projected increase of 1,473 Bcf in working gas inventory during the 2012 injection season (from the end of March to the end of October) would be the smallest build since 1991.

**U.S. Natural Gas Prices.** Natural gas spot prices averaged \$2.84 per MMBtu at the Henry Hub in August 2012, down \$0.11 per MMBtu from the July average and \$1.21 per MMBtu (30 percent) lower than the August 2011 average. While abundant supplies have kept prices relatively low, a hot summer and associated increases in demand for natural gas for power generation contributed to the increase in prices in July. EIA expects the Henry Hub natural gas price will

average \$2.65 per MMBtu in 2012, with prices remaining below \$3.00 per MMBtu until December. EIA expects 2013 prices will average \$3.34 per MMBtu.

Natural gas futures prices for December 2012 delivery (for the five-day period ending September 6, 2012) averaged \$3.20 per MMBtu, and the average implied volatility based on options and futures prices was 40 percent (*Market Prices and Uncertainty Report*). Current options and futures prices imply that market participants place the lower and upper bounds for the 95-percent confidence interval for December 2012 contracts at \$2.20 per MMBtu and \$4.65 per MMBtu, respectively. At this time last year, the December 2011 natural gas futures contract averaged \$4.29 per MMBtu and implied volatility averaged 32 percent. The corresponding lower and upper limits of the 95-percent confidence interval were \$3.18 per MMBtu and \$6.21 per MMBtu.

#### Coal

**U.S. Coal Consumption.** EIA expects that coal consumption in the electric power sector, which averaged over 1 billion short tons annually from 2003 through 2008, will not reach that threshold for a fourth consecutive year in 2012. EIA forecasts coal consumption in the electric power sector to total 829 million short tons (MMst) in 2012. Lower electric power sector natural gas prices have led to a significant increase in the share of natural gas-fired generation. EIA projects power sector coal consumption to grow by 7.8 percent to 894 MMst in 2013 as electricity consumption increases and higher natural gas prices lead to a reduction in natural gas-fired generation.

**U.S. Coal Supply.** EIA forecasts that coal production will decline by 6.1 percent in 2012 as domestic consumption falls. Production for the first seven months of 2012 was 33 MMst (5 percent) below last year's level for the same period. EIA expects that production will total 1,028 MMst in 2012, 66 MMst below the 2011 total. EIA expects production to grow by 1.4 percent (14 MMst) in 2013 to meet the increase in consumption. Electric power sector stocks, which ended 2011 at 175 MMst, are forecast to total 192 MMst at the end of the 2012. Inventories are expected to decline slightly in 2013, but they will remain at elevated levels.

**U.S. Coal Trade.** EIA expects U.S. coal exports to remain strong in 2012 and exceed the 107 MMst exported in 2011. The United States exported 12.7 MMst of coal in June, topping April's record-setting amount, and it was the third consecutive month with exports exceeding 12 MMst. EIA projects coal exports to total a record 124 MMst in 2012. EIA expects that coal exports will decline in 2013 but remain above 100 MMst. The primary reasons for the export decline include China's slower economic growth and increased exports from major coal-exporting countries, particularly Indonesia and Australia. U.S. exports could be higher if there are supply disruptions from any of the major coal-exporting countries. U.S. coal exports averaged 56 MMst in the decade preceding 2011.

**U.S. Coal Prices.** Delivered coal prices to the electric power industry have increased steadily over the last 10 years and this trend continued in 2011, with an average delivered coal price of \$2.40 per MMBtu (a 6-percent increase from 2010). However, EIA expects the decline in demand for coal, combined with the large coal inventories, will begin to put downward pressure on coal prices and contribute to the shut-in of higher-cost production. EIA forecasts that the delivered coal price in 2012 will average \$2.39 per MMBtu, and remain at that level in 2013.

### **Electricity**

**U.S. Electricity Consumption.** Average daily retail sales of electricity to the residential sector during the first half of this year were about 6.6 percent lower than the same period in 2011, as a result of mild winter temperatures in the south where many households heat using electricity. Although summer temperatures this year were much warmer than normal, cooling degree days during June, July and August were about 4 percent lower than last summer. Residential sales for the entire year are projected to average about 3.5 percent lower than sales during 2011. Projected sales of electricity to the residential sector grow by 1.6 percent in 2013.

**U.S. Electricity Generation.** Recent power generation and fuel cost data indicate that over the last few quarters the generation fuel mix has been much more responsive to changes in relative fossil fuel prices than it has been in past years (see <a href="Fuel Competition in Power Generation and Elasticities of Substitution">Fuel Fuel Competition in Power Generation and Elasticities of Substitution</a>). The share of total generation fueled by natural gas during the first half of 2012 averaged 30.4 percent compared with 22.3 percent during the same period last year. This increase in fuel share was driven by a cost of natural gas that was very low relative to the cost of coal. However, in June, the average Henry Hub natural gas spot price surpassed the average spot price for Central Appalachian coal for the first time since October 2011, indicating that the recent trend of substituting coal-fired generation with natural-gas-fired generation may be slowing and will likely reverse. In light of the data indicating that power generators have recently been more responsive to changes in relative fuel costs, EIA has revised its projections for the generation fuel mix during 2013. EIA now expects that the higher natural gas prices next year will lead to a 9.5-percent decline in natural gas-fired generation while coal-fired generation increases by 9.3 percent.

**U.S. Electricity Retail Prices.** EIA expects the nominal U.S. residential electricity price will rise by 1.0 percent during 2012 to an average of 11.91 cents per kilowatthour. During 2013, U.S. residential retail electricity prices increase 0.9 percent over the average 2012 price. When measured in real terms, the U.S. residential electricity price declines by an annual average of 0.8 percent in both 2012 and 2013.

#### **Renewables and Carbon Dioxide Emissions**

**U.S. Renewables.** After growing by 13.8 percent in 2011, total renewable energy consumption is projected to decline by 2.3 percent in 2012. This decrease is the result of hydropower resource levels beginning to return to the long-term average, with consumption falling by 0.4 quadrillion Btu (13.9 percent). The decline in hydropower from 2011 to 2012 more than offsets the projected growth in the consumption of other renewable energy forms. Renewable energy consumption increases 2.0 percent in 2013 as hydropower continues to decline (2.2 percent) but non-hydropower renewables grow by an average of 4.1 percent.

Under current law, federal production tax credits for wind-powered generation will not be available for turbines that begin operating after the end of 2012. Wind-powered generation, which grew by 26 percent in 2011, is forecast to grow an additional 18 percent in 2012. The outlook for wind capacity additions and generation in 2013 will likely respond to whatever decision is made regarding the extension of production tax credits.

As a result of drought conditions affecting corn harvests throughout the Midwest, ethanol production fell from an average of 887 thousand bbl/d in June 2012 to 808 thousand bbl/d in July, and then modestly rebounded to 822 thousand bbl/d in August. EIA expects ethanol production will average 830 thousand bbl/d over the second half of 2012. Forecast ethanol production recovers in the second half of 2013, averaging 870 thousand bbl/d (13.3 billion gallons) for the year. The projected lower ethanol production is generally matched by lower ethanol exports.

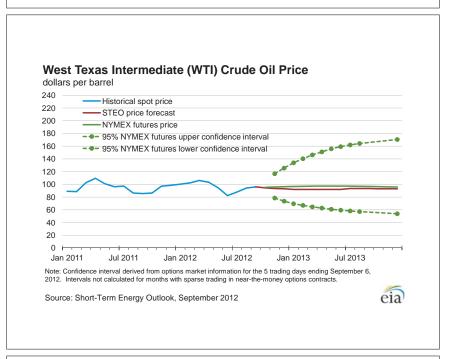
Biodiesel production averaged about 63 thousand bbl/d (967 million gallons) in 2011. Forecast biodiesel production averages 70 thousand bbl/d in 2012 and 75 thousand bbl/d in 2013.

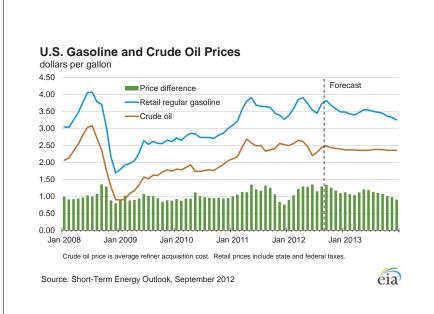
**U.S. Energy-Related Carbon Dioxide Emissions.** After declining by 2.3 percent in 2011, fossil fuel emissions are projected to further decline by 2.4 percent in 2012, but this decline is followed by an increase of 2.8 percent in 2013. Petroleum emissions decline in 2012 (1.4 percent) and grow only 0.2 percent in 2013. Natural gas emissions rise by 5.2 percent and 0.1 percent in 2012 and 2013, respectively. Coal emissions decline 8.9 percent in 2012, but their projected rise of 8.5 percent in 2013 is spurred by a 19-percent increase in the cost of natural gas for electricity while the cost of coal for power generation stays flat.

