*Independent Statistics & Analysis*
U.S. Energy Information Administration

**October 2011**

# Short-Term Energy and Winter Fuels Outlook

**October 12, 2011 Release**

## Highlights

- EIA projects average household heating expenditures for natural gas, propane, and heating oil will increase by 3 percent, 7 percent, and 8 percent, respectively, this winter (October 1 to March 31) compared with last winter, while electricity heating expenditures fall by less than 1 percent. Average expenditures for households that heat with oil are forecast to be higher than in any previous winter.

- This forecast reflects higher prices for natural gas, propane, and heating oil, and slightly milder weather than last winter in much of the Nation contributing to lower consumption in many areas (see EIA Short Term Energy and Winter Fuels Outlook slideshow).

- According to the National Oceanic and Atmospheric Administration's (NOAA) most recent projection of heating degree-days, the lower-48 States are forecast to be 2 percent warmer during the October through March winter heating season compared with last winter. However, heating degree-day projections vary widely among regions, with the West projected to be about 3 percent colder than last winter, and the South projected to be about 5 percent warmer.

- Forecast U.S. real gross domestic product (GDP) grows by 1.5 percent this year and by 1.8 percent next year, slightly lower than in last month's *Outlook*. World oil-consumption-weighted real GDP grows by 3.0 percent and 3.5 percent in 2011 and 2012, respectively, compared with 3.1 percent and 3.8 percent in the last *Outlook*. EIA expects the U.S. average refiner acquisition cost of crude oil to average $99 per barrel in 2011 and $98 per barrel in 2012, compared with $100 per barrel and $103 per barrel, respectively, in the previous *Outlook*.

- Natural gas working inventories ended September 2011 at 3.4 trillion cubic feet (Tcf), about 2.6 percent, or 91 billion cubic feet (Bcf), below the 2010 end-of-September level. EIA expects that working natural gas inventories will approach last year's high levels by the end the injection season. The projected

Henry Hub natural gas spot price averages $4.15 per million British thermal units (MMBtu) in 2011, $0.24 per MMBtu lower than the 2010 average. EIA expects the rate of growth in domestic natural gas production to slow in 2012, with the Henry Hub spot price averaging $4.32 per MMBtu.

**Projected Winter Fuel Expenditures by Fuel and Region**

The average household winter heating fuel expenditures discussed in this *Outlook* provide a broad guide to changes compared with last winter, but fuel expenditures for individual households are highly dependent on local weather conditions, market size, the size and energy efficiency of individual homes and their heating equipment, and thermostat settings (see Winter Fuels Outlook table).

***Natural Gas***. EIA expects households heating with natural gas to spend an average of $19 (3 percent) more this winter than last winter. About one-half of U.S. households utilize natural gas as their primary heating fuel. The increase in natural gas expenditures represents a 4-percent increase in prices and a 1-percent decrease in consumption. In the Midwest, where 71 percent of households use natural gas as the primary heating fuel, average household expenditures are expected to be unchanged from last winter. The projected changes in residential natural gas prices this winter range from a 2 percent decline in the West to a 10 percent increase in the South. Price changes vary across regions because of a number of factors such as regional changes in production and pipeline supply capacity and differences in regulatory constraints in passing price changes through to customers.

***Heating Oil***. EIA expects households heating primarily with heating oil to spend an average of about $193 (8 percent) more this winter than last winter as a result of a 10-percent increase in prices and a 1-percent decrease in consumption. About 6 percent of U.S. households depend on heating oil for winter fuel; however, the Northeast accounts for about 80 percent of these households. EIA projects residential heating oil prices to average $3.71 per gallon during the winter season, 33 cents per gallon more than last winter, and the highest average winter price on record (although lower than the record heating oil prices realized during the summer of 2008 when crude oil and all petroleum product prices hit their peak).

***Propane***. About 5 percent of total U.S. households heat with propane. EIA expects households heating primarily with propane to spend more this winter, but that increase varies across regions. EIA expects that households in the Midwest will see an average increase in winter propane expenditures of 4 percent, as projected residential propane prices increase by 5 percent from last winter and consumption falls by about

1 percent. Households in the Northeast may see a larger increase in propane prices with expenditures rising by 9 percent.

***Electricity***. Households heating primarily with electricity can expect to spend an average of $6 (1 percent) less this winter. Projected household electricity expenditures are lower this winter because the decline in consumption more than offsets a 1-percent increase in prices. About 37 percent of all U.S. households rely on electricity as their primary heating fuel, ranging from 14 percent in the Northeast to 62 percent in the South. The number of households heating with electricity is expected to increase by 1.7 percent from last winter. About 80 percent of the increase occurs in the South, where electric heat pumps are popular.

## Global Crude Oil and Liquid Fuels

***Crude Oil and Liquid Fuels Overview***. The expected pace of global oil consumption growth for 2011 is slightly lower in this month's *Outlook*, while projected total supply in 2011 is higher, resulting in some easing of oil market tightness. Despite this easing, EIA continues to expect markets to rely on inventories to meet some consumption growth in 2011 and 2012. Oil consumption growth from countries outside of the Organization for Economic Cooperation and Development (OECD) is projected to outpace the growth in supply from producers that are not members of the Organization of the Petroleum Exporting Countries (OPEC), implying a need for OPEC producers to increase their output to balance the market in 2011 and 2012.

Oil prices continue to face upward price pressure due to supply uncertainty and downward price pressure because of lowering expectations of economic growth. Upside uncertainty to the crude oil price outlook remains as a result of ongoing unrest in oil-producing regions. Heightened turmoil in Syria, which produced an average 400 thousand bbl/d in 2010, and the potential for more sanctions on the country's energy sector is one source of risk to non-OPEC supply. At the same time, downside demand risks predominate, as fears persist about the rate of global economic recovery, contagion effects of the debt crisis in the European Union, and other fiscal issues facing national governments. On the supply side, there may be downward price pressure if Libya is able to ramp up oil production and exports sooner than anticipated.

***Global Crude Oil and Liquid Fuels Consumption***. EIA expects that world crude oil and liquid fuels consumption will continue growing from its record-high level of 87.1 million barrels per day (bbl/d) in 2010 and reach 88.4 million bbl/d on 2011 and 89.8 million bbl/d in 2012 (World Liquid Fuels Consumption Chart). Consumption in

OECD countries is projected to decline in both 2011 and 2012, while China and other emerging economies account for all projected oil consumption growth through 2012.

***Non-OPEC Supply***. EIA projects that non-OPEC liquid fuels production will grow by 0.49 million bbl/d in 2011 and 0.85 million bbl/d to an average of 53.1 million bbl/d in 2012 (Non-OPEC Crude Oil and Liquid Fuels Production Growth Chart). The largest sources of expected growth in non-OPEC oil production over the forecast period are Brazil, Canada, China, Colombia, Kazakhstan, and the United States, with average annual growth in each country of over 100 thousand bbl/d. In contrast, Russian, Mexican, and North Sea production will be lower by the end of the forecast period.