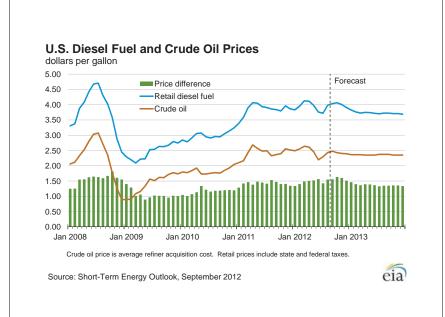


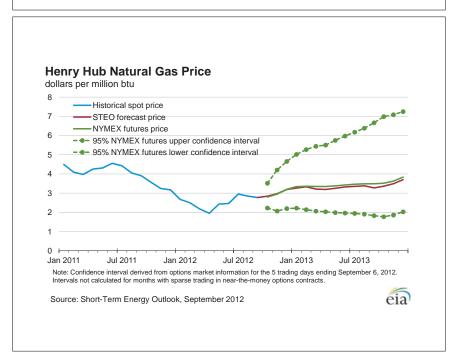


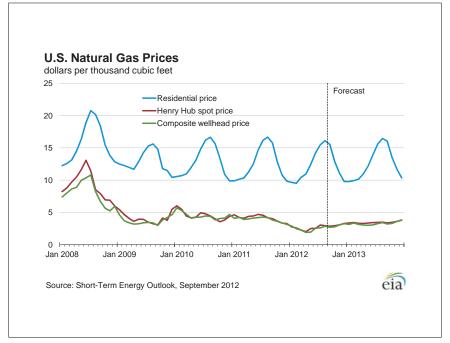
## Chart Gallery for September 2012

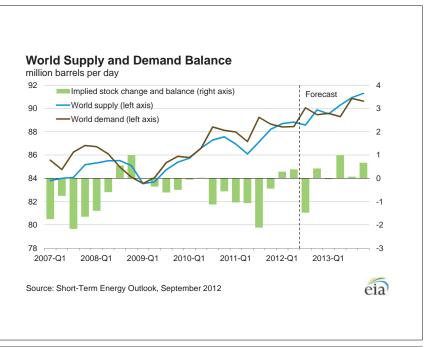


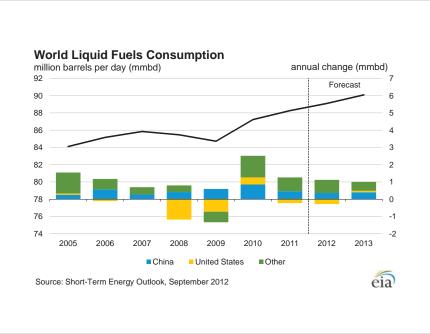


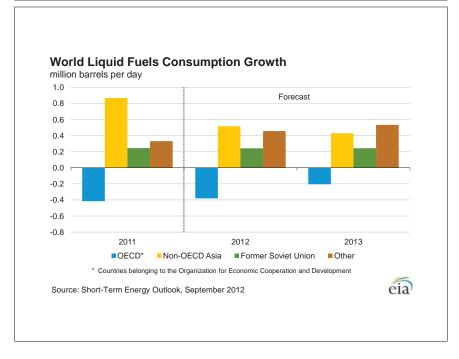


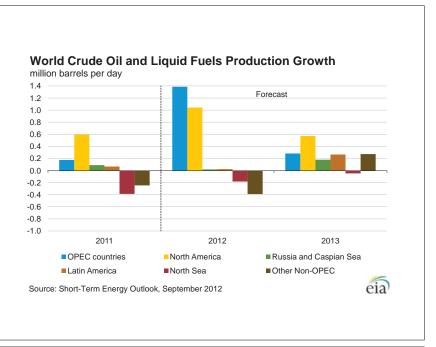


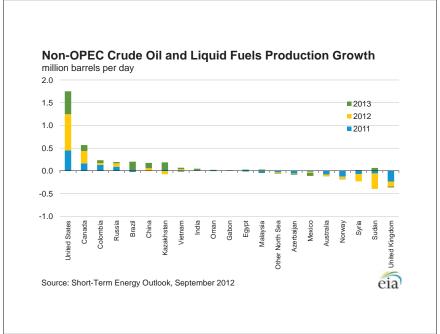


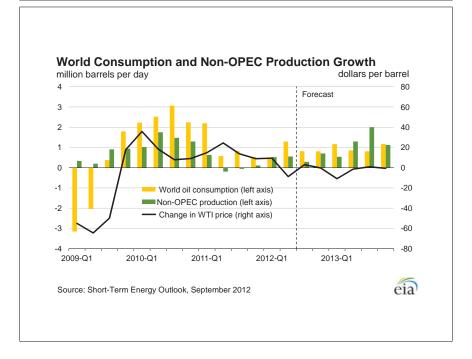


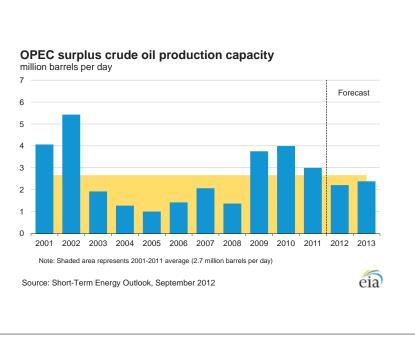


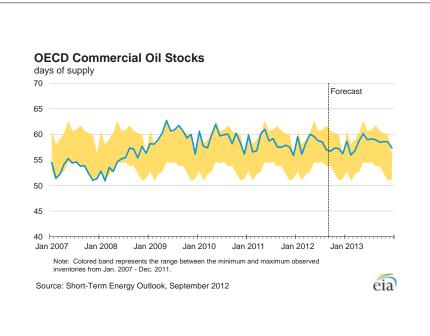


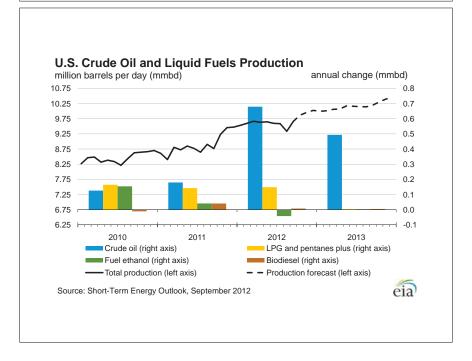


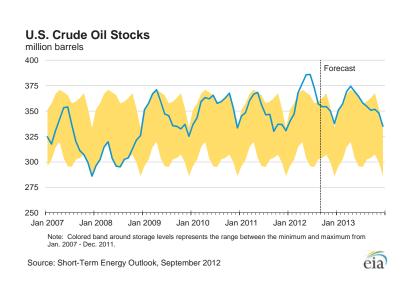


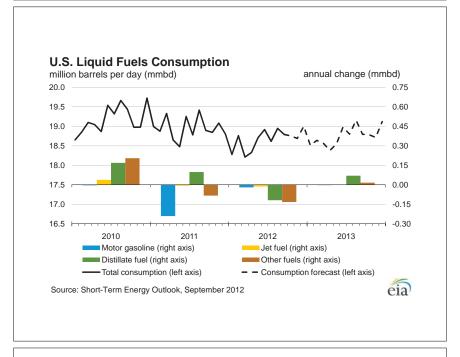


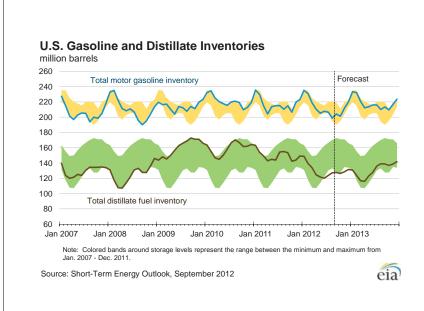


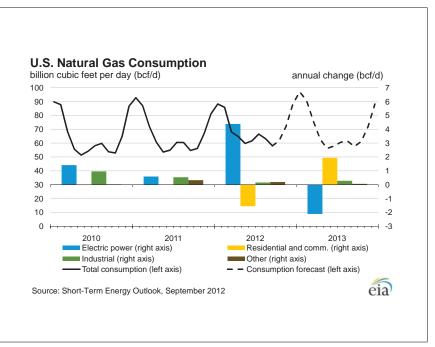


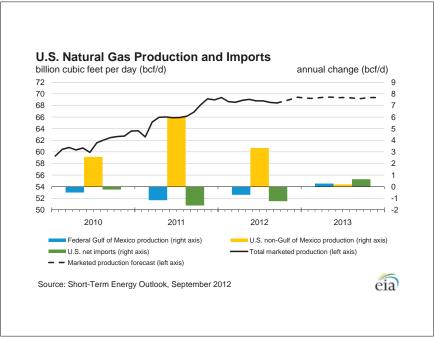


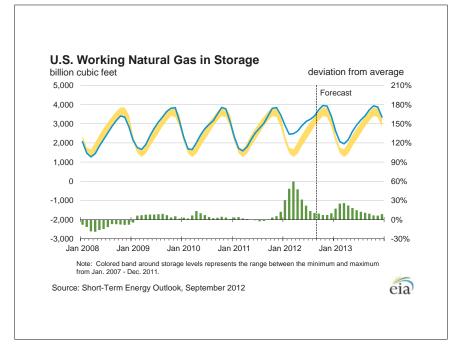


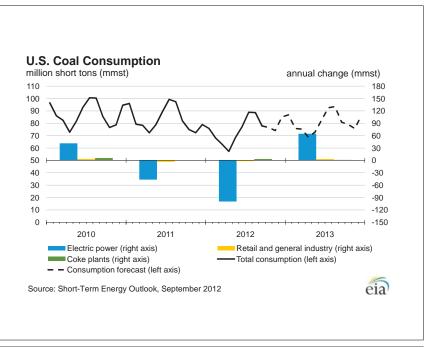


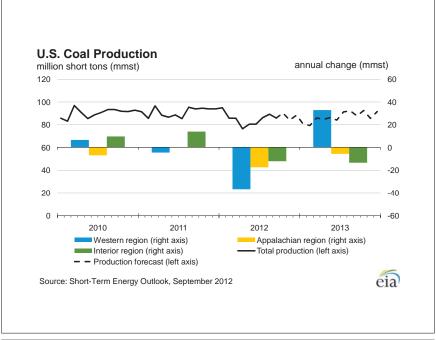


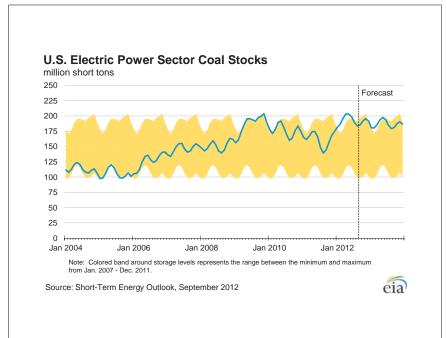


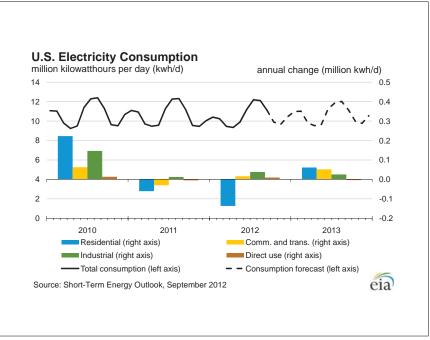


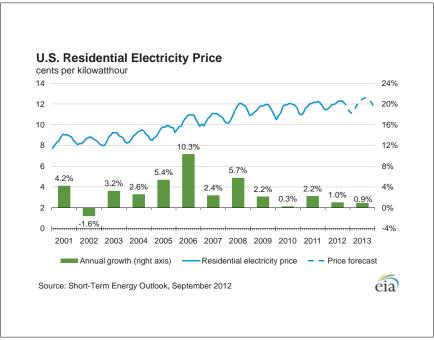


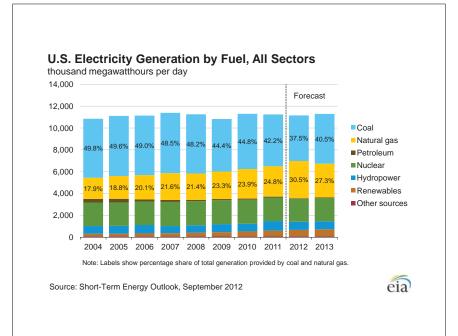


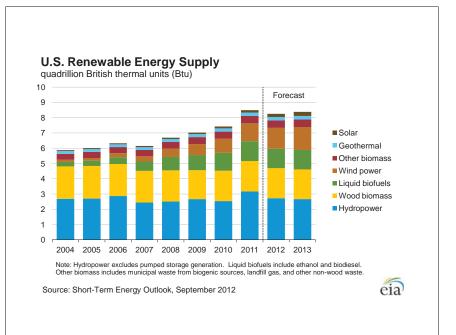


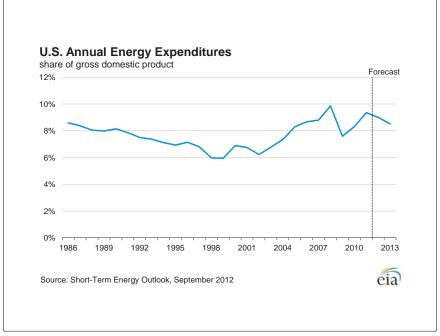


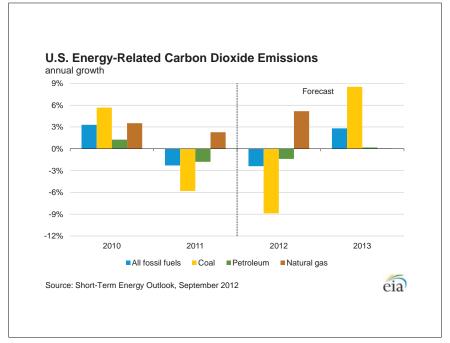












### **U.S. Summer Cooling Degree-Days**

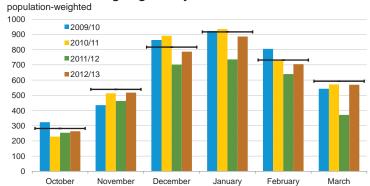
population-weighted 450 **2**010 400 2011 350 ■2012 300 **2013** 250 200 150 100 50 0 September May July April June August

Note: Horizontal bars indicate 30-year normals. Historical data from the National Oceanic and Atmospheric Administration (NOAA). Projections reflect NOAA's 14-16 month outlook and EIA estimates.

Source: Short-Term Energy Outlook, September 2012



### U.S. Winter Heating Degree-Days



Note: Horizontal bars indicate 30-year normals. Historical data from the National Oceanic and Atmospheric Administration (NOAA). Projections reflect NOAA's 14-16 month outlook and EIA estimates.

Source: Short-Term Energy Outlook, September 2012



#### U.S. Census Regions and Divisions



Source: Short-Term Energy Outlook, September 2012



Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy information Administration	Short-Ter	III Ellergy	Outlook - S	eptember	2012				
		2011			2012		Year-o	ver-year ( (percent)	U
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) <sup>a</sup>	2.43	2.14	2.29	2.22	2.21	2.22	-8.6	3.3	-3.0
Imported Crude Oil Price <sup>b</sup>	2.59	2.43	2.51	2.41	2.41	2.41	-6.8	-0.8	-3.9
U.S. Refiner Average Crude Oil Cost	2.57	2.40	2.48	2.42	2.40	2.41	-6.1	0.2	-3.0
Wholesale Gasoline Price <sup>c</sup>	3.12	2.97	3.04	2.99	2.97	2.98	-4.3	0.1	-2.2
Wholesale Diesel Fuel Price <sup>c</sup>	3.16	3.07	3.11	3.01	3.09	3.05	-4.8	0.7	-2.1
Regular Gasoline Retail Priced	3.80	3.63	3.71	3.72	3.66	3.69	-1.9	0.6	-0.7
Diesel Fuel Retail Priced	4.01	3.87	3.94	3.95	3.91	3.93	-1.6	1.2	-0.2
Gasoline Consumption/Supply (million	barrels per	day)							
Total Consumption	8.892	8.902	8.897	8.950	8.914	8.932	0.7	0.1	0.4
Total Refinery and Blender Output	7.486	7.819	7.653	7.628	7.711	7.670	1.9	-1.4	0.2
Fuel Ethanol Blending	0.854	0.845	0.849	0.868	0.849	0.859	1.7	0.5	1.1
Total Stock Withdrawal <sup>f</sup>	0.000	0.002	0.001	0.122	0.039	0.080			
Net Imports <sup>f</sup>	0.552	0.237	0.393	0.332	0.315	0.324	-39.9	33.4	-17.8
Refinery Utilization (percent)	85.8	89.8	87.8	89.9	90.8	90.4			
Gasoline Stocks, Including Blending C	omponents	s (million b	arrels)						
Beginning	215.0	215.0	215.0	218.8	207.7	218.8			
Ending	215.0	214.8	214.8	207.7	204.1	204.1			
Economic Indicators (annualized billion	2000 dollai	rs)							
Real GDP	13,265	13,307	13,286	13,558	13,600	13,579	2.2	2.2	2.2
Real Income	10,158	10,126	10,142	10,289	10,337	10,313	1.3	2.1	1.7

<sup>&</sup>lt;sup>a</sup> Spot Price of West Texas Intermediate (WTI) crude oil

Notes: Minor discrepancies with other Energy Information Administration (EIA) published historical data are due to rounding. Historical data are printed in bold. Forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: latest data available from: EIAPetroleum Supply Monthly, DOE/EIA-0109; Monthly Energy Review, DOE/EIA-0035; U.S. Department of Commerce, Bureau of Economic Analysis (GDP and income); Reuters News Service (WTI crude oil spotprice). Macroeconomic projections are based on IHS Global Insight Macroeconomic Forecast Model.

<sup>&</sup>lt;sup>b</sup> Cost of imported crude oil to U.S. refiners.

<sup>&</sup>lt;sup>c</sup> Price product sold by refiners to resellers.

<sup>&</sup>lt;sup>d</sup> Average pump price including taxes.

<sup>&</sup>lt;sup>e</sup> Refinery and blender net production plus finished motor gasoline adjustment.

<sup>&</sup>lt;sup>f</sup> Total stock withdrawal and net imports includes both finished gasoline and gasoline blend components. GDP = gross domestic product.

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administra	tion	Short-Te		gy Outlo	ook - Sep			Г				1			
<u> </u>	1st	201 2nd	1 3rd	4th	1st	201 2nd	2 3rd	4th	1st	201 2nd	3rd	4th	2011	Year 2012	2013
Energy Supply			v. u	1			v. 4				V. 4				
Crude Oil Production (a) (million barrels per day)	5.52	5.58	5.56	5.98	6.21	6.25	6.25	6.63	6.75	6.80	6.80	6.97	5.66	6.34	6.83
Dry Natural Gas Production (billion cubic feet per day)	60.83	62.75	63.10	65.32	65.35	65.44	65.14	65.60	65.79	65.92	65.79	65.85	63.01	65.38	65.84
Coal Production (million short tons)	274	264	275	282	266	238	261	263	246	255	271	270	1,094	1,028	1,042
Energy Consumption															
Liquid Fuels (million barrels per day)	19.07	18.79	19.03	18.91	18.41	18.65	18.78	18.82	18.57	18.63	18.92	18.87	18.95	18.67	18.75
Natural Gas (billion cubic feet per day)	83.70	56.37	58.56	68.04	80.52	61.98	62.60	74.08	87.66	58.85	59.88	73.71	66.60	69.79	69.96
Coal (b) (million short tons)	254	241	279	226	207	203	255	236	238	224	267	241	999	901	971
Electricity (billion kilowatt hours per day)	10.56	10.09	11.92	9.68	10.03	10.14	11.80	10.00	10.58	10.14	11.68	10.11	10.57	10.49	10.63
Renewables (c) (quadrillion Btu)	2.07	2.29	2.02	2.01	2.06	2.19	1.98	1.97	2.08	2.25	2.02	2.02	8.39	8.20	8.37
Total Energy Consumption (d) (quadrillion Btu)	25.86	23.09	24.32	23.92	24.43	22.87	24.17	24.59	25.57	23.06	24.22	24.78	97.18	96.05	97.63
Energy Prices															
Crude Oil (e) (dollars per barrel)	94.01	108.13	100.61	104.55	107.62	101.53	100.78	101.16	99.25	98.75	99.75	98.75	101.91	102.72	99.13
Natural Gas Wellhead (dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.71	3.02	3.20	3.03	3.29	3.55	3.90	2.60	3.27
Coal (dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.42	2.38	2.34	2.42	2.40	2.39	2.37	2.40	2.39	2.39
Macroeconomic															
Real Gross Domestic Product (billion chained 2005 dollars - SAAR) Percent change from prior year	13,184 1.8	13,265 1.9	13,307 1.6	13,441 2.0	13,506 2.4	13,558 2.2	13,600 2.2	13,645 1.5	13,707 1.5	13,767 1.5	13,837 1.7	13,918 2.0	13,299 1.8	13,577 2.1	13,807 1.7
GDP Implicit Price Deflator (Index, 2005=100) Percent change from prior year	112.4 2.0	113.1 2.2	113.9 2.4	114.0 2.0	114.6 2.0	115.1 1.7	115.6 1.5	116.3 2.0	116.8 1.9	117.1 1.8	117.6 1.7	118.1 1.5	113.4 2.1	115.4 1.8	117.4 1.7
Real Disposable Personal Income (billion chained 2005 dollars - SAAR) Percent change from prior year	10,196 3.2	10,158 1.2	10,126 0.6	10,122 0.3	10,207 0.1	10,289 1.3	10,337 2.1	10,369 2.4	10,403 1.9	10,453 1.6	10,510 1.7	10,577 2.0	10,150 1.3	10,300 1.5	10,486 1.8
Manufacturing Production Index (Index, 2007=100) Percent change from prior year	90.4 6.8	90.6 4.0	91.7 3.9	92.9 4.5	95.2 5.3	95.6 5.6	96.0 4.7	96.6 3.9	97.1 1.9	97.8 2.3	98.6 2.7	99. <i>4</i> 3.0	91.4 4.8	95.8 4.9	98.2 2.5
Weather															
U.S. Heating Degree-Days U.S. Cooling Degree-Days	2,235 39	508 450	77 961	1,419 80	1,747 59	412 451	80 917	1,568 90	2,160 39	515 379	95 813	1,577 91	4,238 1,529	3,808 1,517	4,347 1,322

<sup>- =</sup> no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports Petroleum Supply Monthly, DOE/EIA-0109;

Petroleum Supply Annual, DOE/EIA-0340/2; Weekly Petroleum Status Report, DOE/EIA-0208; Petroleum Marketing Monthly, DOE/EIA-0380; Natural Gas Monthly, DOE/EIA-0130;

Electric Power Monthly, DOE/EIA-0226; Quarterly Coal Report, DOE/EIA-0121; and International Petroleum Monthly, DOE/EIA-0520.

Minor discrepancies with published historical data are due to independent rounding.

Projections: Generated by simulation of the EIA Regional Short-Term Energy Model. Macroeconomic projections are based on Global Insight Model of the U.S. Economy.

Weather projections from National Oceanic and Atmospheric Administration.

<sup>(</sup>a) Includes lease condensate.

<sup>(</sup>b) Total consumption includes Independent Power Producer (IPP) consumption.

<sup>(</sup>c) Renewable energy includes minor components of non-marketed renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy.

EIA does not estimate or project end-use consumption of non-marketed renewable energy.

<sup>(</sup>d) The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations of gross energy consumption in EIA's Monthly Energy Review (MER). Consequently, the historical data may not precisely match those published in the MER or the Annual Energy Review (AER).

<sup>(</sup>e) Refers to the refiner average acquisition cost (RAC) of crude oil.

Table 2. U.S. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - September 2012

		201	1			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil (dollars per barrel)											-				
West Texas Intermediate Spot Average	93.50	102.22	89.72	93.99	102.88	93.42	92.68	93.67	92.00	92.00	93.50	93.00	94.86	95.66	92.63
Brent Spot Average	104.96	117.36	113.34	109.40	118.49	108.42	109.66	110.67	105.00	103.00	103.50	102.00	111.26	111.81	103.38
Imported Average	94.23	108.74	102.06	105.36	108.13	101.33	101.29	101.67	99.50	99.00	100.00	99.00	102.65	103.10	99.38
Refiner Average Acquisition Cost	94.01	108.13	100.61	104.55	107.62	101.53	100.78	101.16	99.25	98.75	99.75	98.75	101.91	102.72	99.13
Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	267	312	297	271	297	299	297	288	276	283	276	262	287	295	274
Diesel Fuel	286	316	307	304	317	301	309	312	290	287	287	283	303	309	287
Heating Oil	275	305	295	296	312	293	296	304	290	281	281	281	291	303	285
Refiner Prices to End Users															
Jet Fuel	287	322	308	302	321	304	307	313	295	288	287	285	305	311	289
No. 6 Residual Fuel Oil (a)	217	246	249	250	270	266	255	255	252	247	248	248	239	262	249
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	330	380	363	337	361	372	366	358	343	352	347	331	353	364	343
Gasoline All Grades (b)	335	385	369	342	367	378	371	364	349	357	353	337	358	370	349
On-highway Diesel Fuel	363	401	387	387	397	395	391	399	377	373	372	370	384	396	373
Heating Oil	359	390	367	366	379	372	366	384	378	362	358	362	368	377	369
Natural Gas															
Average Wellhead (dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.71	3.02	3.20	3.03	3.29	3.55	3.90	2.60	3.27
Henry Hub Spot (dollars per thousand cubic feet)	4.31	4.50	4.25	3.42	2.52	2.35	2.94	3.09	3.36	3.35	3.43	3.62	4.12	2.73	3.44
Henry Hub Spot (dollars per Million Btu)	4.18	4.37	4.12	3.32	2.45	2.28	2.85	3.00	3.27	3.25	3.33	3.52	4.00	2.65	3.34
End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	5.52	5.24	5.03	4.62	4.18	3.15	3.88	4.32	4.77	4.23	4.45	4.84	5.11	3.91	4.58
Commercial Sector	8.85	9.24	9.64	8.56	8.16	8.06	8.75	8.67	8.60	8.77	9.42	9.35	8.92	8.40	8.95
Residential Sector	10.08	12.29	16.18	10.65	9.77	12.10	15.71	10.75	9.92	11.88	16.03	11.35	11.01	10.90	11.09
Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.34	2.42	2.46	2.37	2.41	2.42	2.38	2.34	2.42	2.40	2.39	2.37	2.40	2.39	2.39
Natural Gas	5.02	4.92	4.76	4.13	3.31	2.92	3.54	3.81	4.05	3.89	3.95	4.32	4.71	3.38	4.04
Residual Fuel Oil (c)	15.88	18.29	20.10	20.05	21.27	21.06	18.82	18.28	18.21	18.06	17.99	17.97	18.49	19.74	18.05
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	22.96	22.96	23.96	23.11	22.78	22.77	23.05	22.40	23.38	22.94
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.66	7.02	6.51	6.45	6.71	7.15	6.66	6.89	6.68	6.75
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.12	10.54	9.92	9.83	10.29	10.77	10.16	10.32	10.15	10.28
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.02	12.28	11.70	11.30	12.21	12.55	12.01	11.79	11.91	12.02

<sup>- =</sup> no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Prices exclude taxes unless otherwise noted.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Petroleum Marketing Monthly, DOE/EIA-0380;

Weekly Petroleum Status Report , DOE/EIA-0208; Natural Gas Monthly , DOE/EIA-0130; Electric Power Monthly , DOE/EIA-0226; and Monthly Energy Review , DOE/EIA-0035.