***OPEC Supply***. EIA expects OPEC crude oil production to decline by 30 thousand bbl/d in 2011. This is in sharp contrast to the last *Outlook*, in which EIA expected total OPEC crude oil production to decline by 360 thousand bbl/d. The significant change in this *Outlook* for 2011 is largely due to increased production in Saudi Arabia, which rose to 9.9 million bbl/d in the third quarter of this year, compared with 9.1 million bbl/d in the second quarter. EIA maintains its assumption that about one-half of Libya's pre-disruption production will resume by the end of 2012, contributing to the overall growth in OPEC crude oil output of 270 thousand bbl/d in 2012. EIA expects that OPEC surplus crude oil production capacity fell from 4.0 million bbl/d in the fourth quarter of 2010 to 2.8 million bbl/d in the fourth quarter of 2011, but will increase to 3.5 million bbl/d by the end of 2012 as Libyan production capacity comes back on line (OPEC Surplus Crude Oil Production Capacity Chart). Forecast OPEC non-crude liquids production, which is not subject to production targets, is expected to increase by 450 thousand bbl/d in both 2011 and 2012.

***OECD Petroleum Inventories***. EIA expects that OECD commercial inventories will decline in both 2011 and 2012. Days of supply (total inventories divided by average daily consumption) fall slightly but remain relatively high at 58 days during the fourth quarter of 2010, 57 days during the fourth quarter 2011, and 56 days during the fourth quarter 2012 (Days of Supply of OECD Commercial Stocks Chart).

***Crude Oil Prices.*** West Texas Intermediate (WTI) crude oil spot prices fell from an average of $97 per barrel in July to $86 per barrel in August and September (West Texas Intermediate Crude Oil Price Chart). The WTI spot price began October below $80 per barrel. EIA revised the projected oil price paths downward from last month's *Outlook*. EIA expects that the U.S. refiner average crude oil acquisition cost will average about $99 per barrel in 2011 and $98 per barrel in 2012 compared with $100 per barrel and $103 per barrel for 2011 and 2012, respectively, in last month's *Outlook*.

The significant price discount for WTI relative to other U.S. and world crude oils is expected to continue until transportation bottlenecks restricting the movement of crude oil out of the mid-continent region are relieved. Consequently, the projected average U.S. refiner acquisition cost of crude oil, which averaged almost $2.70 per barrel below WTI in 2010, averages about $7 per barrel above WTI in 2011 and $10 per barrel above WTI in 2012.

Energy price forecasts are highly uncertain (Market Prices and Uncertainty Report). WTI futures for December 2011 delivery over the 5-day period ending October 6 averaged $79 per barrel and implied volatility averaged 51 percent, establishing the lower and upper limits of a 95-percent confidence interval for the market's expectations of monthly average WTI prices in December of $57 per barrel and $110 per barrel, respectively. Last year at this time, WTI for December 2010 delivery averaged $83 per barrel and implied volatility averaged 30 percent. The corresponding lower and upper limits of the 95-percent confidence interval were $68 per barrel and $101 per barrel.

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

***U.S. Liquid Fuels Consumption.*** Total consumption of liquid fuels in 2010 grew by about 410 thousand bbl/d, or 2.2 percent, the highest rate of growth since 2004 (U.S. Liquid Fuels Consumption Growth Chart). In contrast, projected total U.S. liquid fuels consumption in 2011 falls by 230 thousand bbl/d (1.2 percent), revised downward from the previous *Outlook's* 170 thousand bbl/d (0.9 percent) decline as the 2011 U.S. real GDP growth forecast has been lowered for the seventh consecutive month. Motor gasoline consumption accounts for much of the projected decline for the year.

EIA expects total liquid fuels consumption to increase by 90 thousand bbl/d (0.5 percent) to 19.1 million bbl/d in 2012. Projected motor gasoline consumption rises by 40 thousand bbl/d (0.5 percent) as highway travel increases modestly, and distillate fuel consumption increases by 30 thousand bbl/d (0.7 percent) as growth in industrial activity and non-petroleum imports continues to slow as a result of continuing weak economic growth.

***U.S. Liquid Fuels Supply and Imports.*** Domestic crude oil production, which increased by 110 thousand bbl/d in 2010 to 5.5 million bbl/d, increases by a further 180 thousand bbl/d in 2011 and by 70 thousand bbl/d in 2012 (U.S. Crude Oil Production Chart), driven by increased oil-directed drilling activity, particularly in unconventional shale formations.

The rapid growth in U.S. ethanol production since the mid-2000s is projected to slow with total production averaging 900 thousand bbl/d in 2011 and 910 thousand bbl/d in 2012. Assuming ethanol net exports average roughly 40 thousand bbl/d next year, EIA expects that 870 thousand bbl/d of ethanol will be blended into gasoline in 2012, which is sufficient to meet the requirements of the renewable fuels standard (RFS). The expiration of the Federal motor fuels excise tax credit for ethanol blending is expected to have little effect on ethanol blending levels, as ethanol producers do not currently appear to be capturing much of the value of the credit.

Liquid fuel net imports (including both crude oil and refined products) fell from 57 percent of total U.S. consumption in 2008 to 49 percent in 2010 because of rising domestic production and the decline in consumption during the economic downturn. EIA forecasts that liquid fuel net imports' share of total consumption will decline further to 46 percent in 2011 before rising slightly to 47 percent in 2012.

***U.S. Crude Oil and Petroleum Product Inventories.*** Commercial crude oil inventory levels ended September 2011 at an estimated 336 million barrels, 26 million barrels below last year but 7 million barrels higher than the previous 5-year average for that month. Commercial crude oil stocks are gradually drawn down to 317 million barrels by the end of 2012, close to their 5-year average.

Total motor gasoline stocks at the end of September 2011 were an estimated 214 million barrels, down 5 million barrels from last year but 6 million barrels above the previous 5-year average for that month. Distillate fuel oil stocks ended September 2011 at an estimated 157 million barrels, down 10 million barrels from the same time last year but 7 million barrels above the previous 5-year average. Projected total motor gasoline and distillate inventories average about 3 million barrels and 8 million barrels higher, respectively, than their previous 5-year averages at the end of 2012. The Northeast Home Heating Oil Reserve, which was emptied earlier this year because of the move to low-sulfur heating oil in several northeast States next year, is expected to be restocked with 650,000 barrels this month and 350,000 barrels next month.

***U.S. Petroleum Product Prices.*** EIA forecasts that the annual average regular-grade gasoline retail price, which averaged $2.78 per gallon in 2010, will increase to an average of $3.52 per gallon in 2011, and average $3.43 per gallon in 2012. The increase in retail prices in 2011 reflects not only the higher cost of crude oil but also changes in the average U.S. refinery gasoline margin (the difference between refinery wholesale gasoline prices and the average cost of crude oil). The average U.S. refinery gasoline margin increases from $0.34 per gallon in 2010, to $0.51 per gallon in 2011, then declines to $0.43 per gallon in 2012.

EIA expects that on-highway diesel fuel retail prices, which averaged $2.99 per gallon in 2010, will average $3.80 per gallon in 2011, and $3.73 per gallon in 2012. Projected U.S. refinery diesel fuel margins increase from an average of $0.39 per gallon in 2010 to $0.64 per gallon in 2011, then fall to an average of $0.56 per gallon in 2012.

## Natural Gas

***U.S. Natural Gas Consumption.*** Projected natural gas consumption increases by an average 1.2 billion cubic feet per day (Bcf/d) in 2011 and 0.5 Bcf/d in 2012, with growth in the electric power and industrial sectors driving the increases. Projected natural gas consumption for electricity generation increases by 0.36 Bcf/d and 0.37 Bcf/d in 2011 and 2012, respectively. EIA expects consumption in the industrial sector to rise from 18.1 Bcf/d to 18.5 Bcf/d in 2011 and 18.6 Bcf/d in 2012, as the projected natural-gas-weighted industrial production index also continues to rise but at a slowing rate.

Natural gas consumption for the third quarter of 2011 averaged an estimated 57.9 Bcf/d, with consumption in the electric power sector making up almost half of the total. There were an estimated 942 cooling degree-days for the third quarter 2011, about 22 percent more than the 30-year normal, and above the 930 cooling degree-days for the record-breaking heat of the third quarter of 2010.

***U.S. Natural Gas Production and Imports.*** EIA expects marketed natural gas production to average 66.0 Bcf/d in 2011, a 4.2 Bcf/d (6.7 percent) increase over 2010. The entirety of this growth is coming from increases in onshore production in the lower 48 States, which will more than offset a steep year-over-year decline of over 0.9 Bcf/d (15 percent) in the Federal Gulf of Mexico (GOM) and a small decline in Alaska. EIA expects that overall production will continue to grow in 2012, but at a slower pace, increasing 1.4 Bcf/d (2.1 percent) to an average of 67.4 Bcf/d.

Drilling activity has been resilient despite lower natural gas spot and futures prices. According to Baker Hughes, the September 30 rig count was 923 active drilling rigs targeting natural gas, up from this year's low of 866 on May 20. If drilling continues to increase, production could grow more than expected in 2012.

Growing domestic natural gas production has reduced reliance on natural gas imports and contributed to increased exports. EIA expects that pipeline gross imports of natural gas will fall by 4.8 percent to 8.6 Bcf/d during 2011 and by another 3.1 percent to 8.4 Bcf/d in 2012. Projected U.S. imports of liquefied natural gas (LNG) fall from 1.2 Bcf/d in 2010 to 0.9 Bcf/d in 2011 and to 0.7 Bcf/d in 2012. Pipeline gross exports to

Mexico and Canada are expected to average 4.1 Bcf/d in 2011 and 4.2 Bcf/d in 2012, compared with 3.1 Bcf/d in 2010.

***U.S. Natural Gas Inventories.*** On September 30, 2011, working natural gas in storage stood at 3,409 Bcf, 91 Bcf below the 2010 end-of-September level (U.S. Working Natural Gas in Storage Chart). EIA expects that inventories, though currently lower than last year, will come close to last year's levels towards the end of the 2011 injection season, reaching 3.77 Tcf at the end of October 2011.

***U.S. Natural Gas Prices***. The Henry Hub spot price averaged $3.90 per MMBtu in September 2011, 15 cents lower than the August 2011 average (Henry Hub Natural Gas Price Chart). EIA expects that Henry Hub spot prices will fall further in October, before rising above $4 per MMBtu in December. This month's *Outlook* lowers the 2011 forecast by 5 cents to $4.15 per MMBtu, 24 cents less than the 2010 average. Although the average 2011 spot natural gas price is lower than the 2010 average, the forecast price over the winter 2011-12 is higher than last winter's average. Last year the Henry Hub spot price hit a low of $3.43 per million Btu in October 2010. EIA expects this winter's heating season will start out with an average Henry Hub spot price of $3.78 per million Btu in October 2011. EIA expects the Henry Hub price in 2012 to average $4.32 per MMBtu.

Natural gas futures prices for December 2011 delivery (for the 5-day period ending October 6, 2011) averaged $3.93 per MMBtu, and the average implied volatility was 34 percent (Market Prices and Uncertainty Report). The lower and upper bounds for the 95-percent confidence interval for December 2011 contracts are $3.13 per MMBtu and $4.93 per MMBtu. At this time last year, the December 2010 natural gas futures contract averaged $4.07 per MMBtu and implied volatility averaged 39 percent. The corresponding lower and upper limits of the 95-percent confidence interval were $3.09 per MMBtu and $5.37 per MMBtu.

**Coal**

***U.S. Coal Consumption.*** EIA expects that coal consumption for electricity generation will decline by 19 million short tons (MMst) (1.9 percent) in 2011, as the growth in total electricity generation of 0.6 percent is satisfied by increases in generation from natural gas (1.2 percent) and hydropower (23 percent). Projected increases in generation from natural gas and nuclear, combined with lower electricity consumption, contribute to an additional 3.9 percent decline in electric power sector coal consumption in 2012.

***U.S. Coal Supply.*** EIA forecasts that coal production will fall by 1.5 percent in 2011 despite a significant increase in coal exports. Coal production in the Western region is projected to decline, while production in the Appalachian and Interior regions increases slightly. EIA expects coal production to decline by nearly 24 MMst (2.2 percent) in 2012 as domestic consumption and exports fall (U.S. Annual Coal Production Chart) and inventories at electric power plants decline (U.S. Electric Power Sector Coal Stocks Chart).

***U.S. Coal Trade.*** U.S. coal exports rose by about 35 percent during the first half of 2011 compared with 2010. Exports of 54 MMst during the first half of 2011 were the highest since 1982. EIA expects U.S. coal exports to remain elevated over the second half of 2011, reaching an annual total of 99 MMst. Forecast U.S. coal exports fall back to about 86 MMst in 2012 as supply from other major coal-exporting countries recovers from disruptions. The strong global demand for coal outside the United States also contributed to a 15 percent decline in U.S. coal imports in 2010 (to 19.4 MMst) despite an increase in domestic consumption. EIA expects the lower level of U.S. coal imports to continue, with imports below 20 MMst in 2011 and 2012. U.S. coal imports averaged about 31 MMst annually from 2004 through 2009.

***U.S. Coal Prices.*** Average delivered coal prices to the electric power sector have risen steadily over the last 10 years, with an average annual increase of 6.7 percent. EIA expects that this trend will continue in 2011, with a significant portion of the increase attributed to a sharp rise in transportation costs. Expected declines in consumption and stable transportation costs contribute to a flattening of the electric power sector coal price in 2012. The projected average delivered coal price to the electric power sector, which averaged $2.26 per MMBtu in 2010, is $2.39 per MMBtu for both 2011 and 2012.

**Electricity**

***U.S. Electricity Consumption.*** Last winter, heating degree-days during the fourth quarter of 2010 in the South Atlantic Census region, where the majority of households heat using electricity as an energy source, were 19 percent higher than normal. This *Outlook* assumes that temperatures in this region during the fourth quarter of 2011 will return to near-normal levels. This reduction in South Atlantic heating demand contributes to the overall decline of 2.6 percent for residential electricity consumption in the region during 2011.

Growth in the total industrial production index slows from 3.7 percent in 2011 to 2.0 percent in 2012. The slowing pace of industrial output growth next year contributes to slowing growth of retail sales of electricity to the industrial sector from 1.4 percent

in 2011 to 0.7 percent in 2012. EIA expects that total consumption of electricity during 2011 will grow by 0.4 percent from last year's level followed by a decline of 0.5 percent in 2012 (U.S. Total Electricity Consumption Chart).