 $Natural\ gas\ Henry\ Hub\ and\ WTI\ crude\ oil\ spot\ prices\ from\ Reuter's\ News\ Service\ (http://www.reuters.com).$ 

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) Average for all sulfur contents.

<sup>(</sup>b) Average self-service cash price.

<sup>(</sup>c) Includes fuel oils No. 4, No. 5, No. 6, and topped crude.

Table 3a. International Crude Oil and Liquid Fuels Supply, Consumption, and Inventories

U.S. Energy Information Admin	2011				utiook (	201				201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million barrels per day) (a)															
OECD	21.51	21.24	21.33	22.30	22.53	22.35	22.05	22.78	22.82	22.78	22.82	23.26	21.60	22.43	22.92
U.S. (50 States)	9.78	10.02	10.07	10.68	10.83	10.89	10.83	11.22	11.26	11.39	11.46	11.66	10.14	10.94	11.44
Canada	3.61	3.36	3.66	3.77	3.89	3.80	3.84	3.95	3.95	3.91	3.99	4.15	3.60	3.87	4.00
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.94	2.92	2.89	2.88	2.86	2.85	2.96	2.94	2.87
North Sea (b)	3.61	3.34	3.10	3.34	3.36	3.19	2.90	3.20	3.23	3.11	3.00	3.13	3.35	3.16	3.12
Other OECD	1.53	1.54	1.57	1.57	1.52	1.52	1.54	1.50	1.49	1.48	1.51	1.48	1.55	1.52	1.49
Non-OECD	65.43	64.85	65.79	65.91	66.17	66.48	66.52	67.10	66.71	67.51	68.11	68.03	65.49	66.57	67.60
OPEC	35.12	34.44	35.22	35.69	36.35	36.62	36.38	36.66	36.65	36.79	36.75	36.96	35.12	36.50	36.79
Crude Oil Portion	29.78	29.20	29.99	30.35	30.87	31.04	30.67	30.93	30.87	30.99	30.93	31.09	29.83	30.88	30.97
Other Liquids	5.34	5.24	5.23	5.34	5.48	5.58	5.71	5.73	5.78	5.79	5.81	5.87	5.29	5.63	5.82
Former Soviet Union	13.35	13.35	13.25	13.30	13.41	13.36	13.10	13.52	13.40	13.57	13.55	13.56	13.31	13.35	13.52
China	4.39	4.36	4.25	4.20	4.31	4.34	4.35	4.43	4.41	4.47	4.51	4.51	4.30	4.36	4.48
Other Non-OECD	12.58	12.70	13.07	12.71	12.09	12.16	12.69	12.49	12.25	12.68	13.30	13.00	12.77	12.36	12.81
Total World Supply	86.94	86.09	87.12	88.21	88.70	88.83	88.57	89.88	89.54	90.29	90.93	91.30	87.09	89.00	90.52
Non-OPEC Supply	51.82	51.65	51.90	52.52	52.35	52.20	52.19	53.22	52.88	53.50	54.19	54.34	51.98	52.49	53.73
Consumption (million barrels per day	y) (c)														
OECD	46.32	44.63	46.18	46.05	45.49	44.72	45.76	45.67	45.48	44.39	45.20	45.76	45.79	45.41	45.21
U.S. (50 States)	19.07	18.79	19.03	18.91	18.41	18.65	18.78	18.82	18.57	18.63	18.92	18.87	18.95	18.67	18.75
U.S. Territories	0.30	0.30	0.30	0.30	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.30	0.32	0.33
Canada	2.28	2.17	2.31	2.28	2.18	2.21	2.29	2.25	2.24	2.17	2.29	2.26	2.26	2.24	2.24
Europe	14.22	14.12	14.70	14.09	13.70	13.71	14.29	14.00	13.60	13.50	13.94	13.91	14.28	13.93	13.74
Japan	4.83	3.91	4.31	4.81	5.28	4.30	4.53	4.70	5.10	4.30	4.34	4.75	4.46	4.70	4.62
Other OECD	5.62	5.33	5.53	5.66	5.60	5.53	5.55	5.59	5.64	5.46	5.39	5.64	5.53	5.57	5.53
Non-OECD		42.53	43.06	42.60	42.91	43.72	44.29	43.79	44.09	44.91	45.67	44.87	42.47	43.68	44.89
Former Soviet Union	4.58	4.51	4.77	4.76	4.79	4.81	4.99	4.98	5.05	4.96	5.25	5.25	4.66	4.89	5.13
Europe	0.74	0.74	0.77	0.77	0.74	0.75	0.77	0.77	0.75	0.75	0.78	0.78	0.75	0.76	0.76
China	9.99	9.78	9.82	9.82	10.12	10.09	10.33	10.29	10.57	10.53	10.81	10.52	9.85	10.21	10.61
Other Asia	10.20	10.39	10.00	10.28	10.35	10.60	10.15	10.42	10.40	10.59	10.18	10.46	10.22	10.38	10.41
Other Non-OECD	16.14	17.10	17.71	16.98	16.91	17.47	18.06	17.32	17.32	18.08	18.65	17.85	16.99	17.44	17.98
Total World Consumption	87.98	87.15	89.24	88.65	88.41	88.44	90.05	89.46	89.57	89.30	90.86	90.63	88.26	89.09	90.10
Inventory Net Withdrawals (million ba	arrels per	day)													
U.S. (50 States)	0.20	-0.36	0.30	0.34	-0.31	-0.34	0.12	0.49	-0.04	-0.42	-0.12	0.50	0.12	-0.01	-0.02
Other OECD	0.23	-0.10	0.20	0.33	-0.07	0.00	0.51	-0.34	0.03	-0.21	0.02	-0.44	0.17	0.02	-0.15
Other Stock Draws and Balance	0.61	1.52	1.62	-0.22	0.09	-0.05	0.84	-0.56	0.05	-0.36	0.03	-0.73	0.88	0.08	-0.25
Total Stock Draw	1.04	1.07	2.12	0.44	-0.29	-0.39	1.48	-0.42	0.04	-0.99	-0.07	-0.67	1.17	0.10	-0.42
End-of-period Inventories (million ba	rrels)														
U.S. Commercial Inventory	1,050	1,082	1,085	1,054	1,082	1,112	1,101	1,056	1,060	1,099	1,110	1,064	1,054	1,056	1,064
OECD Commercial Inventory	2,634	2,676	2,660	2,599	2,633	2,664	2,605	2,592	2,593	2,650	2,660	2,654	2,599	2,592	2,654

<sup>- =</sup> no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland,

France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal,

Slovakia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

Monthly OECD supply and consumption does not yet include Chile, Estonia, Israel, or Slovenia.

OPEC = Organization of Petroleum Exporting Countries: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, Venezuela.

Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

(a) Supply includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

(b) Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

(c) Consumption of petroleum by the OECD countries is synonymous with "petroleum product supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109.

Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

Minor discrepancies with published historical data are due to independent rounding.

Table 3b. Non-OPEC Crude Oil and Liquid Fuels Supply (million barrels per day)

U.S. Energy Information Admini	stration			nergy C	outlook -	Septemb		<u>'</u>							
		20				201				20				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
North America	16.38	16.36	16.67	17.39	17.65	17.63	17.61	18.08	18.10	18.18	18.32	18.66	16.70	17.74	18.31
Canada	3.61	3.36	3.66	3.77	3.89	3.80	3.84	3.95	3.95	3.91	3.99	4.15	3.60	3.87	4.00
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.94	2.92	2.89	2.88	2.86	2.85	2.96	2.94	2.87
United States	9.78	10.02	10.07	10.68	10.83	10.89	10.83	11.22	11.26	11.39	11.46	11.66	10.14	10.94	11.44
Central and South America	4.47	4.90	5.17	4.87	4.57	4.73	5.22	4.99	4.71	5.08	5.60	5.16	4.85	4.88	5.14
Argentina	0.78	0.72	0.78	0.79	0.78	0.76	0.77	0.76	0.76	0.76	0.76	0.75	0.77	0.77	0.76
Brazil	2.33	2.77	2.98	2.66	2.40	2.56	3.03	2.77	2.48	2.84	3.34	2.89	2.69	2.69	2.89
Colombia	0.89	0.95	0.95	0.97	0.96	0.97	0.99	1.01	1.02	1.03	1.05	1.07	0.94	0.98	1.04
Other Central and S. America	0.47	0.46	0.46	0.45	0.44	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.46	0.44	0.45
Europe	4.54	4.27	4.07	4.30	4.33	4.16	3.86	4.14	4.16	4.03	3.92	4.05	4.29	4.12	4.04
Norway	2.11	1.95	1.95	2.03	2.07	1.98	1.79	1.98	1.95	1.95	1.89	1.98	2.01	1.95	1.94
United Kingdom (offshore)	1.23	1.13	0.91	1.07	1.05	0.97	0.88	0.99	1.05	0.94	0.89	0.94	1.08	0.97	0.95
Other North Sea	0.26	0.27	0.24	0.24	0.24	0.25	0.23	0.23	0.23	0.22	0.21	0.21	0.25	0.24	0.22
Former Soviet Union (FSU)	13.35	13.35	13.25	13.30	13.41	13.36	13.10	13.52	13.40	13.57	13.55	13.56	13.31	13.35	13.52
Azerbaijan	1.00	1.00	0.97	0.98	0.96	0.95	0.92	1.12	0.97	0.97	0.96	0.94	0.99	0.99	0.96
Kazakhstan	1.67	1.65	1.63	1.61	1.63	1.59	1.45	1.60	1.69	1.71	1.75	1.75	1.64	1.57	1.72
Russia	10.22	10.24	10.19	10.25	10.35	10.33	10.22	10.31	10.24	10.38	10.34	10.36	10.23	10.30	10.33
Turkmenistan	0.22	0.22	0.22	0.23	0.24	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.22	0.24	0.27
Other FSU	0.45	0.45	0.45	0.46	0.47	0.48	0.50	0.51	0.50	0.51	0.51	0.51	0.45	0.49	0.51
Middle East	1.56	1.40	1.44	1.34	1.25	1.31	1.26	1.28	1.31	1.32	1.35	1.36	1.43	1.28	1.34
Oman	0.89	0.87	0.90	0.89	0.89	0.90	0.88	0.88	0.88	0.88	0.88	0.88	0.89	0.89	0.88
Syria	0.38	0.38	0.34	0.23	0.18	0.20	0.15	0.15	0.17	0.18	0.20	0.21	0.33	0.17	0.19
Yemen	0.24	0.10	0.15	0.16	0.13	0.16	0.18	0.20	0.21	0.21	0.22	0.22	0.16	0.17	0.21
Asia and Oceania	8.91	8.76	8.68	8.66	8.74	8.72	8.83	8.89	8.89	8.96	9.03	9.03	8.75	8.79	8.98
Australia	0.51	0.52	0.51	0.53	0.46	0.48	0.50	0.47	0.47	0.47	0.49	0.46	0.52	0.48	0.47
China	4.39	4.36	4.25	4.20	4.31	4.34	4.35	4.43	4.41	4.47	4.51	4.51	4.30	4.36	4.48
India	0.95	0.95	0.94	0.93	0.93	0.94	0.95	0.96	0.97	0.97	0.97	0.97	0.94	0.95	0.97
Indonesia	1.00	0.99	1.00	0.99	0.96	0.95	0.97	0.97	0.97	0.97	0.97	0.97	0.99	0.96	0.97
Malaysia	0.66	0.58	0.61	0.63	0.65	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.62	0.63	0.65
Vietnam	0.32	0.30	0.30	0.35	0.35	0.32	0.37	0.38	0.37	0.38	0.39	0.40	0.32	0.36	0.39
Africa	2.63	2.61	2.63	2.66	2.40	2.31	2.31	2.32	2.31	2.35	2.42	2.51	2.63	2.33	2.40
Egypt	0.73	0.73	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.71	0.71	0.70	0.73	0.72	0.71
Equatorial Guinea	0.29	0.29	0.29	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.37	0.30	0.33	0.34
Gabon	0.25	0.23	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.24	0.25	0.26
Sudan	0.48	0.45	0.45	0.45	0.20	0.08	0.10	0.10	0.11	0.15	0.21	0.26	0.46	0.12	0.18
Total non-OPEC liquids	51.82	51.65	51.90	52.52	52.35	52.20	52.19	53.22	52.88	53.50	54.19	54.34	51.98	52.49	53.73
OPEC non-crude liquids	5.34	5.24	5.23	5.34	5.48	5.58	5.71	5.73	5.78	5.79	5.81	5.87	5.29	5.63	5.82
Non-OPEC + OPEC non-crude	57.16	56.89	57.13	57.86	57.83	57.79	57.91	58.95	58.67	59.29	60.00	60.20	57.26	58.12	59.55

<sup>- =</sup> no data available

Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Sudan production represents total production from both north and south.

OPEC = Organization of Petroleum Exporting Countries: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, Venezuela.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Supply includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

Not all countries are shown in each region and sum of reported country volumes may not equal regional volumes.

Historical data: Latest data available from Energy Information Administration international energy statistics; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

Minor discrepancies with published historical data are due to independent rounding.

Table 3c. OPEC Crude Oil (excluding condensates) Supply (million barrels per day)

0.3. Energy information Admi	2011				Outlook	•	112	_		20	12			Year	
-	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil															
Algeria	1.27	1.27	1.27	1.27	1.27	1.27	-	-	-	-	-	-	1.27	-	-
Angola	1.70	1.60	1.70	1.78	1.78	1.75	-	-	-	-	-	-	1.70	-	-
Ecudaor	0.50	0.50	0.49	0.50	0.50	0.50	-	-	-	-	-	-	0.50	-	-
Iran	3.70	3.70	3.65	3.58	3.40	3.09	-	-	-	-	-	-	3.66	-	-
Iraq	2.53	2.53	2.63	2.70	2.64	2.93	-	-	-	-	-	-	2.60	-	-
Kuwait	2.33	2.50	2.53	2.55	2.60	2.60	-	-	-	-	-	-	2.48	-	-
Libya	1.09	0.17	0.07	0.55	1.18	1.40	-	-	-	-	-	-	0.47	-	-
Nigeria	2.13	2.15	2.19	2.03	2.12	2.17	-	-	-	-	-	-	2.13	-	-
Qatar	0.85	0.85	0.85	0.85	0.82	0.73	-	-	-	-	-	-	0.85	-	-
Saudi Arabia	9.03	9.13	9.80	9.70	9.87	9.90	-	-	-	-	-	-	9.42	-	-
United Arab Emirates	2.43	2.60	2.60	2.63	2.50	2.50	-	-	-	-	-	-	2.57	-	-
Venezuela	2.20	2.20	2.20	2.20	2.20	2.20	-	-	-	-	-	-	2.20	-	-
OPEC Total	29.78	29.20	29.99	30.35	30.87	31.04	30.67	30.93	30.87	30.99	30.93	31.09	29.83	30.88	30.97
Other Liquids	5.34	5.24	5.23	5.34	5.48	5.58	5.71	5.73	5.78	5.79	5.81	5.87	5.29	5.63	5.82
Total OPEC Supply	35.12	34.44	35.22	35.69	36.35	36.62	36.38	36.66	36.65	36.79	36.75	36.96	35.12	36.50	36.79
Crude Oil Production Capacity															
Africa	6.18	5.18	5.22	5.64	6.34	6.59	6.60	6.80	6.99	7.09	7.20	7.22	5.55	6.58	7.13
South America	2.70	2.70	2.69	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Middle East	24.54	24.56	24.61	24.60	24.11	23.96	23.63	23.53	23.48	23.51	23.53	23.61	24.58	23.81	23.53
OPEC Total	33.42	32.44	32.52	32.94	33.15	33.24	32.93	33.03	33.17	33.29	33.43	33.53	32.83	33.09	33.36
Surplus Crude Oil Production Capa	city														
Africa	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	3.64	3.24	2.54	2.57	2.28	2.20	2.27	2.10	2.30	2.30	2.50	2.43	2.99	2.21	2.38
OPEC Total	3.64	3.24	2.54	2.58	2.28	2.20	2.27	2.10	2.30	2.30	2.50	2.43	3.00	2.21	2.38

<sup>- =</sup> no data available

OPEC = Organization of Petroleum Exporting Countries: Algeria, Angola, Libya, and Nigeria (Africa); Ecuador and Venezuela (South America); Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates (Middle East).

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

Minor discrepancies with published historical data are due to independent rounding.