***U.S. Electricity Generation.*** Total generation in the United States is expected to fall by 62,000 megawatt hours per day (0.5 percent) in 2012 from the level during 2011. Hydroelectric generation should return to more normal levels, bringing its share of total generation down from 7.4 percent in 2011 to 6.5 percent next year. In contrast, favorable natural gas prices and additions to renewable generation capacity during 2012 should boost the shares provided by these two energy sources by 0.9 and 0.5 percentage points, respectively (U.S. Electricity Generation by Fuel, all Sectors Chart).

***U.S. Electricity Retail Prices.*** After relatively modest growth of 0.6 percent during 2010, EIA expects rising coal prices for electricity generation to push retail residential electricity prices up by 1.9 percent this year. As fuel costs moderate during the second half of this year and into next year, growth in residential prices should slow to 0.9 percent during 2012 (U.S. Residential Electricity Prices Chart).

**Renewables and Carbon Dioxide Emissions**

***U.S. Renewables.*** Led by conventional hydropower, the total supply of renewables is projected to grow about 14 percent from 2010 to 2011. EIA expects total renewable energy supply to remain flat in 2012 as the decline in hydropower offsets growth in other renewable energy supply.

Because of high levels of precipitation in regions such as the Pacific Northwest, 2011 promises to be an abundant year for hydropower generation (growth of 0.57 trillion Btu or 23 percent) – the best year since 1999. EIA assumes a return to normal snow and rainfall levels in 2012 with hydropower generation falling by 0.38 trillion Btu (12 percent).

Wind energy is projected to account for 39 percent of total renewable energy supply growth from 2010 to 2012, with increases of 0.24 trillion Btu (26 percent) in 2011 and 0.15 trillion Btu (12 percent) in 2012. The supply of geothermal energy is also projected to rise in both 2011 and 2012 and account for the second largest share of renewables growth (0.20 trillion Btu or 20 percent) from 2010 to 2012.

The wood energy supply is second only to conventional hydropower in terms of the total energy value of renewable sources. However, much of the wood supply is subject to industrial market conditions, especially in the pulp and paper industry, with net growth of 0.04 quadrillion Btu between 2010 and 2012. Solar energy supply

represents about 1.5 percent of total renewable energy supply and is projected to grow by 3.9 percent and 9.0 percent in 2011 and 2012, respectively.

In terms of liquid renewable fuels, EIA projects that biodiesel production in 2011 will average about 56 thousand bbl/d (860 million gallons total annual production), surpassing the 2011 Renewable Fuel Standard (RFS) Biomass Based Diesel mandate of 800 million gallons, taking advantage of the $1 per gallon biodiesel tax credit which expires at the end of the year. RFS credits generated above the current mandate can be banked and used for compliance in the following year for up to 20 percent of the requirement. In 2012, biodiesel production is forecast to grow slightly higher to 61 thousand bbl/d (940 million gallons), just reaching the 2012 RFS mandate of 1.0 billion gallons after accounting for 60 million gallons of 2011 credits.

Ethanol production growth, which averaged 120 thousand bbl/d annually between 2005 and 2010, is expected to slow, increasing by 30 thousand bbl/d in 2011 and 10 thousand bbl/d in 2012, to an average 910 thousand bbl/d in 2012. Ethanol exports reduce the volume of ethanol blended into gasoline. Assuming ethanol net exports average about 40 thousand bbl/d next year, EIA expects that 870 thousand bbl/d of ethanol will be blended into gasoline in 2012, which is sufficient to satisfy RFS requirements. The expiration of the Federal motor fuels excise tax credit for ethanol blending is expected to have little effect on ethanol blending levels, as ethanol producers do not currently appear to be capturing much of the value of the credit.

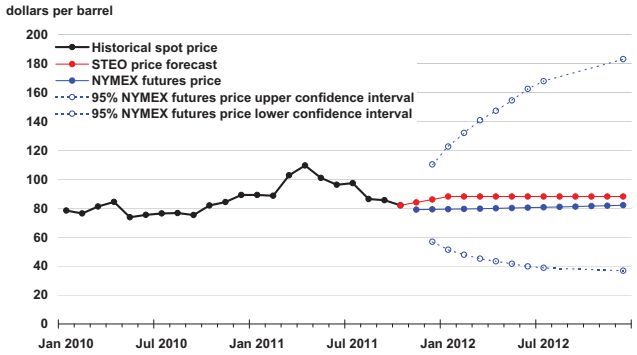
***U.S. $CO_2$ Emissions.*** EIA estimates that $CO_2$ emissions from fossil fuels increased by 3.9 percent in 2010 (U.S. Carbon Dioxide Emissions Growth Chart). Forecast fossil-fuel $CO_2$ emissions fall by 0.7 percent in 2011, as emission increases from higher natural gas consumption are offset by declines in coal and petroleum consumption. Increases in hydroelectric generation and other renewable energy sources in 2011 also help to mitigate emissions growth. Fossil-fuel $CO_2$ emissions in 2012 fall by almost 1 percent as expected declines in coal emissions more than outweigh the increases in emissions from petroleum and natural gas.

U.S. Energy Information Administration
*Independent Statistics & Analysis*

# Short-Term Energy Outlook

## Chart Gallery for October 2011

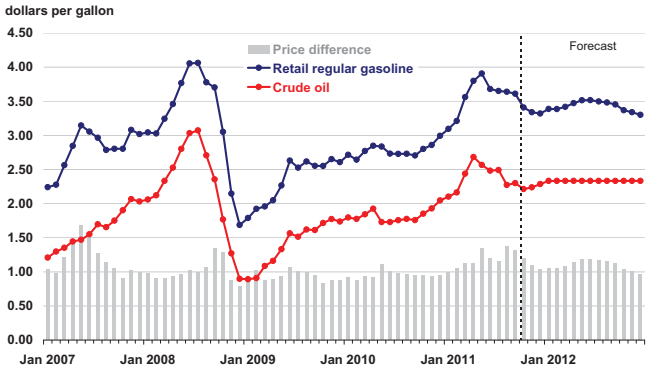
### West Texas Intermediate (WTI) Crude Oil Price




*Note: Confidence interval derived from options market information for the 5 trading days ending October 6, 2011*
*Intervals not calculated for months with sparse trading in "near-the-money" options contracts*

Source: Short-Term Energy Outlook, October 2011

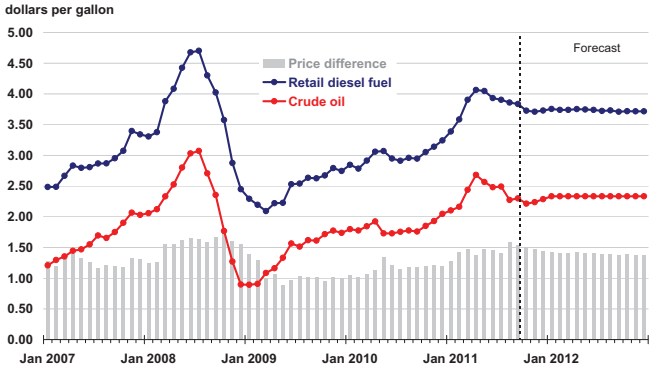
### U.S. Gasoline and Crude Oil Prices




*Crude oil price is refiner average acquisition cost. Retail prices include State and Federal taxes.*