 $\textbf{Projections:} \ \textbf{Generated by simulation of the EIA Regional Short-Term Energy Model}.$ 

Table 3d. World Liquid Fuels Consumption (million barrels per day)

c.e. Energy information / terminotration	Onore 10	201				20	12			20	13				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011	2012	2013
North America	23.46	23.09	23.49	23.36	22.72	23.01	23.17	23.18	22.91	22.93	23.30	23.23	23.35	23.02	23.09
Canada	2.28	2.17	2.31	2.28	2.18	2.21	2.29	2.25	2.24	2.17	2.29	2.26	2.26	2.24	2.24
Mexico	2.11	2.12	2.14	2.16	2.11	2.14	2.09	2.10	2.09	2.11	2.08	2.09	2.13	2.11	2.10
United States	19.07	18.79	19.03	18.91	18.41	18.65	18.78	18.82	18.57	18.63	18.92	18.87	18.95	18.67	18.75
Central and South America	6.26	6.49	6.51	6.49	6.44	6.67	6.70	6.68	6.63	6.88	6.90	6.88	6.44	6.62	6.82
Brazil	2.50	2.59	2.65	2.64	2.60	2.71	2.76	2.75	2.73	2.83	2.89	2.88	2.59	2.71	2.83
Europe	14.95	14.87	15.46	14.86	14.44	14.46	15.06	14.78	14.35	14.25	14.72	14.69	15.04	14.68	14.50
Former Soviet Union	4.58	4.51	4.77	4.76	4.79	4.81	4.99	4.98	5.05	4.96	5.25	5.25	4.66	4.89	5.13
Russia	3.09	3.05	3.22	3.22	3.26	3.31	3.40	3.39	3.46	3.41	3.61	3.60	3.15	3.34	3.52
Middle East	6.80	7.55	8.16	7.41	7.29	7.64	8.23	7.47	7.39	7.93	8.50	7.69	7.48	7.66	7.88
Asia and Oceania	28.56	27.31	27.53	28.42	29.26	28.39	28.48	28.91	29.64	28.77	28.64	29.30	27.95	28.76	29.09
China	9.99	9.78	9.82	9.82	10.12	10.09	10.33	10.29	10.57	10.53	10.81	10.52	9.85	10.21	10.61
Japan	4.83	3.91	4.31	4.81	5.28	4.30	4.53	4.70	5.10	4.30	4.34	4.75	4.46	4.70	4.62
India	3.36	3.35	3.07	3.32	3.43	3.46	3.14	3.39	3.54	3.52	3.23	3.49	3.27	3.36	3.45
Africa	3.36	3.34	3.32	3.35	3.48	3.45	3.43	3.46	3.61	3.58	3.56	3.59	3.34	3.45	3.58
Total OECD Liquid Fuels Consumption	46.32	44.63	46.18	46.05	45.49	44.72	45.76	45.67	45.48	44.39	45.20	45.76	45.79	45.41	45.21
Total non-OECD Liquid Fuels Consumption	41.66	42.53	43.06	42.60	42.91	43.72	44.29	43.79	44.09	44.91	45.67	44.87	42.47	43.68	44.89
Total World Liquid Fuels Consumption	87.98	87.15	89.24	88.65	88.41	88.44	90.05	89.46	89.57	89.30	90.86	90.63	88.26	89.09	90.10
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2007 Q1 = 100	109.6	110.2	111.1	111.7	112.7	113.3	114.0	114.7	115.4	116.2	117.0	117.9	110.7	113.7	116.6
Percent change from prior year	3.6	2.9	2.9	2.5	2.9	2.8	2.7	2.7	2.4	2.5	2.6	2.8	3.0	2.7	2.6
OECD Index, 2007 Q1 = 100	101.4	101.8	102.3	102.8	103.3	103.4	103.7	103.9	104.3	104.7	105.0	105.4	102.1	103.6	104.9
Percent change from prior year	2.1	1.6	1.6	1.5	1.9	1.7	1.3	1.1	1.0	1.2	1.3	1.5	1.7	1.5	1.2
Non-OECD Index, 2007 Q1 = 100	122.2	123.2	124.5	125.5	127.4	128.7	130.2	131.6	132.9	134.3	136.0	137.7	123.9	129.5	135.2
Percent change from prior year	5.7	4.7	4.7	4.0	4.3	4.4	4.6	4.8	4.3	4.4	4.4	4.6	4.8	4.5	4.4
Real U.S. Dollar Exchange Rate (a)															
Index, January 2007 = 100	96.28	94.62	95.09	97.70	97.96	99.37	100.39	100.25	100.82	101.72	103.33	103.37	95.92	99.49	102.31
Percent change from prior year	-1.9	-5.2	-3.9	0.8	1.7	5.0	5.6	2.6	2.9	2.4	2.9	3.1	-2.6	3.7	2.8

<sup>- =</sup> no data available

Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Finland,

France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal,

Slovakia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) Weighted geometric mean of real indices for various countries with weights equal to each country's share of world oil consumption in the base period. Exchange rate is measured in foreign currency per U.S. dollar.

Table 4a. U.S. Crude Oil and Liquid Fuels Supply, Consumption, and Inventories

U.S. Energy Information Administration   S	Short-Terr			k - Septe	ember 20		_						1		
	1ot	201		44h	101	201		4th	101	201		4th	2011	Year	2012
Supply (million barrels per day)	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil Supply															
Domestic Production (a)	5.52	5.58	5.56	5.98	6.21	6.25	6.25	6.63	6.75	6.80	6.80	6.97	5.66	6.34	6.83
Alaska		0.59	0.53	0.60	0.59	0.53	0.45	0.55	0.75	0.53	0.47	0.53	0.57	0.53	0.52
Federal Gulf of Mexico (b)		1.35	1.19	1.28	1.34	1.23	1.27	1.34	1.36	1.38	1.36	1.39	1.32	1.30	1.38
Lower 48 States (excl GOM)		3.64	3.83	4.10	4.28	4.49	4.53	4.74	4.83	4.89	4.97	5.04	3.77	4.51	4.93
Crude Oil Net Imports (c)		9.01	9.00	8.73	8.58	8.82	8.66	7.98	7.94	8.22	8.38	7.58	8.89	8.51	8.03
SPR Net Withdrawals		0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Commercial Inventory Net Withdrawals		0.05	0.28	-0.01	-0.41	-0.20	0.34	0.18	-0.35	0.05	0.15	0.17	0.01	-0.02	0.01
Crude Oil Adjustment (d)		0.11	0.31	0.09	0.16	0.27	0.09	0.03	0.09	0.14	0.08	0.03	0.17	0.14	0.09
Total Crude Oil Input to Refineries		14.75	15.48	14.79	14.54	15.14	15.34	14.82	14.43	15.22	15.40	14.75	14.81	14.96	14.96
Other Supply															
Refinery Processing Gain	1.00	1.07	1.13	1.11	1.05	1.08	1.10	1.08	1.05	1.06	1.10	1.07	1.08	1.08	1.07
Natural Gas Liquids Production	2.11	2.20	2.20	2.35	2.38	2.36	2.35	2.37	2.32	2.37	2.38	2.39	2.22	2.36	2.37
Renewables and Oxygenate Production (e)	0.99	1.00	1.01	1.06	1.01	1.01	0.93	0.95	0.95	0.96	0.98	1.01	1.02	0.97	0.98
Fuel Ethanol Production	0.91	0.90	0.89	0.94	0.92	0.89	0.82	0.84	0.85	0.85	0.87	0.91	0.91	0.87	0.87
Petroleum Products Adjustment (f)	0.17	0.17	0.18	0.19	0.19	0.18	0.20	0.19	0.19	0.20	0.21	0.21	0.18	0.19	0.20
Product Net Imports (c)	0.11	0.00	-0.65	-0.93	-0.86	-0.98	-0.89	-0.90	-0.69	-0.71	-0.88	-0.90	-0.37	-0.91	-0.80
Pentanes Plus	-0.04	-0.06	-0.07	-0.05	-0.07	-0.08	-0.04	-0.04	-0.05	-0.05	-0.05	-0.05	-0.05	-0.06	-0.05
Liquefied Petroleum Gas		-0.01	0.02	0.09	-0.03	-0.02	-0.14	-0.18	-0.08	-0.14	-0.14	-0.09	0.05	-0.09	-0.11
Unfinished Oils		0.69	0.69	0.65	0.53	0.61	0.66	0.65	0.55	0.63	0.64	0.59	0.69	0.61	0.60
Other HC/Oxygenates		-0.12	-0.11	-0.14	-0.11	-0.09	-0.05	-0.05	-0.04	-0.04	-0.05	-0.09	-0.12	-0.07	-0.05
Motor Gasoline Blend Comp		0.86	0.60	0.59	0.58	0.64	0.57	0.58	0.58	0.59	0.57	0.56	0.67	0.59	0.57
Finished Motor Gasoline		-0.31	-0.37	-0.52	-0.33	-0.31	-0.25	-0.45	-0.31	-0.17	-0.26	-0.42	-0.37	-0.33	-0.29
Jet Fuel		0.01	-0.03	-0.05	-0.10	-0.07	-0.05	-0.07	-0.06	-0.05	-0.06	-0.08	-0.03	-0.07	-0.06
Distillate Fuel Oil		-0.61	-0.74	-0.90	-0.76	-0.97	-0.93	-0.78	-0.69	-0.77	-0.82	-0.71	-0.68	-0.86	-0.75
Residual Fuel Oil		-0.07 -0.38	-0.21 -0.44	-0.07 -0.52	-0.10 -0.47	-0.16 -0.52	-0.14 -0.52	-0.09 -0.47	-0.14 -0.45	-0.19 -0.51	-0.18 -0.53	-0.10 -0.50	-0.10 -0.43	-0.12 -0.49	-0.15 -0.50
Other Oils (g) Product Inventory Net Withdrawals		-0.36	-0.44	0.34	0.11	-0.52	-0.32	0.30	0.31	-0.51 -0.47	-0.53	0.33	0.03	0.01	-0.03
Total Supply		18.79	19.03	18.91	18.41	18.66	-0.22 18.81	18.82	18.57	18.63	-0.27 18.92	18.87	18.95	18.67	-0.03 18.75
Natural Gas Liquids and Other Liquids Pentanes Plus Liquefied Petroleum Gas Unfinished Oils Finished Liquid Fuels Motor Gasoline Jet Fuel Distillate Fuel Oil Residual Fuel Oil	2.57 0.07 8.59 1.36 3.97	0.03 2.05 -0.05 8.89 1.47 3.80 0.47	0.04 2.06 0.05 8.90 1.48 3.84 0.39	0.06 2.41 0.04 8.62 1.38 3.99 0.45	0.04 2.37 0.09 8.48 1.35 3.83 0.41	0.05 2.10 0.00 8.95 1.44 3.73 0.36	0.09 2.06 -0.01 8.91 1.46 3.64 0.38	0.10 2.36 0.00 8.59 1.40 3.92 0.45	0.08 2.51 0.01 8.47 1.35 3.88 0.42	0.07 2.05 0.00 8.90 1.43 3.74 0.37	0.09 2.11 0.00 8.91 1.47 3.79 0.37	0.10 2.38 0.00 8.64 1.39 3.99 0.44	0.03 2.27 0.03 8.75 1.43 3.90 0.46	0.07 2.22 0.02 8.73 1.41 3.78 0.40	0.09 2.26 0.00 8.73 1.41 3.85 0.40
Other Oils (f)		2.12	2.27	1.95	1.84	2.04	2.24	1.98	1.86	2.07	2.17	1.94	2.08	2.03	2.01
Total Consumption	19.07	18.79	19.03	18.91	18.41	18.65	18.78	18.82	18.57	18.63	18.92	18.87	18.95	18.67	18.75
Total Liquid Fuels Net Imports	8.93	9.01	8.34	7.80	7.72	7.84	7.78	7.08	7.26	7.52	7.49	6.68	8.52	7.60	7.24
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)		355.8	330.2	330.7	368.1	386.0	354.3	337.6	369.1	364.2	350.7	335.2	330.7	337.6	335.2
Pentanes Plus		15.8	17.2	17.6	15.9	16.5	17.0	14.8	14.5	16.1	16.8	14.6	17.6	14.8	14.6
Liquefied Petroleum Gas		107.0	135.2	111.8	102.0	146.8	173.5	131.4	96.5	134.8	159.2	123.8	111.8	131.4	123.8
Unfinished Oils		91.9	88.6	78.8	90.8	86.5	81.6	77.9	89.2	87.2	85.2	79.1	78.8	77.9	79.1
Other HC/Oxygenates		21.9	21.2	21.4	26.8	24.8	22.0	21.4	22.6	22.5	23.2	23.4	21.4	21.4	23.4
Total Motor Gasoline		215.0	214.8	223.1	218.8	207.7	204.1	219.9	220.6	216.1	213.4	223.7	223.1	219.9	223.7
Finished Motor Gasoline		55.5	56.3	60.6	54.4	52.3	50.0	54.9	54.9	57.6	57.1	59.0	60.6	54.9	59.0
Motor Gasoline Blend Comp.		159.5	158.5	162.5	164.4	155.4	154.1	165.0	165.7	158.5	156.3	164.7	162.5	165.0	164.7
Jet Fuel Distillate Fuel Oil		42.3	45.9	41.5	39.1	38.5	43.3 127.5	41.6	41.8	43.1 127.7	44.0	41.5	41.5	41.6 121.5	41.5
Residual Fuel Oil		143.9 37.9	153.4 34.7	149.2 34.2	133.8 36.3	120.0 36.9	127.5 34.3	131.5 35.8	116.8 35.8	127.7 35.6	138.8 35.1	141.8 36.3	149.2 34.2	131.5 35.8	141.8 36.3
Other Oils (f)		50.5	43.8	34.2 45.9	50.3	36.9 48.6	34.3 43.4	35.8 44.4	53.5	35.6 51.2	35.1 43.4	36.3 44.3	34.2 45.9	35.8 44.4	36.3 44.3
Total Commercial Inventory		1,082	1,085	1,054	1,082	1,112	43.4 1,101	1,056	1,060	1,099	43.4 1,110	1,064	1,054	1,056	44.3 1,064
Crude Oil in SPR	•	727	696	696	696	696	696	696	696	696	696	696	696	696	696
Heating Oil Reserve		0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	- 0.0	0.0	0.0		1.0		1.0	1.0	1.0	1.0	1.0	1.0		7.0	7.0

<sup>- =</sup> no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109;

Petroleum Supply Annual , DOE/EIA-0340/2; and Weekly Petroleum Status Report , DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) Includes lease condensate.

<sup>(</sup>b) Crude oil production from U.S. Federal leases in the Gulf of Mexico (GOM).

<sup>(</sup>c) Net imports equals gross imports minus gross exports.

 $<sup>(</sup>d) \ Crude \ oil \ adjustment \ balances \ supply \ and \ consumption \ and \ was \ previously \ referred \ to \ as \ "Unaccounted \ for \ Crude \ Oil."$ 

 $<sup>(</sup>e) \ Renewables \ and \ oxygenate \ production \ includes \ pentanes \ plus, \ oxygenates \ (excluding \ fuel \ ethanol), \ and \ renewable \ fuels.$ 

<sup>(</sup>f) Petroleum products adjustment includes hydrogen/oxygenates/renewables/other hydrocarbons, motor gasoline blend components, and finished motor gasoline.

<sup>(</sup>g) "Other Oils" inludes aviation gasoline blend components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Table 4b. U.S. Petroleum Refinery Balance (Million Barrels per Day, Except Utilization Factor)

	2011			201	12			201	3			Year			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Refinery and Blender Net Inputs		•				•		•		•					
Crude OII	14.20	14.75	15.48	14.79	14.54	15.14	15.34	14.82	14.43	15.22	15.40	14.75	14.81	14.96	14.96
Pentanes Plus	0.17	0.18	0.17	0.17	0.17	0.16	0.17	0.18	0.16	0.17	0.17	0.18	0.17	0.17	0.17
Liquefied Petroleum Gas	0.34	0.26	0.27	0.39	0.33	0.28	0.27	0.39	0.34	0.26	0.28	0.40	0.32	0.32	0.32
Other Hydrocarbons/Oxygenates	0.97	1.02	1.04	1.04	1.00	1.06	1.05	1.04	1.04	1.07	1.08	1.07	1.02	1.04	1.07
Unfinished Oils	0.56	0.70	0.68	0.72	0.31	0.66	0.72	0.68	0.42	0.65	0.67	0.65	0.67	0.59	0.60
Motor Gasoline Blend Components	0.66	0.84	0.54	0.44	0.45	0.50	0.48	0.45	0.54	0.64	0.59	0.46	0.62	0.47	0.56
Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs	16.89	17.74	18.19	17.55	16.79	17.80	18.04	17.57	16.94	18.02	18.18	17.52	17.60	17.55	17.67
Refinery Processing Gain	1.00	1.07	1.13	1.11	1.05	1.08	1.10	1.08	1.05	1.06	1.10	1.07	1.08	1.08	1.07
Refinery and Blender Net Production															
Liquefied Petroleum Gas	0.51	0.81	0.74	0.41	0.53	0.84	0.74	0.42	0.52	0.83	0.75	0.41	0.62	0.63	0.63
Finished Motor Gasoline	8.83	9.14	9.19	9.07	8.61	8.97	9.03	9.06	8.72	9.05	9.14	9.05	9.06	8.92	8.99
Jet Fuel	1.37	1.49	1.55	1.39	1.42	1.50	1.56	1.45	1.42	1.50	1.54	1.44	1.45	1.48	1.47
Distillate Fuel	4.23	4.31	4.63	4.79	4.39	4.50	4.62	4.70	4.36	4.59	4.69	4.70	4.49	4.55	4.59
Residual Fuel	0.54	0.54	0.56	0.51	0.54	0.52	0.49	0.56	0.56	0.56	0.54	0.55	0.54	0.53	0.55
Other Oils (a)	2.42	2.51	2.64	2.50	2.35	2.54	2.70	2.46	2.41	2.55	2.62	2.45	2.52	2.52	2.51
Total Refinery and Blender Net Production	17.89	18.81	19.31	18.66	17.84	18.88	19.14	18.65	17.98	19.08	19.28	18.59	18.67	18.63	18.74
Refinery Distillation Inputs	14.69	15.22	15.93	15.27	14.89	15.49	15.64	15.18	14.77	15.53	15.74	15.12	15.28	15.30	15.29
Refinery Operable Distillation Capacity	17.70	17.74	17.74	17.73	17.29	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.73	17.24	17.23
Refinery Distillation Utilization Factor	0.83	0.86	0.90	0.86	0.86	0.90	0.91	0.88	0.86	0.90	0.91	0.88	0.86	0.89	0.89

<sup>- =</sup> no data available

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109;

Petroleum Supply Annual, DOE/EIA-0340/2; Weekly Petroleum Status Report, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) "Other Oils" includes aviation gasoline blend components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Table 4c. U.S. Regional Motor Gasoline Prices and Inventories

C.C. Energy information / terministration	011   0	201		y Galled	к оорк	201				20 <sup>-</sup>	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Prices (cents per gallon)						•									
Refiner Wholesale Price	267	312	297	271	297	299	297	288	276	283	276	262	287	295	274
Gasoline Regular Grade Retail Prices In	cluding Ta	axes													
PADD 1	329	377	364	337	363	366	362	358	343	350	346	331	352	362	343
PADD 2	326	380	364	329	355	366	368	351	337	348	342	324	350	360	338
PADD 3	315	365	349	317	346	353	344	339	327	337	330	313	337	345	327
PADD 4	311	365	355	337	322	374	356	350	330	342	344	326	343	350	336
PADD 5	353	400	377	368	390	413	389	387	369	376	375	359	375	395	370
U.S. Average	330	380	363	337	361	372	366	358	343	352	347	331	353	364	343
Gasoline All Grades Including Taxes	335	385	369	342	367	378	371	364	349	357	353	337	358	370	349
End-of-period Inventories (million barrels	)														
Total Gasoline Inventories	,														
PADD 1	55.0	55.2	56.3	59.2	57.1	51.3	50.4	56.9	56.7	56.3	54.7	59.0	59.2	56.9	59.0
PADD 2	50.5	49.9	49.9	52.2	52.5	49.4	50.6	50.5	50.8	50.2	49.8	50.5	52.2	50.5	50.5
PADD 3	70.4	72.9	73.8	74.5	71.4	72.7	68.7	75.8	76.8	74.8	74.3	77.4	74.5	75.8	77.4
PADD 4	6.5	6.6	5.9	7.6	6.5	6.4	6.6	7.0	6.7	6.3	6.3	6.8	7.6	7.0	6.8
PADD 5	32.7	30.5	29.0	29.6	31.3	27.9	27.8	29.7	29.6	28.5	28.3	29.9	29.6	29.7	29.9
U.S. Total	215.0	215.0	214.8	223.1	218.8	207.7	204.1	219.9	220.6	216.1	213.4	223.7	223.1	219.9	223.7
Finished Gasoline Inventories															
U.S. Total	61.2	55.5	56.3	60.6	54.4	52.3	50.0	54.9	54.9	57.6	57.1	59.0	60.6	54.9	59.0
Gasoline Blending Components Invento	ries														
U.S. Total	153.8	159.5	158.5	162.5	164.4	155.4	154.1	165.0	165.7	158.5	156.3	164.7	162.5	165.0	164.7

<sup>- =</sup> no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to Petroleum Administration for Defense Districts (PADD).

See "Petroleum for Administration Defense District" in EIA's Energy Glossary (http://www.eia.doe.gov/glossary/index.html) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Petroleum Marketing Monthly, DOE/EIA-0380;

Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; and Weekly Petroleum Status Report, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

Table 5a. U.S. Natural Gas Supply, Consumption, and Inventories

U.S. Energy Information Admir	nistratio	n   Sn	ort- i ern	n Energy	Outlook	c - Septe	mber 20	12							
		20	11			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (billion cubic feet per day)															
Total Marketed Production	63.83	65.96	66.30	68.74	68.86	68.91	68.58	69.07	69.27	69.40	69.27	69.33	66.22	68.86	69.32
Alaska	1.12	1.00	0.86	1.02	1.07	0.94	0.91	0.92	0.96	0.89	0.95	0.95	1.00	0.96	0.94
Federal GOM (a)	5.60	5.23	4.54	4.58	4.57	4.24	3.96	4.37	4.61	4.65	4.47	4.48	4.98	4.28	4.55
Lower 48 States (excl GOM)	57.10	59.73	60.90	63.14	63.22	63.73	63.71	63.78	63.70	63.86	63.85	63.90	60.24	63.61	63.83
Total Dry Gas Production	60.83	62.75	63.10	65.32	65.35	65.44	65.14	65.60	65.79	65.92	65.79	65.85	63.01	65.38	65.84
Gross Imports	11.04	8.95	8.97	8.95	8.96	8.33	9.18	8.89	9.49	8.24	8.68	9.06	9.47	8.84	8.86
Pipeline	9.80	7.89	8.20	8.17	8.35	7.98	8.79	8.44	9.04	7.77	8.29	8.58	8.51	8.39	8.42
LNG	1.23	1.05	0.77	0.78	0.61	0.35	0.39	0.45	0.44	0.47	0.39	0.48	0.96	0.45	0.45
Gross Exports	4.51	4.16	3.82	4.04	4.42	4.18	3.85	4.16	4.63	4.22	4.04	4.27	4.13	4.15	4.29
Net Imports	6.53	4.79	5.15	4.91	4.54	4.15	5.32	4.72	4.85	4.02	4.63	4.79	5.34	4.69	4.57
Supplemental Gaseous Fuels	0.19	0.14	0.16	0.18	0.19	0.16	0.17	0.19	0.19	0.16	0.17	0.19	0.17	0.17	0.18
Net Inventory Withdrawals	16.98	-10.45	-9.63	-0.51	10.61	-7.19	-6.63	3.70	15.95	-10.79	-8.60	4.10	-0.97	0.12	0.11
Total Supply	84.53	57.23	58.78	69.91	80.69	62.55	64.00	74.21	86.79	59.30	61.99	74.93	67.55	70.36	70.70
Balancing Item (b)	-0.83	-0.86	-0.23	-1.87	-0.17	-0.58	-1.40	-0.13	0.87	-0.45	-2.12	-1.22	-0.95	-0.57	-0.74
Total Primary Supply	83.70	56.37	58.56	68.04	80.52	61.98	62.60	74.08	87.66	58.85	59.88	73.71	66.60	69.79	69.96
Consumption (billion cubic feet per	day)														
Residential	26.13	7.58	3.73	14.62	20.64	6.29	3.80	17.30	24.91	6.98	3.76	17.29	12.96	12.00	13.19
Commercial	14.74	5.88	4.41	9.74	12.10	5.43	4.34	10.44	14.76	5.87	4.37	10.42	8.67	8.07	8.83
Industrial	19.99	17.58	17.14	18.90	19.71	17.81	17.60	19.10	20.41	17.97	17.69	19.30	18.40	18.56	18.84
Electric Power (c)	16.75	19.88	27.74	18.85	21.76	26.67	31.15	21.22	21.00	22.32	28.31	20.68	20.83	25.21	23.09
Lease and Plant Fuel	3.65	3.78	3.79	3.93	3.94	3.94	3.93	3.95	3.96	3.97	3.96	3.97	3.79	3.94	3.97
Pipeline and Distribution Use	2.35	1.59	1.65	1.91	2.27	1.74	1.69	1.97	2.52	1.64	1.68	1.95	1.87	1.92	1.95
Vehicle Use	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total Consumption	83.70	56.37	58.56	68.04	80.52	61.98	62.60	74.08	87.66	58.85	59.88	73.71	66.60	69.79	69.96
End-of-period Inventories (billion co	ubic feet)														
Working Gas Inventory	1,581	2,530	3,416	3,462	2,477	3,118	3,728	3,388	1,952	2,935	3,726	3,349	3,462	3,388	3,349
Producing Region (d)	738	992	1,070	1,193	1,034	1,128	1,219	1,183	862	1,095	1,189	1,170	1,193	1,183	1,170
East Consuming Region (d)	618	1,188	1,879	1,822	1,090	1,514	1,993	1,752	806	1,408	2,025	1,733	1,822	1,752	1,733
West Consuming Region (d)	225	350	468	447	353	476	517	453	284	432	512	445	447	453	445

<sup>- =</sup> no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

LNG: liquefied natural gas.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Natural Gas Monthly, DOE/EIA-0130; and Electric Power Monthly, DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) Marketed production from U.S. Federal leases in the Gulf of Mexico.

<sup>(</sup>b) The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

<sup>(</sup>c) Natural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

<sup>(</sup>d) For a list of States in each inventory region refer to Methodology for EIA Weekly Underground Natural Gas Storage Estimates (http://tonto.eia.doe.gov/oog/info/ngs/methodology.html).

Table 5b. U.S. Regional Natural Gas Prices (dollars per thousand cubic feet)

U.S. Energy information	i Auminis			Tellii Ei	iergy Ot	ILIOOK - S		2012							
		201		441		201		4.1		201		4.1	2011	Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Wholesale/Spot															
U.S. Average Wellhead		4.10	4.10	3.37	2.54	2.12	2.71	3.02	3.20	3.03	3.29	3.55	3.90	2.60	3.27
Henry Hub Spot Price	4.31	4.50	4.25	3.42	2.52	2.35	2.94	3.09	3.36	3.35	3.43	3.62	4.12	2.73	3.44
Residential															
New England	13.99	14.31	17.28	13.09	13.08	14.86	17.20	13.77	13.47	14.91	17.83	14.55	14.06	13.94	14.35
Middle Atlantic	11.83	14.09	18.13	12.65	11.31	13.43	17.84	13.44	11.98	13.69	18.07	14.01	12.82	12.80	13.23
E. N. Central	8.88	10.97	16.27	9.33	8.34	10.70	15.77	9.25	8.61	10.87	16.35	9.80	9.78	9.44	9.76
W. N. Central	8.84	11.17	16.78	9.52	8.45	12.02	16.76	9.02	8.43	10.79	16.98	9.54	9.81	9.59	9.55
S. Atlantic	11.93	17.38	22.74	13.49	12.37	17.65	22.71	13.23	12.16	17.62	23.89	14.14	13.72	14.07	14.14
E. S. Central	9.99	13.80	18.56	11.20	10.31	14.76	17.99	11.21	10.55	14.40	19.04	11.81	11.22	11.57	11.79
W. S. Central	8.62	14.35	19.09	10.19	9.25	13.97	18.01	10.03	8.37	13.77	18.98	10.85	10.50	10.81	10.49
Mountain	8.97	9.93	13.63	8.92	8.86	10.56	13.36	8.73	8.47	9.12	12.68	9.21	9.46	9.39	9.11
Pacific	9.98	10.92	11.65	9.93	9.45	9.71	10.63	9.42	9.54	9.71	10.77	10.05	10.35	9.63	9.87
U.S. Average	10.08	12.29	16.18	10.65	9.77	12.10	15.71	10.75	9.92	11.88	16.03	11.35	11.01	10.90	11.09
Commercial															
New England	11.23	10.70	10.46	10.50	10.35	10.64	10.68	11.13	11.19	11.19	11.40	11.77	10.88	10.67	11.37
Middle Atlantic	9.81	9.59	8.91	9.23	8.75	7.72	8.02	9.69	9.67	9.51	9.42	10.55	9.52	8.76	9.86
E. N. Central	8.36	9.00	9.90	7.90	7.46	7.70	8.58	7.94	8.01	8.68	9.30	8.61	8.47	7.77	8.39
W. N. Central	7.94	8.47	9.51	7.63	7.23	7.26	8.61	7.15	7.44	7.58	9.05	7.66	8.07	7.33	7.65
S. Atlantic	9.91	10.92	11.16	9.85	9.39	9.76	10.38	10.21	10.01	10.49	11.02	11.10	10.22	9.92	10.56
E. S. Central	8.98	9.77	10.59	9.42	8.96	9.26	9.85	9.76	9.27	9.90	10.60	10.42	9.39	9.37	9.83
W. S. Central	7.22	8.47	8.85	7.35	7.23	6.93	7.93	7.45	7.23	7.79	8.55	8.08	7.70	7.35	7.74
Mountain	8.06	8.09	9.03	7.78	7.56	7.88	8.55	7.65	7.38	7.28	8.38	8.04	8.09	7.75	7.65
Pacific	9.15	9.21	9.77	8.89	8.53	8.02	8.30	8.21	8.41	7.88	8.55	8.97	9.18	8.29	8.48
U.S. Average	8.85	9.24	9.64	8.56	8.16	8.06	8.75	8.67	8.60	8.77	9.42	9.35	8.92	8.40	8.95
Industrial															
New England	10.63	9.79	9.18	9.18	9.44	8.05	8.13	9.21	10.07	9.18	8.93	9.86	9.81	8.85	9.64
Middle Atlantic	8.72	8.34	7.99	8.48	8.06	6.83	7.51	9.08	9.05	7.96	8.16	9.64	8.51	8.12	8.89
E. N. Central	7.30	7.21	7.34	6.62	6.55	5.72	6.00	6.25	6.74	6.39	6.59	6.88	7.11	6.25	6.71
W. N. Central	6.28	5.83	5.63	5.56	5.38	4.10	4.29	4.77	5.32	4.34	4.59	5.30	5.85	4.68	4.95
S. Atlantic	6.52	6.25	6.14	5.73	5.11	4.19	4.85	5.36	5.70	5.31	5.59	6.02	6.17	4.90	5.67
E. S. Central	5.91	5.77	5.58	5.23	4.68	3.77	4.76	5.20	5.52	5.11	5.48	5.66	5.63	4.62	5.45
W. S. Central	4.30	4.52	4.40	3.65	2.97	2.37	3.25	3.27	3.53	3.56	3.84	3.79	4.21	2.97	3.68
Mountain	6.83	6.41	6.77	6.28	6.05	5.25	5.62	6.20	6.24	5.78	6.36	6.87	6.57	5.85	6.34
Pacific	7.51	7.33	7.37	6.93	6.60	5.72	5.82	6.62	6.87	6.24	6.64	7.41	7.28	6.23	6.83
U.S. Average	5.52	5.24	5.03	4.62	4.18	3.15	3.88	4.32	4.77	4.23	4.45	4.84	5.11	3.91	4.58

<sup>- =</sup> no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (http://www.eia.doe.gov/glossary/index.html) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the Natural Gas Monthly , DOE/EIA-0130.

Natural gas Henry Hub spot price from Reuter's News Service (http://www.reuters.com).

Minor discrepancies with published historical data are due to independent rounding.

 $\textbf{Projections:} \ \ \textbf{Generated by simulation of the EIA Regional Short-Term Energy Model}.$ 

Table 6. U.S. Coal Supply, Consumption, and Inventories

		201	11			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million short tons)	·														
Production	273.6	263.6	274.6	282.5	266.4	237.5	261.4	262.7	245.9	255.0	271.3	269.7	1094.3	1028.0	1041.9
Appalachia	87.3	85.7	81.8	82.1	80.6	79.2	78.5	81.2	76.0	79.6	79.5	78.7	336.9	319.5	313.9
Interior	41.5	41.1	45.0	42.6	44.3	39.0	38.8	36.1	34.3	36.2	37.6	36.7	170.3	158.2	144.8
Western	144.8	136.8	147.8	157.7	141.5	119.3	144.1	145.4	135.6	139.2	154.2	154.2	587.1	550.3	583.2
Primary Inventory Withdrawals	5.5	-1.1	1.6	1.8	0.4	0.5	3.8	-0.2	5.5	-1.1	1.6	-2.6	7.9	4.5	3.5
Imports	3.4	3.4	3.6	2.7	2.0	2.3	3.2	3.4	2.5	2.5	3.3	2.9	13.1	10.9	11.1
Exports	26.6	27.0	26.0	27.7	28.6	37.5	31.7	26.4	25.7	26.2	25.2	25.4	107.3	124.3	102.5
Metallurgical Coal	17.2	17.8	16.5	18.0	17.5	20.2	19.4	17.6	16.5	16.8	15.7	15.6	69.5	74.8	64.7
Steam Coal	9.5	9.1	9.5	9.6	11.1	17.4	12.3	8.7	9.2	9.4	9.4	9.8	37.6	49.5	37.8
Total Primary Supply	255.9	239.0	253.9	259.3	240.2	202.7	236.6	239.5	228.2	230.2	251.0	244.6	1008.1	919.2	954.0
Secondary Inventory Withdrawals	8.9	0.7	20.7	-31.2	-20.3	-2.8	12.6	-6.7	6.6	-8.7	12.7	-6.1	-0.8	-17.1	4.4
Waste Coal (a)	3.3	2.9	3.4	3.0	2.8	3.2	3.2	3.0	3.2	2.8	3.2	3.0	12.5	12.1	12.1
Total Supply	268.0	242.6	278.0	231.1	222.8	203.2	252.5	235.9	237.9	224.3	266.9	241.4	1019.7	914.2	970.6
Consumption (million short tons)															
Coke Plants	5.2	5.4	5.4	5.4	5.3	6.1	6.8	6.6	6.2	6.4	6.9	6.5	21.4	24.8	26.1
Electric Power Sector (b)	234.8	223.5	261.5	208.6	189.9	185.7	236.9	216.4	218.8	205.0	247.9	221.9	928.6	828.9	893.5
Retail and Other Industry	13.5	11.7	11.7	12.2	11.7	11.2	11.6	12.9	12.9	13.0	12.2	13.0	49.1	47.5	51.0
Residential and Commercial	1.0	0.6	0.5	0.6	0.7	0.6	0.7	1.1	1.1	0.8	0.8	1.1	2.8	3.2	3.9
Other Industrial	12.5	11.1	11.2	11.6	11.0	10.6	10.9	11.8	11.7	12.2	11.4	11.9	46.3	44.3	47.1
Total Consumption	253.6	240.6	278.7	226.3	206.9	203.0	255.4	235.9	237.9	224.3	266.9	241.4	999.1	901.2	970.6
Discrepancy (c)	14.5	2.0	-0.6	4.9	15.8	0.1	-2.9	0.0	0.0	0.0	0.0	0.0	20.6	13.1	0.0
End-of-period Inventories (million sho	rt tons)														
Primary Inventories (d)	44.3	45.4	43.8	41.9	41.5	41.0	37.2	37.4	32.0	33.0	31.4	34.0	41.9	37.4	34.0
Secondary Inventories	173.1	172.4	151.6	182.8	203.0	205.8	193.2	199.8	193.3	202.0	189.3	195.4	182.8	199.8	195.4
Electric Power Sector	166.7	165.7	144.4	175.1	196.4	198.4	185.2	191.5	185.9	194.0	180.8	186.6	175.1	191.5	186.6
Retail and General Industry	3.9	4.2	4.3	4.5	3.8	4.2	4.8	5.2	4.5	4.7	5.3	5.6	4.5	5.2	5.6
Coke Plants	2.0	2.0	2.4	2.6	2.3	2.7	2.6	2.6	2.3	2.7	2.6	2.6	2.6	2.6	2.6
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.22	5.22	5.22	5.22	5.12	5.12	5.12	5.12	4.97	4.97	4.97	4.97	5.22	5.12	4.97
Total Raw Steel Production															
(Million short tons per day) Cost of Coal to Electric Utilities	0.257	0.261	0.266	0.264	0.274	0.278	0.269	0.273	0.290	0.301	0.284	0.277	0.262	0.274	0.288
(Dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.42	2.38	2.34	2.42	2.40	2.39	2.37	2.40	2.39	2.39

<sup>- =</sup> no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Quarterly Coal Report, DOE/EIA-0121; and Electric Power Monthly, DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) Waste coal includes waste coal and cloal slurry reprocessed into briquettes.