Source: Short-Term Energy Outlook, October 2011

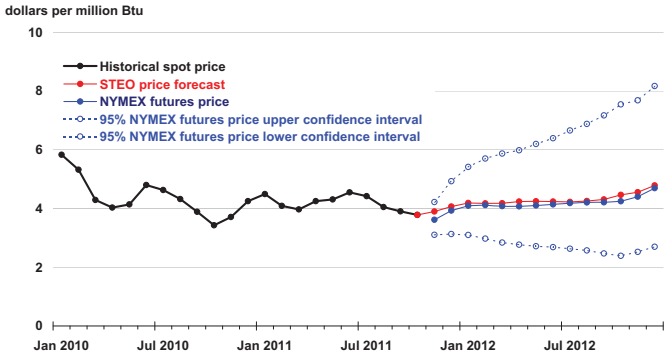
## U.S. Diesel Fuel and Crude Oil Prices




*Crude oil price is refiner average acquisition cost. Retail prices include State and Federal taxes.*

Source: Short-Term Energy Outlook, October 2011

## Henry Hub Natural Gas Price




*Note: Confidence interval derived from options market information for the 5 trading days ending October 6, 2011*
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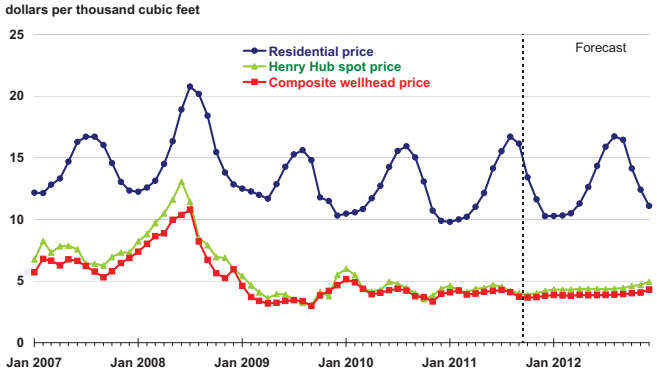
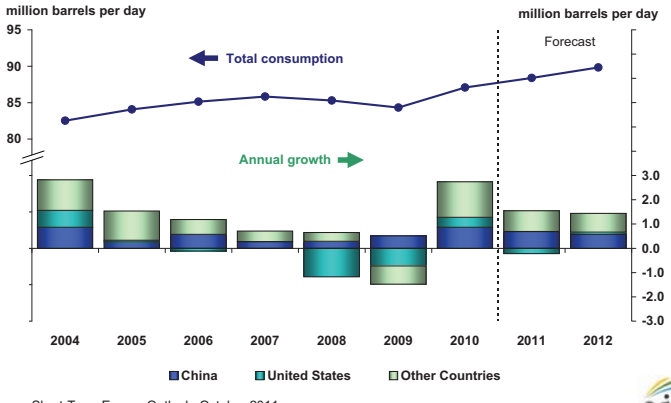
Source: Short-Term Energy Outlook, October 2011

## U.S. Natural Gas Prices



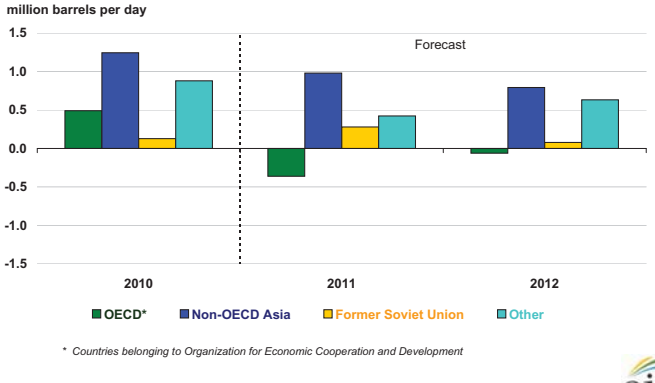

Source: Short-Term Energy Outlook, October 2011

## World Liquid Fuels Consumption




Source: Short-Term Energy Outlook, October 2011

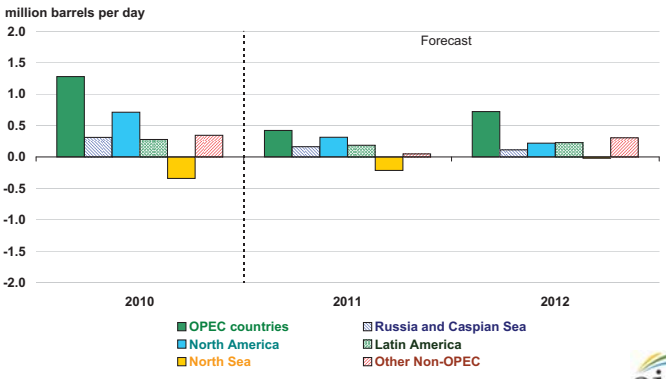
## World Liquid Fuels Consumption Growth (change from previous year)




* *Countries belonging to Organization for Economic Cooperation and Development*

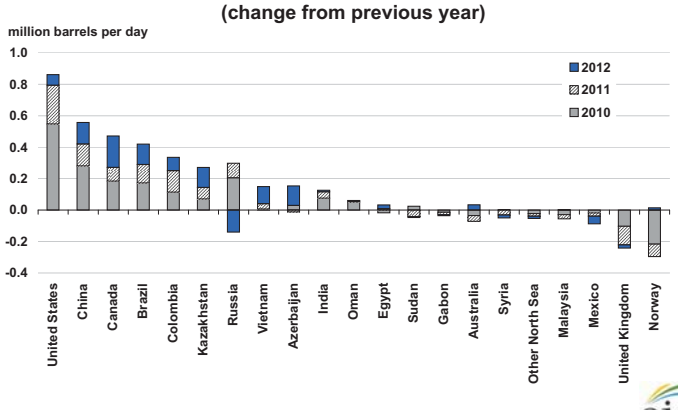
Source: Short-Term Energy Outlook, October 2011