<sup>(</sup>b) Coal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

<sup>(</sup>c) The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

<sup>(</sup>d) Primary stocks are held at the mines and distribution points.

Table 7a. U.S. Electricity Industry Overview

	<u> </u>	201	1	•	<u> </u>	201	12			20	13		<u> </u>	Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electricity Supply (billion kilowatthou	s per day)			<u> </u>	<u> </u>								<u> </u>		
Electricity Generation	11.07	10.94	12.65	10.33	10.56	10.94	12.46	10.65	11.10	10.95	12.36	10.77	11.25	11.15	11.30
Electric Power Sector (a)	10.66	10.54	12.22	9.92	10.14	10.53	12.01	10.23	10.67	10.54	11.92	10.36	10.84	10.73	10.88
End-use Sector (b)	0.41	0.41	0.43	0.41	0.42	0.41	0.45	0.42	0.42	0.41	0.44	0.41	0.41	0.42	0.42
Net Imports	0.08	0.10	0.13	0.09	0.10	0.13	0.15	0.09	0.09	0.08	0.10	0.07	0.10	0.12	0.09
Total Supply	11.15	11.04	12.78	10.42	10.66	11.08	12.61	10.74	11.18	11.03	12.46	10.84	11.35	11.27	11.38
Losses and Unaccounted for (c)	0.59	0.95	0.86	0.74	0.63	0.94	0.80	0.74	0.60	0.89	0.78	0.74	0.79	0.78	0.75
Electricity Consumption (billion kilowa	atthours pe	er day)													
Retail Sales	10.21	9.74	11.55	9.33	9.66	9.79	11.42	9.63	10.22	9.78	11.30	9.75	10.21	10.13	10.27
Residential Sector	4.12	3.49	4.69	3.30	3.67	3.43	4.51	3.44	4.04	3.41	4.36	3.50	3.90	3.76	3.83
Commercial Sector	3.45	3.56	4.05	3.39	3.36	3.61	4.06	3.49	3.51	3.63	4.05	3.53	3.61	3.63	3.68
Industrial Sector	2.61	2.67	2.79	2.62	2.61	2.72	2.82	2.69	2.65	2.73	2.87	2.69	2.67	2.71	2.74
Transportation Sector	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Direct Use (d)	0.35	0.35	0.37	0.35	0.36	0.35	0.39	0.36	0.37	0.35	0.38	0.35	0.36	0.37	0.36
Total Consumption	10.56	10.09	11.92	9.68	10.03	10.14	11.80	10.00	10.58	10.14	11.68	10.11	10.57	10.49	10.63
Prices															
Power Generation Fuel Costs (dollar	s per milli	on Btu)													
Coal	2.34	2.42	2.46	2.37	2.41	2.42	2.38	2.34	2.42	2.40	2.39	2.37	2.40	2.39	2.39
Natural Gas	5.02	4.92	4.76	4.13	3.31	2.92	3.54	3.81	4.05	3.89	3.95	4.32	4.71	3.38	4.04
Residual Fuel Oil	15.88	18.29	20.10	20.05	21.27	21.06	18.82	18.28	18.21	18.06	17.99	17.97	18.49	19.74	18.05
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	22.96	22.96	23.96	23.11	22.78	22.77	23.05	22.40	23.38	22.94
End-Use Prices (cents per kilowatthe	our)														
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.02	12.28	11.70	11.30	12.21	12.55	12.01	11.79	11.91	12.02
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.12	10.54	9.92	9.83	10.29	10.77	10.16	10.32	10.15	10.28
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.66	7.02	6.51	6.45	6.71	7.15	6.66	6.89	6.68	6.75

<sup>- =</sup> no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Electric Power Monthly, DOE/EIA-0226; and Electric Power Annual, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) Generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities and independent power producers.

<sup>(</sup>b) Generation supplied by CHP and electricity-only plants operated by businesses in the commercial and industrial sectors, primarily for onsite use.

 $<sup>(</sup>c)\ Includes\ transmission\ and\ distribution\ losses,\ data\ collection\ time-frame\ differences,\ and\ estimation\ error.$ 

<sup>(</sup>d) Direct Use represents commercial and industrial facility use of onsite net electricity generation; and electrical sales or transfers to adjacent or colocated facilities

for which revenue information is not available. See Table 7.6 of the EIAMonthly Energy Review.

Table 7b. U.S. Regional Electricity Retail Sales (Million Kilowatthours per Day)

U.S. Energy Informati	OH AUHIII	201	_	716-161111	Lifelda	201	- Septem	Del 201		201	13			Year	
-	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Residential Sector															
New England	144	115	143	116	133	112	147	123	139	113	139	125	130	128	129
Middle Atlantic	402	328	437	318	363	314	427	317	394	314	404	328	371	356	360
E. N. Central	575	455	608	457	516	460	594	479	560	450	555	485	524	512	512
W. N. Central	332	251	334	251	292	251	333	265	318	247	317	269	292	285	288
S. Atlantic	1,033	907	1,192	803	890	855	1,125	860	1,050	866	1,098	878	984	933	973
E. S. Central	372	296	408	261	312	288	394	281	367	289	384	285	334	319	331
W. S. Central	558	550	820	467	485	544	732	475	531	513	704	483	599	559	558
Mountain	248	228	334	229	237	247	340	235	248	244	344	242	260	265	270
Pacific contiguous	438	350	401	385	428	351	409	388	416	356	401	394	393	394	392
AK and HI	15	13	13	14	15	12	13	14	15	12	13	14	14	13	13
Total	4,118	3,493	4,689	3,302	3,670	3,433	4,512	3,438	4,035	3,406	4.358	3,504	3,901	3.764	3,826
Commercial Sector	,	,	,	,	•	•	,	*	,	,	*	,	•	,	,
New England	123	119	133	115	118	117	135	121	125	121	135	123	123	123	126
Middle Atlantic	435	421	482	406	416	417	479	414	430	420	469	416	436	432	434
E. N. Central	496	484	551	473	476	495	558	492	500	501	554	500	501	505	514
W. N. Central	269	262	297	258	257	270	304	271	276	272	302	275	272	275	281
S. Atlantic	784	856	942	773	761	845	941	806	801	851	948	816	839	838	854
E. S. Central	217	227	265	206	207	228	267	216	221	228	266	218	229	230	234
W. S. Central	443	500	595	456	447	519	586	461	458	504	581	471	499	503	504
Mountain	238	249	287	243	233	260	290	250	244	264	295	257	254	258	265
Pacific contiguous	430	429	482	438	430	442	485	438	434	448	484	442	445	449	452
AK and HI	18	17	17	17	17	16	17	17	18	17	18	18	17	17	17
Total	3,453	3,564	4,052	3,386	3,364	3,609	4,060	3,487	3,506	3,627	4,051	3,534	3,614	3,631	3,681
Industrial Sector	-,	-,	-,	-,	-,	-,	.,	٠, ٠٠٠	-,	-,	.,	-,	-,	-,	-,
New England	75	76	81	73	73	75	80	73	72	74	80	72	76	75	75
Middle Atlantic	199	192	196	187	186	193	198	189	194	195	198	192	194	192	195
E. N. Central	540	541	567	536	546	562	557	547	550	561	574	549	546	553	558
W. N. Central	232	236	253	237	234	248	260	249	240	249	264	250	240	248	251
S. Atlantic	370	394	401	373	372	397	407	381	375	398	414	383	384	389	393
E. S. Central	342	320	336	336	345	344	351	351	354	339	357	355	334	348	351
W. S. Central	415	441	456	422	410	427	463	419	420	433	465	414	434	430	433
Mountain	204	219	239	215	206	230	245	222	209	230	253	225	219	226	229
Pacific contiguous	221	233	247	228	220	236	249	240	226	235	253	239	232	236	238
AK and HI	14	13	14	14	14	13	14	14	13	14	14	14	14	14	14
Total	2,612	2,666	2,791	2,620	2,607	2,725	2,824	2,686	2,653	2,727	2,872	2,692	2,673	2,711	2,737
Total All Sectors (a)	_,	_,000	_,	_,,	_,	_,	2,02 .	2,000	2,000	_,	2,072	2,002	_,	_,	2,. 0.
New England	344	311	359	307	326	305	363	319	337	310	354	322	330	328	331
Middle Atlantic	1,048	952	1,126	921	977	935	1,116	933	1,031	942	1,085	948	1,012	990	1,001
E. N. Central	1,613	1,482	1,728	1,468	1,541	1,519	1,710	1,519	1,612	1,513	1,684	1,535	1,573	1,572	1,586
W. N. Central	834	749	884	746	783	768	896	785	834	768	883	794	803	808	820
S. Atlantic	2,191	2,161	2,539	1,952	2,027	2,100	2,477	2,050	2,229	2,119	2,464	2,080	2,211	2,164	2,223
E. S. Central	931	844	1,009	803	864	860	1,011	849	941	857	1,007	858	897	896	916
W. S. Central	1,417	1,491	1,871	1,346	1,342	1,490	1,781	1,356	1,409	1,450	1,750	1,367	1,532	1,493	1,495
Mountain	691	696	860	687	676	737	875	708	701	739	892	724	734	7,493 749	764
Pacific contiguous	1,090	1,015	1,132	1,054	1,081	1,031	1,145	1.069	1.078	1.042	1,140	1.078	1,073	1.082	1.084
AK and HI	46	43	1,132	1,054	45	42	1,145	45	46	43	1,140	45	45	1,062	45
	10,206	43 9,743		9,328	9,663	9,786	44 11,418	9.632	46 10,218	9,782	11,304	9.753	10,209	44 10,127	45 10,266
Total	10,206	9,743	11,553	9,3∠8	9,003	9,786	11,418	9,032	10,218	9,782	11,304	9,753	10,209	10,727	10,200

 <sup>- =</sup> no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Retail Sales represents total retail electricity sales by electric utilities and power marketers.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (http://www.eia.doe.gov/glossary/index.html) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Electric Power Monthly, DOE/EIA-0226; and Electric Power Annual, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

<sup>(</sup>a) Total retail sales to all sectors includes residential, commercial, industrial, and transportation sector sales.

Table 7c. U.S. Regional Electricity Prices (Cents per Kilowatthour)

U.S. Energy Information	tion Admi	nistratio	n   Sh	ort-Term	Energy	Outlook	<ul> <li>Septen</li> </ul>	ber 201	2						
		20	11			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Residential Sector															
New England	15.94	16.10	15.94	15.94	16.01	15.84	15.80	15.70	15.70	15.97	15.82	15.81	15.98	15.84	15.82
Middle Atlantic	15.16	15.98	16.48	15.76	14.94	15.40	16.35	15.03	14.87	16.16	17.00	15.63	15.86	15.49	15.93
E. N. Central	10.98	12.04	12.20	11.93	11.69	12.34	12.59	12.14	11.58	12.86	12.96	12.54	11.78	12.20	12.47
W. N. Central	9.01	10.52	11.16	9.80	9.61	10.99	11.34	9.93	9.38	11.08	11.68	10.29	10.13	10.49	10.59
S. Atlantic	10.73	11.43	11.62	11.23	11.13	11.57	11.58	11.14	10.61	11.36	11.70	11.32	11.26	11.37	11.25
E. S. Central	9.60	10.21	10.23	10.51	9.91	10.30	10.13	10.13	9.45	10.39	10.54	10.62	10.11	10.11	10.22
W. S. Central	10.01	10.76	10.79	10.53	10.31	10.46	10.63	10.22	10.15	10.87	10.92	10.53	10.55	10.43	10.64
Mountain	9.75	10.83	11.23	10.21	10.11	11.15	11.49	10.44	10.22	11.40	11.88	10.82	10.57	10.87	11.16
Pacific	12.18	12.53	13.70	12.56	12.30	13.02	14.04	12.68	12.49	12.92	14.14	12.74	12.74	13.01	13.08
U.S. Average	11.19	11.95	12.18	11.82	11.57	12.02	12.28	11.70	11.30	12.21	12.55	12.01	11.79	11.91	12.02
Commercial Sector															
New England	14.38	14.37	14.49	14.05	13.98	13.67	13.98	13.50	13.64	13.77	13.99	13.58	14.33	13.79	13.75
Middle Atlantic	13.23	13.76	14.52	13.00	12.57	12.94	13.93	12.53	12.69	13.44	14.36	12.92	13.66	13.03	13.38
E. N. Central	9.30	9.62	9.63	9.34	9.51	9.55	9.51	9.24	9.20	9.54	9.72	9.52	9.48	9.45	9.50
W. N. Central	7.60	8.47	8.96	7.77	7.89	8.60	8.91	7.75	7.63	8.53	9.13	7.98	8.23	8.31	8.34
S. Atlantic	9.40	9.51	9.62	9.53	9.48	9.44	9.53	9.44	9.36	9.51	9.75	9.66	9.52	9.47	9.58
E. S. Central	9.54	9.73	9.81	9.79	9.67	9.75	9.58	9.60	9.35	9.74	10.02	10.12	9.72	9.65	9.82
W. S. Central	8.55	8.65	8.90	8.43	8.29	8.02	8.30	7.99	8.37	8.41	8.51	8.21	8.65	8.15	8.39
Mountain	8.25	9.01	9.29	8.66	8.40	9.10	9.35	8.73	8.46	9.24	9.52	8.90	8.83	8.92	9.06
Pacific	10.89	12.29	13.71	11.46	10.83	12.06	13.78	11.64	10.89	12.28	13.89	11.75	12.14	12.13	12.25
U.S. Average	9.97	10.38	10.76	10.07	9.93	10.12	10.54	9.92	9.83	10.29	10.77	10.16	10.32	10.15	10.28
Industrial Sector															
New England	12.67	12.61	12.99	12.41	12.09	12.13	12.22	11.86	12.16	11.88	12.26	11.97	12.68	12.08	12.07
Middle Atlantic	8.46	8.21	8.34	7.67	7.53	7.48	7.97	7.48	7.72	7.87	8.04	7.52	8.17	7.62	7.79
E. N. Central	6.45	6.56	6.78	6.54	6.49	6.53	6.83	6.53	6.32	6.49	6.77	6.52	6.59	6.60	6.53
W. N. Central	5.77	6.13	6.64	5.78	5.92	6.23	6.62	5.75	5.72	6.11	6.73	5.90	6.09	6.14	6.13
S. Atlantic	6.52	6.76	7.11	6.57	6.41	6.54	6.83	6.45	6.26	6.47	6.95	6.64	6.75	6.56	6.59
E. S. Central	5.81	6.16	6.82	5.94	5.79	6.07	6.38	5.91	5.61	6.11	6.64	6.23	6.18	6.04	6.15
W. S. Central	5.78	6.03	6.63	5.77	5.47	5.34	5.61	5.24	5.66	5.74	5.88	5.47	6.07	5.42	5.69
Mountain	5.59	6.08	6.87	5.80	5.66	6.16	6.90	5.92	5.97	6.36	7.04	6.01	6.11	6.19	6.37
Pacific	7.34	7.73	8.70	7.82	7.30	7.69	8.29	7.38	7.01	7.54	8.43	7.54	7.92	7.68	7.66
U.S. Average	6.63	6.86	7.36	6.68	6.51	6.66	7.02	6.51	6.45	6.71	7.15	6.66	6.89	6.68	6.75
All Sectors (a)															
New England	14.63	14.55	14.70	14.34	14.35	14.05	14.30	13.93	14.14	14.10	14.29	14.06	14.56	14.16	14.15
Middle Atlantic	13.05	13.39	14.19	12.86	12.48	12.63	13.78	12.34	12.57	13.17	14.15	12.73	13.41	12.85	13.18
E. N. Central	8.94	9.24	9.60	9.12	9.16	9.27	9.70	9.18	9.04	9.39	9.78	9.40	9.24	9.34	9.41
W. N. Central	7.65	8.42	9.13	7.82	7.94	8.61	9.15	7.85	7.75	8.56	9.33	8.11	8.28	8.41	8.45
S. Atlantic	9.54	9.81	10.17	9.66	9.64	9.76	10.02	9.60	9.43	9.70	10.15	9.81	9.81	9.77	9.78
E. S. Central	8.19	8.54	8.99	8.42	8.20	8.46	8.69	8.25	7.98	8.52	9.02	8.68	8.55	8.41	8.56
W. S. Central	8.31	8.65	9.18	8.32	8.16	8.14	8.56	7.92	8.24	8.49	8.78	8.20	8.66	8.22	8. <b>4</b> 5
Mountain	8.00	8.68	9.37	8.28	8.17	8.87	9.49	8.42	8.34	9.06	9.73	8.65	8.63	8.79	8.99
Pacific	10.68	11.32	12.61	11.06	10.68	11.38	12.67	11.05	10.68	11.42	12.75	11.17	11.44	11.47	11.53
U.S. Average	9.61	9.98	10.52	9.74	9.63	9.82	10.36	9.60	9.53	9.96	10.54	9.86	9.98	9.87	9.99

<sup>- =</sup> no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Electric Power Monthly, DOE/EIA-0226; and Electric Power Annual, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

 $\textbf{Projections:} \ \ \textbf{Generated by simulation of the EIA Regional Short-Term Energy Model}.$ 

<sup>(</sup>a) Volume-weighted average of retail prices to residential, commercial, industrial, and transportation sectors.

See "Census division" in EIA's Energy Glossary (http://www.eia.doe.gov/glossary/index.html) for a list of States in each region.

Table 7d. U.S. Regional Electricity Generation, All Sectors (Thousand megawatthours per day)

O.O. Energy information Admir	notration	20	11	Lilorgy	Outlook	201	12	-		201	13			Year	
<b> </b>	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
United States															
Coal	4,933	4,616	5,320	4,139	3,834	3,782	4,746	4,357	4,551	4,211	5,014	4,501	4,751	4,182	4,570
Natural Gas	2,294	2,609	3,602	2,623	3,024	3,516	4,143	2,928	2,842	2,941	3,713	2,814	2,785	3,403	3.079
Petroleum (a)	88	76	83	61	61	56	69	58	71	62	69	59	77	61	65
Other Gases	29	30	33	31	36	34	35	34	38	35	35	34	31	35	36
Nuclear	2,258	1,943	2,288	2,170	2,175	2,012	2,187	2,008	2,162	2.092	2,225	2,064	2,165	2,096	2,136
Renewable Energy Sources:	2,230	1,343	2,200	2,170	2,173	2,012	2,101	2,000	2,102	2,032	2,220	2,004	2,103	2,030	2,130
Conventional Hydropower	917	1,066	863	719	781	910	733	635	762	888	700	647	891	764	749
• •	330	384	235	364	422	404	733 311	402	702 441	477	349	422	328	385	422
Wind Wood Biomass	102	364 97	106	100	101	93	109	106	105	98	349 111	106	101	365 102	105
	51		55		53	55 55	54	54			57		54	54	56
Waste Biomass	47	55 45		56 46					55 47	58 46		56 46	-		
Geothermal		45	44	46	47	46	46	47	47	46	46	46	46	46	46
Solar	2	7	7	4	4	14	14	7	9	24	24	10	5	10	17
Pumped Storage Hydropower	-11	-16	-21	-16	-9	-12	-20	-17	-16	-14	-20	-17	-16	-14	-17
Other Nonrenewable Fuels (b)	28	31	31	30	29	30	31	31	29	32	32	31	30	30	31
Total Generation	11,070	10,944	12,647	10,326	10,558	10,941	12,459	10,648	11,098	10,948	12,357	10,772	11,249	11,154	11,296
Northeast Census Region															
Coal	372	329	373	264	262	230	298	305	356	240	301	324	334	274	305
Natural Gas	424	477	605	483	503	548	679	516	514	521	618	502	498	562	539
Petroleum (a)	11	5	8	2	2	3	6	4	7	4	7	4	6	4	6
Other Gases	2	2	2	2	3	2	3	3	3	2	2	2	2	3	2
Nuclear	545	447	539	516	544	482	525	477	514	497	529	490	512	507	507
Hydropower (c)	98	112	91	110	116	91	76	94	113	97	77	95	103	94	95
Other Renewables (d)	52	48	46	53	58	51	50	62	63	56	52	62	50	55	58
Other Nonrenewable Fuels (b)	10	12	12	11	11	12	12	12	11	12	11	12	11	12	12
Total Generation	1,515	1,431	1,676	1,442	1,499	1,419	1,648	1,473	1,581	1,429	1,598	1,491	1,516	1,510	1,525
South Census Region															
Coal	2,177	2,180	2,408	1,688	1,567	1,709	2,123	1,791	1,935	1,999	2,237	1,848	2,113	1,798	2,005
Natural Gas	1,311	1,645	2,139	1,473	1,685	2,095	2,324	1,595	1,553	1,727	2,145	1,552	1,644	1,925	1,745
Petroleum (a)	41	35	38	24	25	22	28	20	29	25	25	20	34	24	25
Other Gases	14	14	15	14	14	14	14	15	15	15	15	15	14	14	15
Nuclear	940	831	977	920	898	870	953	872	938	907	965	895	917	899	926
Hydropower (c)	120	126	79	112	140	72	65	97	137	79	67	98	109	93	95
Other Renewables (d)	171	198	151	180	195	190	166	193	200	208	177	197	175	186	195
Other Nonrenewable Fuels (b)	11	13	12	12	11	12	12	12	12	13	13	12	12	12	12
Total Generation	4,787	5,042	5,819	4,423	4,533	4,986	5,686	4,595	4,818	4,972	5,644	4,637	5,019	4,951	5,019
Midwest Census Region															
Coal	1,804	1,628	1,896	1,573	1,468	1,395	1,735	1,614	1,648	1,513	1,835	1,676	1,725	1,554	1,668
Natural Gas	141	132	239	141	260	331	384	200	198	175	216	138	164	294	182
Petroleum (a)	9	9	8	7	7	6	8	7	8	7	8	7	8	7	8
Other Gases	7	8	9	8	12	11	11	9	13	11	11	8	8	11	11
Nuclear	561	485	577	524	553	516	542	508	550	532	566	525	537	530	543
Hydropower (c)	49	61	56	45	46	55	47	38	45	61	49	39	53	47	48
Other Renewables (d)	144	151	91	167	183	167	120	180	192	186	132	191	138	163	175
Other Nonrenewable Fuels (b)	3	3	3	3	3	3	4	3	3	3	4	3	3	3	3
Total Generation	2,717	2,477	2,880	2,469	2,532	2,484	2,852	2,560	2,656	2,489	2,820	2,588	2,636	2,608	2,639
West Census Region	_,	_,	_,	_,	_,	_,	_,	_,	_,	_,	_,	_,	_,,,,,	_,	_,
Coal	580	480	642	614	538	448	590	646	613	459	641	654	579	556	592
Natural Gas	418	355	619	526	576	542	756	616	578	517	734	621	480	623	613
Petroleum (a)	28	28	29	28	26	24	27	27	27	26	28	28	28	26	27
Other Gases	6	6	6	7	7	6	7	7	8	7	7	7	6	7	7
Nuclear	212	180	196	210	, 181	144	167	150	161	156	166	154	199	160	159
	639	750	616	436	470	680	52 <i>4</i>	389	452	637	488	398	610	516	494
Hydropower (c)															
Other Renewables (d)	165 4	192	159	168	191	203 4	200	181	201 4	252 4	228	190	171	194	218
Other Nonrenewable Fuels (b)		4 005	4	4 004	4 000		3	4			2 205	2.050	2 070	2.005	4
Total Generation	2,052	1,995	2,271	1,991	1,993	2,052	2,273	2,020	2,044	2,057	2,295	2,056	2,078	2,085	2,113

<sup>(</sup>a) Residual fuel oil, distillate fuel oil, petroleum coke, and other petroleum liquids.

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from U.S. Energy Information Administration Electric Power Monthly and Electric Power Annual.

Projections: Generated by simulation of the U.S. Energy Information Administration Short-Term Energy Outlook model.

<sup>(</sup>b) Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, nonrenewable waste, and miscellaneous technologies.

<sup>(</sup>c) Conventional hydroelectric and pumped storage generation.

<sup>(</sup>d) Wind, biomass, geothermal, and solar generation.

Table 7e. U.S. Regional Fuel Consumption for Electricity Generation, All Sectors

	2011				20	12			20	13			Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Fuel Consumption for Electricity Ge	neration,	All Sector	s					•							
United States															
Coal (thousand st/d)	2,622	2,467	2,859	2,277	2,098	2,046	2,589	2,364	2,444	2,261	2,710	2,424	2,556	2,276	2,460
Natural Gas (million cf/d)	17,454	20,657	28,512	19,639	22,549	27,455	32,047	21,803	21,475	22,943	29,077	21,180	21,590	25,969	23,683
Petroleum (thousand b/d)	157	133	146	107	108	100	122	101	128	109	122	103	136	108	115
Residual Fuel Oil	43	42	42	30	29	32	45	31	32	31	41	31	39	34	34
Distillate Fuel Oil	33	31	30	25	22	27	29	25	30	25	26	25	30	26	27
Petroleum Coke (a)	77	55	70	48	54	36	43	40	57	48	48	41	62	43	48
Other Petroleum Liquids (b)	5	4	5	4	4	4	6	5	8	5	6	6	5	5	6
Northeast Census Region															
Coal (thousand st/d)	171	151	174	123	122	107	138	141	162	111	140	150	154	127	140
Natural Gas (million cf/d)	3,203	3,652	4,724	3,605	3,756	4,201	5,210	3,789	3,827	3,968	4,745	3,697	3,800	4,240	4,061
Petroleum (thousand b/d)	20	9	15	5	5	7	12	7	15	7	15	8	12	8	11
South Census Region															
Coal (thousand st/d)	1,114	1,134	1,258	913	837	907	1,138	952	1,012	1,046	1,174	965	1,105	959	1,050
Natural Gas (million cf/d)	10,019	13,155	17,007	11,095	12,670	16,551	18,146	11,997	11,806	13,594	16,933	11,785	12,833	14,842	13,539
Petroleum (thousand b/d)	75	62	69	45	48	43	52	36	53	47	46	35	63	45	45
Midwest Census Region															
Coal (thousand st/d)	1,014	918	1,073	899	840	784	986	911	929	853	1,042	946	976	881	943
Natural Gas (million cf/d)	1,082	1,092	2,040	1,064	1,908	2,575	2,935	1,457	1,527	1,402	1,730	1,058	1,321	2,218	1,429
Petroleum (thousand b/d)	16	16	16	13	12	11	16	14	14	14	15	14	15	13	14
West Census Region															
Coal (thousand st/d)	322	263	355	343	300	249	326	360	341	251	354	364	321	309	328
Natural Gas (million cf/d)	3,149	2,757	4,742	3,876	4,214	4,128	5,757	4,561	4,314	3,979	5,669	4,639	3,636	4,668	4,654
Petroleum (thousand b/d)	46	46	47	44	43	38	42	44	45	41	45	46	46	42	44
End-of-period U.S. Fuel Inventories	Held by E	lectric Po	wer Secto	r											
Coal (million short tons)	166.7	165.7	144.4	175.1	196.4	198.4	185.2	191.5	185.9	194.0	180.8	186.6	175.1	191.5	186.6
Residual Fuel Oil (mmb)	15.4	16.4	15.7	15.5	15.3	14.6	14.2	13.9	13.4	14.6	13.7	13.1	15.5	13.9	13.1
Distillate Fuel Oil (mmb)	16.5	16.8	16.7	17.1	16.9	16.7	16.8	17.0	16.5	16.4	16.5	16.7	17.1	17.0	16.7
Petroleum Coke (mmb)	2.4	2.5	1.9	2.3	2.0	1.7	1.5	1.7	2.0	2.0	2.1	2.1	2.3	1.7	2.1

<sup>(</sup>a) Petroleum coke consumption converted from short tons to barrels by multiplying by five.

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. Data include fuel consumed only for generation of electricity. Values do not include consumption by CHP plants for useful thermal output.

The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Physical Units: st/d = short tons per day; b/d = barrels per day; cf/d = cubic feet per day; mmb = million barrels.

Historical data: Latest data available from U.S. Energy Information Administration Electric Power Monthly and Electric Power Annual.

 $\textbf{Projections}: \textbf{Generated by simulation of the U.S. Energy Information Administration \textit{Short-Term Energy Outlook} \ \text{model}.$ 

<sup>(</sup>b) Other petroleum liquids include jet fuel, kerosene, and waste oil.

Table 8. U.S. Renewable Energy Consumption (Quadrillion Btu)

U.S. Energy information Adm	2011				Outlook	- Septen 201				201	3			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electric Power Sector	<u> </u>		L.			I.	I.			I.					
Hydroelectric Power (a)	0.801	0.941	0.771	0.641	0.688	0.803	0.654	0.565	0.664	0.783	0.625	0.576	3.154	2.710	2.650
Wood Biomass (b)	0.046	0.040	0.047	0.042	0.045	0.038	0.050	0.049	0.051	0.046	0.057	0.052	0.175	0.182	0.205
Waste Biomass (c)		0.067	0.069	0.069	0.066	0.068	0.067	0.067	0.067	0.070	0.072	0.070	0.269	0.268	0.278
Wind	0.290	0.341	0.211	0.326	0.375	0.358	0.279	0.361	0.387	0.423	0.313	0.378	1.168	1.373	1.501
Geothermal	0.042	0.040	0.040	0.041	0.041	0.041	0.042	0.042	0.041	0.040	0.042	0.042	0.163	0.166	0.165
Solar	0.002	0.006	0.006	0.003	0.004	0.012	0.013	0.006	0.008	0.021	0.021	0.009	0.018	0.035	0.059
Subtotal	1.245	1.435	1.145	1.122	1.219	1.315	1.104	1.089	1.218	1.384	1.131	1.127	4.947	4.727	4.859
Industrial Sector															
Hydroelectric Power (a)	0.005	0.005	0.003	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.018	0.020	0.020
Wood Biomass (b)	0.325	0.322	0.331	0.334	0.325	0.314	0.321	0.320	0.307	0.302	0.317	0.323	1.311	1.280	1.250
Waste Biomass (c)	0.043	0.042	0.043	0.044	0.043	0.043	0.047	0.045	0.044	0.043	0.046	0.043	0.172	0.178	0.176
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004
Subtotal	0.378	0.375	0.383	0.388	0.378	0.369	0.379	0.376	0.361	0.356	0.375	0.377	1.524	1.501	1.468
Commercial Sector															
Wood Biomass (b)	0.017	0.018	0.018	0.018	0.018	0.018	0.019	0.018	0.018	0.017	0.019	0.017	0.071	0.072	0.071
Waste Biomass (c)	0.009	0.008	0.009	0.010	0.009	0.009	0.011	0.010	0.010	0.010	0.011	0.010	0.036	0.038	0.042
Geothermal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.020	0.020	0.020
Subtotal	0.031	0.032	0.034	0.036	0.032	0.033	0.037	0.035	0.035	0.034	0.036	0.035	0.133	0.136	0.140
Residential Sector															
Wood Biomass (b)	0.106	0.107	0.108	0.108	0.107	0.106	0.107	0.107	0.103	0.104	0.105	0.105	0.430	0.427	0.417
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.040	0.040	0.040
Solar (d)	0.035	0.035	0.035	0.035	0.042	0.042	0.043	0.043	0.050	0.051	0.052	0.052	0.140	0.170	0.205
Subtotal	0.150	0.152	0.154	0.154	0.159	0.159	0.159	0.159	0.163	0.165	0.167	0.167	0.610	0.636	0.661
Transportation Sector															
Ethanol (e)		0.272	0.270	0.270	0.257	0.276	0.270	0.272	0.264	0.274	0.277	0.276	1.070	1.075	1.092
Biodiesel (e)		0.026	0.034	0.039	0.019	0.037	0.035	0.036	0.035	0.037	0.037	0.037	0.112	0.127	0.146
Subtotal	0.269	0.298	0.305	0.309	0.276	0.313	0.305	0.308	0.300	0.311	0.315	0.313	1.181	1.202	1.239
All Sectors Total															
Hydroelectric Power (a)	0.806	0.946	0.775	0.645	0.693	0.808	0.659	0.570	0.669	0.788	0.631	0.581	3.171	2.730	2.670
Wood Biomass (b)	0.495	0.486	0.504	0.502	0.494	0.478	0.497	0.494	0.478	0.470	0.498	0.497	1.987	1.963	1.943
Waste Biomass (c)	0.116	0.118	0.121	0.123	0.117	0.120	0.125	0.122	0.121	0.123	0.129	0.123	0.477	0.484	0.497
Wind		0.341	0.211	0.326	0.375	0.358	0.279	0.361	0.387	0.423	0.313	0.378	1.168	1.373	1.501
Geothermal	0.057	0.056	0.056	0.057	0.057	0.057	0.058	0.058	0.057	0.056	0.058	0.058	0.226	0.229	0.229
Solar		0.041	0.042	0.039	0.046	0.054	0.056	0.049	0.058	0.072	0.073	0.060	0.158	0.205	0.264
Ethanol (e)		0.277	0.277	0.278	0.262	0.281	0.278	0.279	0.271	0.281	0.284	0.283	1.093	1.100	1.118
Biodiesel (e)		0.026	0.034	0.039	0.019	0.037	0.035	0.036	0.035	0.037	0.037	0.037	0.112	0.127	0.146
Total Consumption	2.074	2.292	2.020	2.008	2.063	2.188	1.984	1.967	2.077	2.249	2.023	2.018	8.393	8.203	8.367
no data available															

<sup>- =</sup> no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from EIA databases supporting the following reports: Electric Power Monthly, DOE/EIA-0226 and Renewable Energy Annual, DOE/EIA-0603; Petroleum Supply Monthly, DOE/EIA-0109.

Minor discrepancies with published historical data are due to independent rounding.

**Projections:** Generated by simulation of the U.S. Energy Information Administration Short-Term Energy Outlook model.

<sup>(</sup>a) Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

<sup>(</sup>b) Wood and wood-derived fuels.

<sup>(</sup>c) Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

<sup>(</sup>d) Includes small-scale solar thermal and photovoltaic energy used in the commercial, industrial, and electric power sectors.

<sup>(</sup>e) Fuel ethanol and biodiesel consumption in the transportation sector includes production, stock change, and imports less exports. Some biodiesel may be consumed in the residential sector in heating oil.