## World Crude Oil and Liquid Fuels Production Growth (change from previous year)



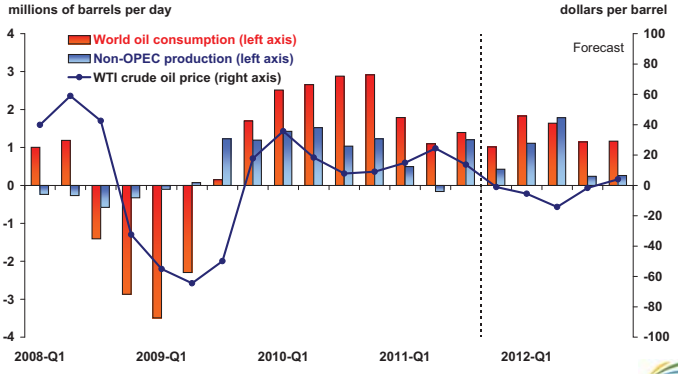

Source: Short-Term Energy Outlook, October 2011

## Non-OPEC Crude Oil and Liquid Fuels Production Growth (change from previous year)



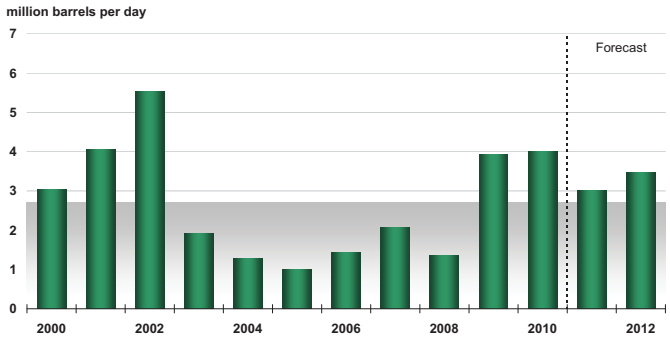

Source: Short-Term Energy Outlook, October 2011

## World Consumption and Non-OPEC Production (change from previous year)




Source: Short-Term Energy Outlook, October 2011

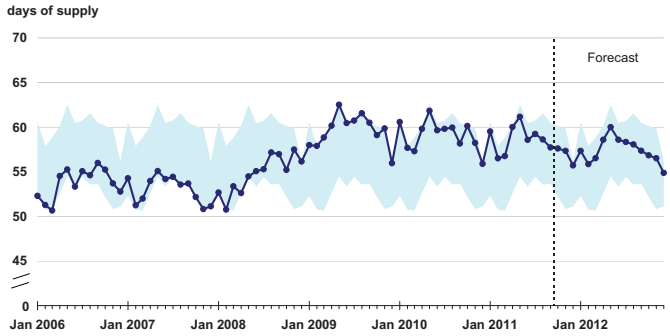
## OPEC Surplus Crude Oil Production Capacity




*Note: Shaded area represents 2000-2010 average (2.7 million barrels per day)*

Source: Short-Term Energy Outlook, October 2011

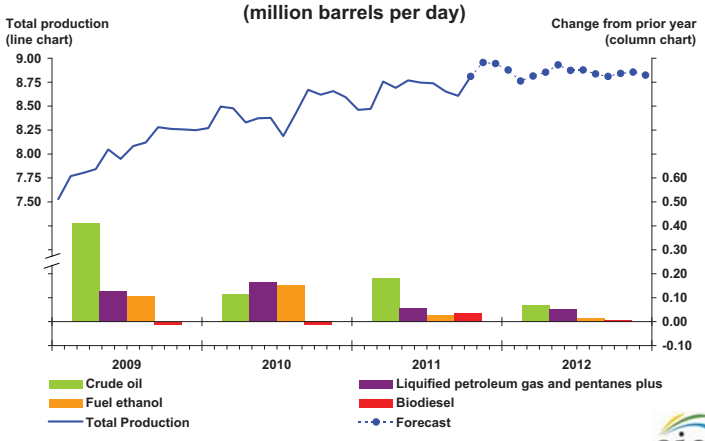
## OECD Commercial Oil Stocks




*Note: Colored band represents the range between the minimum and maximum observed inventories from Jan. 2006 - Dec. 2010.*

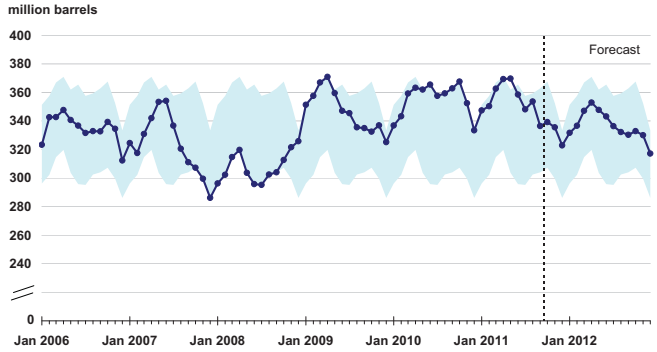
Source: Short-Term Energy Outlook, October 2011

## U.S Crude Oil and Liquid Fuels Production (million barrels per day)




Source: Short-Term Energy Outlook, October 2011

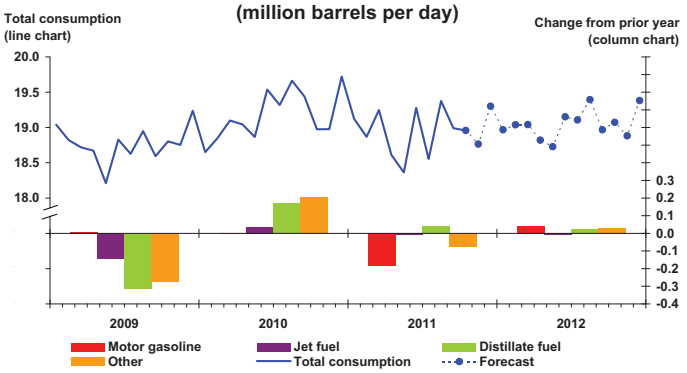
## U.S. Crude Oil Stocks




*Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2006 - Dec. 2010.*

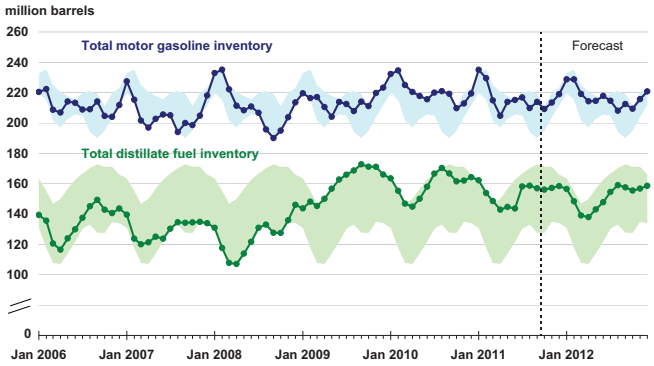
Source: Short-Term Energy Outlook, October 2011

## U.S. Liquid Fuels Consumption (million barrels per day)




Source: Short-Term Energy Outlook, October 2011

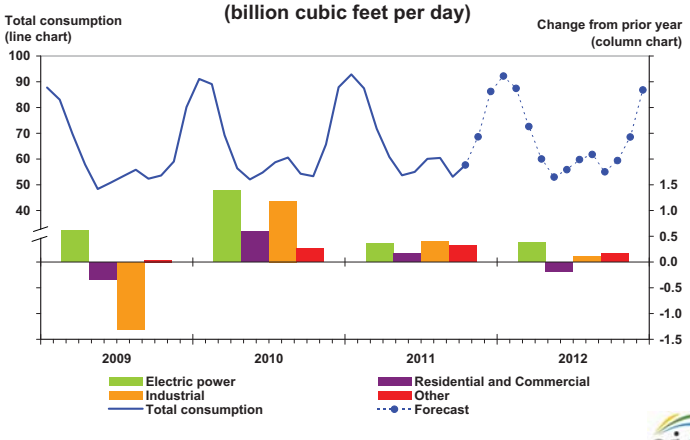
## U.S. Gasoline and Distillate Inventories




*Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2006 - Dec. 2010.*

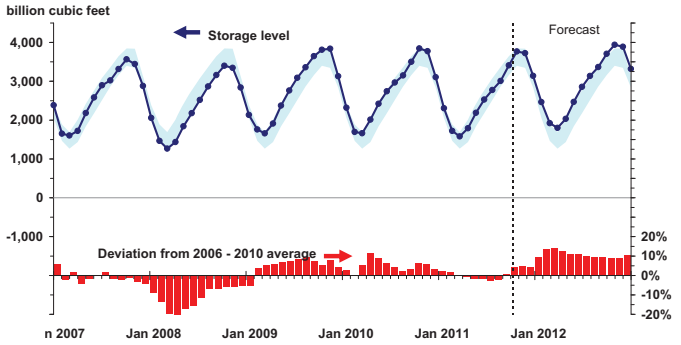
Source: Short-Term Energy Outlook, October 2011

## U.S. Natural Gas Consumption (billion cubic feet per day)




Source: Short-Term Energy Outlook, October 2011

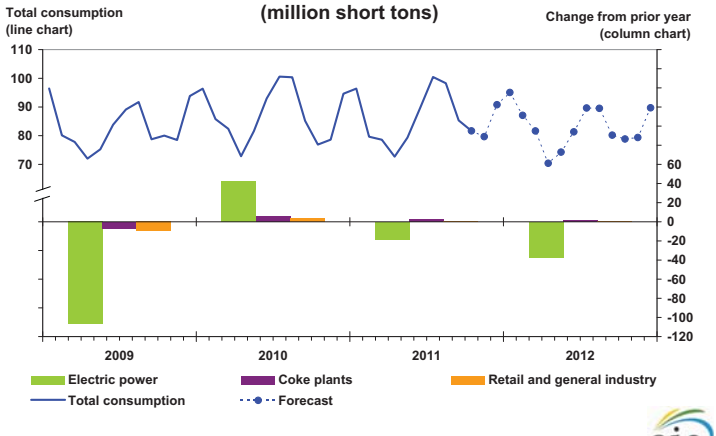
## U.S. Working Natural Gas in Storage




*Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2006 - Dec. 2010*

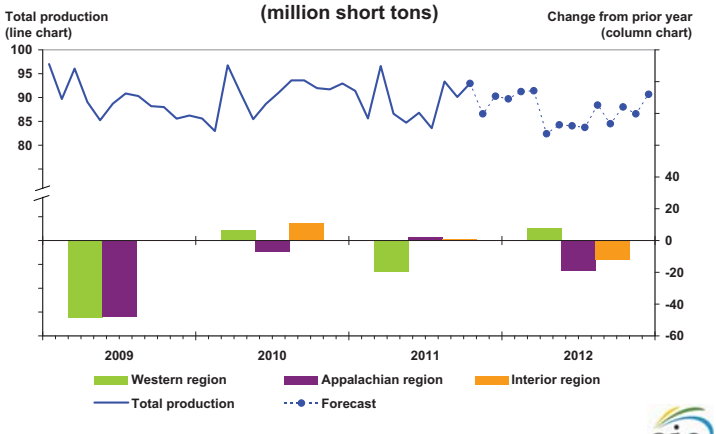
Source: Short-Term Energy Outlook, October 2011

## U.S. Coal Consumption (million short tons)



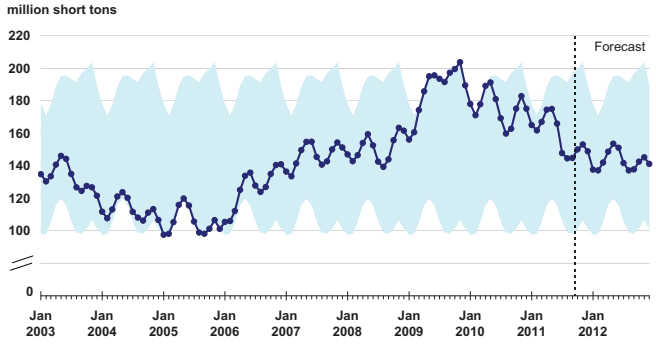

Source: Short-Term Energy Outlook, October 2011

## U.S. Coal Production (million short tons)




Source: Short-Term Energy Outlook, October 2011

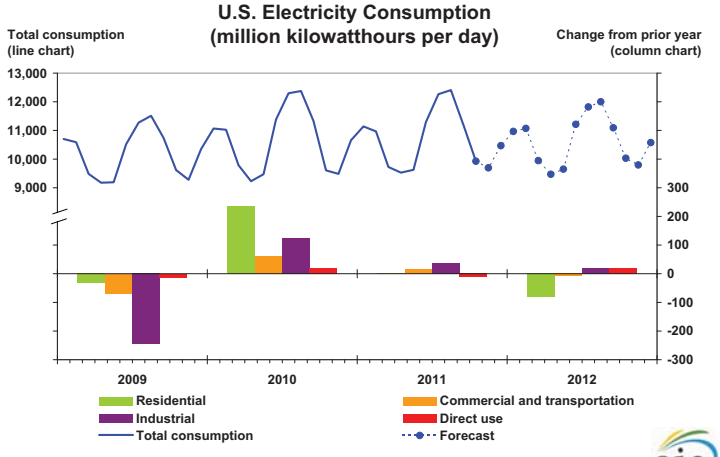
## U.S. Electric Power Coal Stocks




*Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2006 - Dec. 2010*

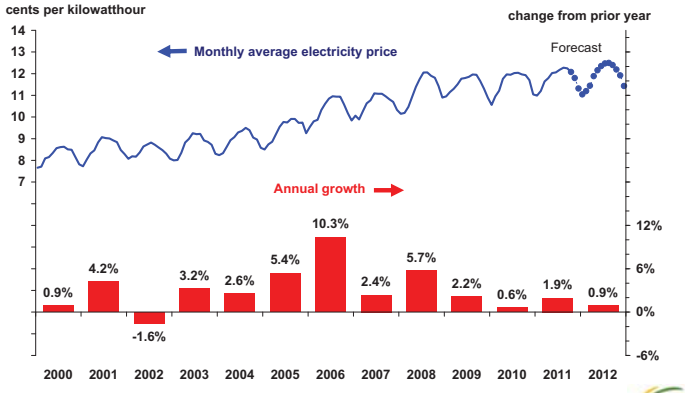
Source: Short-Term Energy Outlook, October 2011