Table 9a. U.S. Macroeconomic Indicators and CO2 Emissions

		201				201				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2005 dollars - SAAR)	13,184	13,265	13,307	13,441	13,506	13,558	13,600	13,645	13,707	13,767	13,837	13,918	13,299	13,577	13,807
Real Disposable Personal Income															
(billion chained 2005 Dollars - SAAR)	10,196	10,158	10,126	10,122	10,207	10,289	10,337	10,369	10,403	10, <b>4</b> 53	10,510	10,577	10,150	10,300	10,486
Real Fixed Investment															
(billion chained 2005 dollars-SAAR)	1,627	1,675	1,737	1,779	1,821	1,848	1,875	1,898	1,921	1,948	1,981	2,021	1,704	1,860	1,968
Business Inventory Change															
(billion chained 2005 dollars-SAAR)	21.39	16.37	2.40	35.48	11.86	0.19	13.65	8.69	7.84	6.87	5.01	7.54	18.91	8.60	6.81
Housing Stock	123.5	422 E	422 E	422 E	422.6	400.6	100.6	100.6	100.7	100.0	100.0	122.0	400 E	100.6	100.0
(millions)	123.5	123.5	123.5	123.5	123.6	123.6	123.6	123.6	123.7	123.8	123.8	123.9	123.5	123.6	123.9
Non-Farm Employment	130.7	131.2	131.5	132.0	132.7	133.0	133.4	133.8	134.2	134.7	135.2	135.7	131.4	133.2	135.0
(millions)  Commercial Employment	130.7	131.2	131.5	132.0	132.7	133.0	133.4	133.0	134.2	134.7	135.2	135.7	131.4	133.2	135.0
	88.7	89.2	89.5	90.0	90.5	90.8	91.2	91.5	92.0	92.4	92.9	93.3	89.4	91.0	92.6
(millions)	00.7	03.2	03.5	30.0	30.3	30.0	91.2	91.0	92.0	32.4	32.3	33.3	03.4	91.0	32.0
Industrial Production Indices (Index, 2007=	-100)														
Total Industrial Production	92.6	92.9	94.2	95.3	96.7	97.2	97.7	98.3	98.6	99.2	100.0	100.5	93.7	97.5	99.6
Manufacturing	90.4	90.6	91.7	92.9	95.2	95.6	96.0	96.6	97.1	97.8	98.6	99.4	91.4	95.8	98.2
Food	99.5	100.3	100.4	101.2	102.3	102.2	102.4	102.7	103.1	103.5	103.9	104.4	100.3	102.4	103.7
Paper	87.5	86.0	85.0	85.3	85.3	84.9	84.7	84.7	84.6	84.9	85.4	86.1	86.0	84.9	85.3
Chemicals	87.2	86.2	86.6	86.8	87.5	86.5	86.8	87.1	87.2	87.7	88.3	88.9	86.7	87.0	88.0
Petroleum	94.7	96.6	100.8	102.0	102.1	100.1	101.1	101.6	102.0	102.4	102.7	102.8	98.5	101.2	102.5
Stone, Clay, Glass	69.1	71.3	72.3	71.1	72.3	71.8	72.3	73.0	73.8	75.1	76.6	78.4	71.0	72.4	76.0
Primary Metals	95.7	95.3	95.9	100.2	102.4	100.7	101.0	100.9	100.5	101.7	103.3	105.0	96.8	101.2	102.6
Resins and Synthetic Products	87.1	80.7	80.7	80.8	84.5	78.7	78.7	79.0	78.9	79.3	80.3	81.2	82.3	80.2	79.9
Agricultural Chemicals	93.6	91.4	92.8	94.6	94.3	88.9	89.3	89.6	89.8	91.0	92.1	92.9	93.1	90.5	91.4
Natural Gas-weighted (a)	89.9	88.7	89.8	90.8	92.1	90.2	90.6	90.9	90.9	91.6	92.5	93.3	89.8	90.9	92.1
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	2.22	2.25	2.26	2.27	2.28	2.29	2.30	2.31	2.32	2.32	2.34	2.35	2.25	2.30	2.33
Producer Price Index: All Commodities															
(index, 1982=1.00)	1.98	2.02	2.02	2.03	2.04	2.00	2.01	2.04	2.04	2.03	2.03	2.04	2.01	2.02	2.03
Producer Price Index: Petroleum															
(index, 1982=1.00)	2.74	3.22	3.07	2.94	3.08	3.08	3.09	3.06	2.92	2.93	2.90	2.82	2.99	3.07	2.89
GDP Implicit Price Deflator															
(index, 2005=100)	112.4	113.1	113.9	114.0	114.6	115.1	115.6	116.3	116.8	117.1	117.6	118.1	113.4	115.4	117.4
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	7,585	8,324	8,251	7,950	7,608	8,388	8,304	7,946	7.640	8,413	8,376	7,999	8,029	8,062	8,109
Air Travel Capacity	-,	-,	-,	1,000	-,	-,	-,	.,	.,	-,	2,21.2	.,	-,	-,	-,
(Available ton-miles/day, thousands)	519	549	554	527	515	549	553	527	517	549	552	526	537	536	536
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	307	339	344	320	307	344	340	313	313	349	340	312	328	326	328
Airline Ticket Price Index															
(index, 1982-1984=100)	298.2	308.1	307.8	302.0	299.2	314.6	297.4	286.4	305.6	328.0	312.3	292.1	304.0	299.4	309.5
Raw Steel Production															
(million short tons per day)	0.257	0.261	0.266	0.264	0.274	0.278	0.269	0.273	0.290	0.301	0.284	0.277	0.262	0.274	0.288
Carbon Dioxide (CO <sub>2</sub> ) Emissions (million n	netric ton	s)													
Petroleum	569	577	583	578	556	567	574	576	554	567	579	579	2,307	2,274	2,278
Natural Gas	402	273	286	333	391	300	307	363	421	285	294	362	1,294	1,361	1,361
Coal	474	450	520	423	387	380	484	449	452	427	507	459	1,867	1,701	1,846
Total Fassil Fuels	1 115	1 200	1 200	1 224	1 224	1 249	1 265	1 200	1 427	1 200	1 270	1 100	E 467	5 226	E 10E

<sup>- =</sup> no data available

1,299

1,445

Total Fossil Fuels .....

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

1,389

1,334

Historical data: Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration.

1,334

Minor discrepancies with published historical data are due to independent rounding.

Projections: Macroeconomic projections are based on the Global Insight Model of the U.S. Economy and Regional Economic Information and simulation of the EIA Regional Short-Term Energy Model.

1,248

1,365

1,388

1,427

1,280

1,379

1,400

5,467

5,336

5,485

<sup>(</sup>a) Natural gas share weights of individual sector indices based on EIAManufacturing Energy Consumption Survey, 2002.

<sup>(</sup>b) Total highway travel includes gasoline and diesel fuel vehicles.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Informa	tion Admi			ort-Term	Energy		: - Septer	mber 20	112						
		201				20				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Real Gross State Produc															
New England	715	720	723	731	734	736	739	741	744	746	749	752	722	737	748
Middle Atlantic	1,943	1,952	1,956	1,968	1,982	1,987	1,992	2,000	2,008	2,013	2,020	2,030	1,955	1,990	2,018
E. N. Central	1,801	1,810	1,812	1,824	1,834	1,839	1,843	1,847	1,852	1,859	1,867	1,876	1,812	1,841	1,863
W. N. Central	852	856	857	862	868	873	875	878	882	885	889	893	857	874	887
S. Atlantic	2,393	2,408	2,415	2,440	2,450	2,456	2,461	2,468	2,480	2,491	2,504	2,520	2,414	2,459	2,499
E. S. Central	611	612	613	617	620	623	624	626	629	631	634	637	613	623	633
W. S. Central	1,570	1,585	1,595	1,611	1,615	1,627	1,639	1,648	1,658	1,668	1,679	1,694	1,590	1,632	1,675
Mountain	864	869	874	883	884	889	893	896	901	905	910	917	873	891	908
Pacific	2,321	2,336	2,347	2,388	2,402	2,410	2,416	2,423	2,434	2,450	2,464	2,478	2,348	2,413	2,456
Industrial Output, Manuf	facturing (I	ndex, Yea	r 2007=10	0)											
New England	92.1	91.8	92.9	93.7	95.5	95.2	95.6	96.0	96.4	96.8	97.4	98.1	92.6	95.6	97.2
Middle Atlantic	89.9	89.8	90.4	91.2	93.5	93.3	93.6	94.0	94.4	95.0	95.6	96.3	90.3	93.6	95.3
E. N. Central	89.4	89.9	91.2	92.6	95.6	96.4	97.0	97.6	98.2	99.2	100.1	101.1	90.8	96.6	99.6
W. N. Central	92.9	93.3	94.7	96.2	99.1	99.6	99.9	100.5	101.1	101.8	102.8	103.7	94.3	99.8	102.3
S. Atlantic	87.2	87.1	88.2	89.4	91.2	91.2	91.4	91.9	92.4	93.1	93.8	94.5	88.0	91.4	93.4
E. S. Central	86.1	86.0	87.0	88.6	90.5	91.4	92.0	92.8	93.7	94.6	95.6	96.6	86.9	91.7	95.1
W. S. Central	93.5	93.9	95.3	96.9	99.3	99.9	100.3	100.9	101.5	102.3	103.1	104.0	94.9	100.1	102.7
Mountain	90.1	90.2	91.6	92.9	95.4	96.1	96.5	97.2	97.7	98.5	99.3	100.2	91.2	96.3	98.9
Pacific	91.8	91.9	93.1	94.1	95.9	96.2	96.5	97.0	97.3	97.9	98.6	99.3	92.7	96.4	98.3
Real Personal Income (E	Billion \$200	5)													
New England	650	652	645	644	650	656	660	664	668	672	675	678	648	658	673
Middle Atlantic	1,755	1,747	1,741	1,741	1,759	1,774	1,784	1,795	1,805	1,818	1,827	1,837	1,746	1,778	1,822
E. N. Central	1,607	1,599	1,596	1,599	1,613	1,624	1,631	1,637	1,646	1,657	1,667	1,673	1,600	1,626	1,661
W. N. Central	748	747	745	747	753	757	760	761	766	772	780	784	746	758	775
S. Atlantic	2,136	2,131	2,123	2,120	2,138	2,157	2,170	2,184	2,200	2,218	2,232	2,246	2,127	2,162	2,224
E. S. Central	565	564	562	563	567	572	574	577	581	585	588	591	564	573	586
W. S. Central	1,253	1,254	1,255	1,259	1,267	1,283	1,292	1,300	1,311	1,322	1,332	1,342	1,255	1,286	1,327
Mountain	741	741	739	742	748	754	759	764	770	777	782	788	741	756	779
Pacific	1,950	1,941	1,939	1,937	1,958	1,979	1,991	2,002	2,016	2,032	2,047	2,060	1,942	1,983	2,039
Households (Thousands	s)														
New England	5,742	5,746	5,749	5,753	5,761	5,770	5,778	5,786	5,796	5,806	5,815	5,825	5,753	5,786	5,825
Middle Atlantic	15,789	15,808	15,824	15,839	15,861	15,882	15,907	15,927	15,952	15,973	15,995	16,015	15,839	15,927	16,015
E. N. Central	18,296	18,302	18,304	18,312	18,335	18,361	18,388	18,416	18,447	18,479	18,505	18,532	18,312	18,416	18,532
W. N. Central	8,254	8,267	8,281	8,297	8,320	8,343	8,362	8,382	8,402	8,424	8,442	8,462	8,297	8,382	8,462
S. Atlantic	23,562	23,614	23,668	23,731	23,809	23,892	23,973	24,062	24,156	24,251	24,343	24,439	23,731	24,062	24,439
E. S. Central	7,323	7,334	7,346	7,358	7,374	7,392	7,409	7,427	7,448	7,468	7,487	7,508	7,358	7,427	7,508
W. S. Central	13,537	13,577	13,620	13,667	13,727	13,787	13,844	13,904	13,968	14,031	14,092	14,153	13,667	13,904	14,153
Mountain	8,414	8,431	8,451	8,477	8,513	8,550	8,585	8,622	8,663	8,702	8,739	8,778	8,477	8,622	8,778
Pacific	17,764	17,801	17,839	17,882	17,942	18,004	18,063	18,121	18,187	18,254	18,312	18,374	17,882	18,121	18,374
Total Non-farm Employn	nent (Millio	ns)													
New England	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.8	6.9	6.9
Middle Atlantic	18.1	18.2	18.2	18.3	18.4	18.4	18.5	18.5	18.6	18.7	18.7	18.8	18.2	18.5	18.7
E. N. Central	20.2	20.2	20.2	20.3	20.4	20.4	20.5	20.5	20.6	20.7	20.7	20.8	20.2	20.5	20.7
W. N. Central	9.8	9.9	9.9	9.9	10.0	10.0	10.0	10.0	10.1	10.1	10.1	10.2	9.9	10.0	10.1
S. Atlantic	24.9	25.0	25.0	25.1	25.2	25.3	25.3	25.4	25.5	25.6	25.7	25.8	25.0	25.3	25.7
E. S. Central	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	7.6	7.6	7.4	7.5	7.6
W. S. Central	15.0	15.1	15.2	15.3	15.4	15.5	15.5	15.6	15.6	15.7	15.8	15.8	15.2	15.5	15.7
Mountain	9.0	9.1	9.1	9.2	9.2	9.2	9.3	9.3	9.3	9.4	9.4	9.5	9.1	9.3	9.4
Pacific	19.3	19.4	19.4	19.5	19.6	19.7	19.8	19.8	19.9	20.0	20.0	20.1	19.4	19.7	20.0
										_0.0	_0.0				

<sup>- =</sup> no data available

**Notes:** The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics. Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (http://www.eia.doe.gov/glossary/index.html) for a list of States in each region.

Historical data: Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17.

Minor discrepancies with published historical data are due to independent rounding.

 $\textbf{Projections:} \ \textbf{Macroeconomic projections are based on the Global Insight Model of the U.S. Economy.}$ 

Table 9c. U.S. Regional Weather Data

U.S. Energy Informati	tion Admir			rt-Term	Energy (			ber 201	2						
		201				20				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Heating Degree-days															
New England	-	846	106	1,871	2,659	779	148	2,209	3,190	918	172	2,214	6,138	5,796	<i>6,4</i> 93
Middle Atlantic	3,022	609	67	1,715	2,359	594	94	1,990	2,914	731	113	2,010	5,413	5,038	5,769
E. N. Central	3,306	754	183	1,944	2,467	629	132	2,234	3,134	766	155	2,282	6,187	5,462	6,337
W. N. Central	3,519	769	200	2,157	2,528	534	146	2,424	3,255	716	182	2,480	6,645	5,632	6,632
South Atlantic	1,477	175	18	885	1,100	183	21	1,033	1,501	230	22	1,033	2,555	2,337	2,786
E. S. Central	1,870	248	44	1,234	1,326	203	32	1,373	1,889	286	33	1,376	3,397	2,934	3,584
W. S. Central	1,263	98	9	833	883	53	8	886	1,278	107	9	887	2,204	1,829	2,281
Mountain	2,312	759	68	1,915	2,076	514	128	1,905	2,279	707	160	1,881	5,054	4,624	5,028
Pacific	1,486	676	65	1,183	1,431	485	95	1,158	1,422	557	112	1,154	3,411	3,170	3,245
U.S. Average	2,235	508	77	1,419	1,747	412	80	1,568	2,160	515	95	1,577	4,238	3,808	4,347
Heating Degree-days, 30	-year Norma	al (a)													
New England	3,219	930	190	2,272	3,219	930	190	2,272	3,219	930	190	2,272	6,611	6,611	6,611
Middle Atlantic	2,968	752	127	2,064	2,968	752	127	2,064	2,968	752	127	2,064	5,911	5,911	5,911
E. N. Central	3,227	798	156	2,316	3,227	798	156	2,316	3,227	798	156	2,316	6,497	6,497	6,497
W. N. Central	3,326	729	183	2,512	3,326	729	183	2,512	3,326	729	183	2,512	6,750	6,750	6,750
South Atlantic	1,523	247	25	1,058	1,523	247	25	1,058	1,523	247	25	1,058	2,853	2,853	2,853
E. S. Central	1,895	299	33	1,377	1,895	299	33	1,377	1,895	299	33	1,377	3,604	3,604	3,604
W. S. Central	1,270	112	9	896	1,270	112	9	896	1,270	112	9	896	2,287	2,287	2,287
Mountain	2,321	741	183	1,964	2,321	741	183	1,964	2,321	741	183	1,964	5,209	5,209	5,209
Pacific	1,419	556	108	1,145	1,419	556	108	1,145	1,419	556	108	1,145	3,228	3,228	3,228
U.S. Average	2,242	543	101	1,638	2,242	543	101	1,638	2,242	543	101	1,638	4,524	4,524	4,524
Cooling Degree-days															
New England	0	111	495	1	0	119	475	2	0	82	381	1	607	596	465
Middle Atlantic	0	216	670	1	0	211	666	8	0	155	526	7	887	886	688
E. N. Central	0	227	669	2	17	294	685	11	1	218	518	10	898	1,007	746
W. N. Central	1	293	809	13	13	380	831	17	3	276	663	15	1,116	1,240	957
South Atlantic	101	797	1,272	186	157	685	1,183	215	110	599	1,116	219	2,357	2,241	2,043
E. S. Central	10	650	1,131	20	52	610	1,087	66	28	484	1,020	67	1,811	1,816	1,599
W. S. Central	114	1,098	1,777	205	146	1,019	1,528	188	77	807	1,443	189	3,194	2,882	2,515
Mountain	11	323	990	72	9	482	957	72	18	414	905	83	1,396	1,520	1,420
Pacific	25	97	616	71	22	144	644	76	31	195	545	77	809	886	849
U.S. Average	39	450	961	80	59	451	917	90	39	379	813	91	1,529	1,517	1,322
Cooling Degree-days, 30	-year Norma	al (a)													
New England	0	81	361	1	0	81	361	1	0	81	361	1	443	443	443
Middle Atlantic	0	151	508	7	0	151	508	7		151	508	7	666	666	666
E. N. Central	1	208	511	10	1	208	511	10	1	208	511	10	730	730	730
W. N. Central	3	270	661	14	3	270	661	14	3	270	661	14	948	948	948
South Atlantic	113	576	1,081	213	113	576	1,081	213	113	576	1,081	213	1,983	1,983	1,983
E. S. Central		469	1,002	66	29	469	1,002	66	29	469	1,002	66	1,566	1,566	1,566
W. S. Central	80	790	1,424	185	80	790	1,424	185	80	790	1,424	185	2,479	2,479	2,479
Mountain	17	383	839	68	17	383	839	68	17	383	839	68	1,307	1,307	1,307
Pacific	10	171	526	49	10	171	526	49	10	171	526	49	756	756	756
U.S. Average	34	353	775	80	34	353	775	80	34	353	775	80	1,242	1,242	1,242

<sup>- =</sup> no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (http://www.eia.doe.gov/glossary/index.html) for a list of States in each region.

 $\textbf{Historical data}: Latest \ data \ available \ from \ U.S. \ Department \ of \ Commerce, \ National \ Oceanic \ and \ Atmospheric \ Association \ (NOAA).$ 

Minor discrepancies with published historical data are due to independent rounding.

**Projections:** Based on forecasts by the NOAA Climate Prediction Center.

<sup>(</sup>a) 30-year normal represents average over 1971 - 2000, reported by National Oceanic and Atmospheric Administration.