## U.S. Electricity Consumption (million kilowatthours per day)



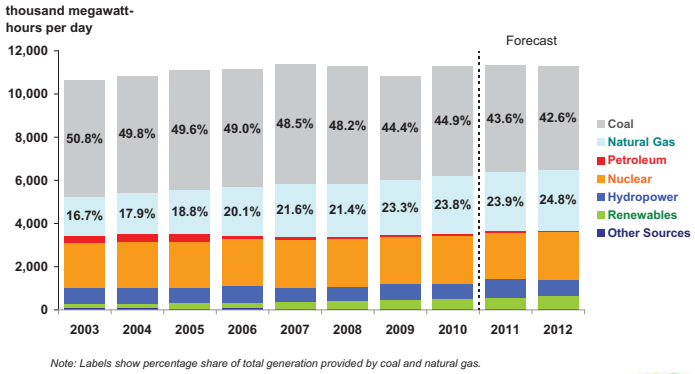

Source: Short-Term Energy Outlook, October 2011

## U.S. Residential Electricity Price




Source: Short-Term Energy Outlook, October 2011

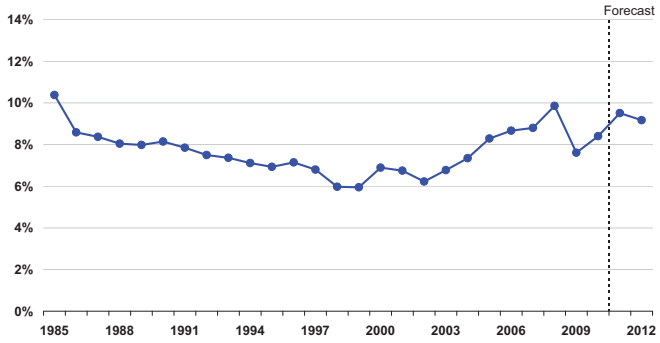
## U.S. Electricity Generation by Fuel, All Sectors




*Note: Labels show percentage share of total generation provided by coal and natural gas.*

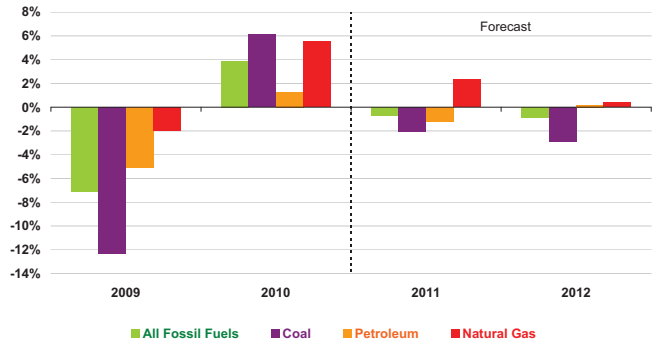
Source: Short-Term Energy Outlook, October 2011

## U.S. Annual Energy Expenditures Share of Gross Domestic Product



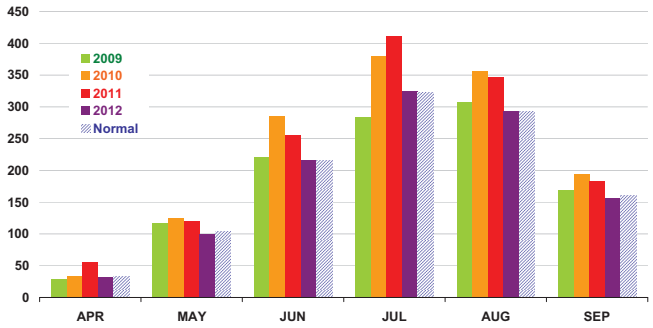

Source: Short-Term Energy Outlook, October 2011

## U.S. Carbon Dioxide Emissions Growth (change from previous year)




Source: Short-Term Energy Outlook, October 2011

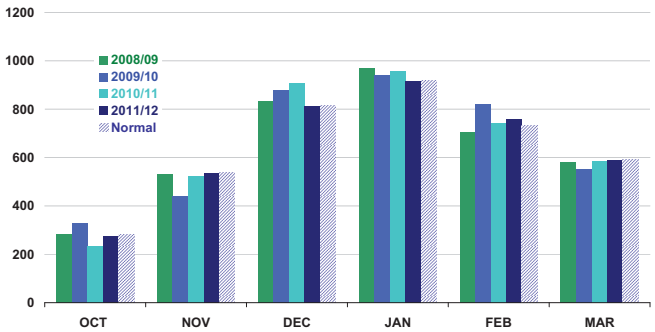
## U.S. Summer Cooling Degree-Days (population-weighted)




*Data source: National Oceanic and Atmospheric Administration, National Weather Service*

Source: Short-Term Energy Outlook, October 2011

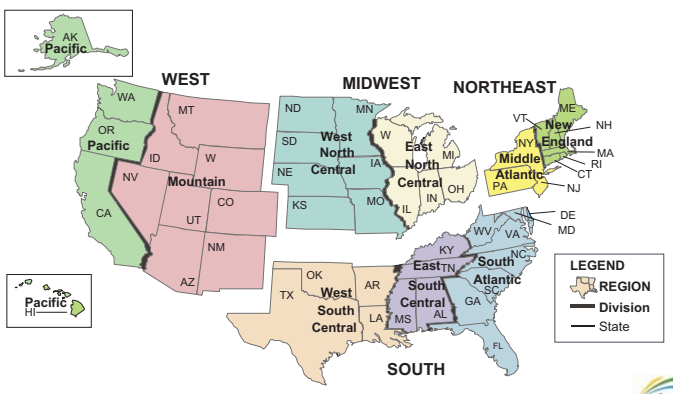
## U.S. Winter Heating Degree-Days (population-weighted)




*Data source: National Oceanic and Atmospheric Administration, National Weather Service*

Source: Short-Term Energy Outlook, October 2011

## U.S. Census Regions and Census Divisions




Source: Short-Term Energy Outlook, October 2011

**Table WF01. Average Consumer Prices* and Expenditures for Heating Fuels During the Winter**

Energy Information Administration/Short-Term Energy Outlook -- October 2011

| Fuel / Region | Winter of | | | | | | | Forecast | |
|---|---|---|---|---|---|---|---|---|---|
| | 05-06 | 06-07 | 07-08 | 08-09 | 09-10 | Avg.05-10 | 10-11 | 11-12 | % Change |
| **Natural Gas** | | | | | | | | | |
| **Northeast** | | | | | | | | | |
| Consumption (mcf**) | 75.7 | 76.5 | 77.0 | 82.5 | 77.8 | 77.9 | 82.7 | 81.7 | -1.2 |
| Price ($/mcf) | 16.35 | 14.74 | 15.17 | 15.82 | 13.32 | 15.09 | 12.65 | 13.25 | 4.7 |
| Expenditures ($) | 1,238 | 1,128 | 1,168 | 1,306 | 1,036 | 1,175 | 1,047 | 1,083 | 3.4 |
| **Midwest** | | | | | | | | | |
| Consumption (mcf) | 77.4 | 79.8 | 83.3 | 86.0 | 83.8 | 82.1 | 85.1 | 83.9 | -1.4 |
| Price ($/mcf) | 13.46 | 11.06 | 11.39 | 11.46 | 9.42 | 11.33 | 9.16 | 9.29 | 1.3 |
| Expenditures ($) | 1,042 | 882 | 949 | 986 | 789 | 930 | 780 | 779 | -0.1 |
| **South** | | | | | | | | | |
| Consumption (mcf) | 51.1 | 51.9 | 50.7 | 53.7 | 60.7 | 53.6 | 55.7 | 53.6 | -3.6 |
| Price ($/mcf) | 16.49 | 13.57 | 14.16 | 14.05 | 11.53 | 13.87 | 11.02 | 12.17 | 10.4 |
| Expenditures ($) | 843 | 704 | 718 | 755 | 700 | 744 | 614 | 653 | 6.4 |
| **West** | | | | | | | | | |
| Consumption (mcf) | 50.3 | 50.8 | 53.0 | 50.5 | 52.3 | 51.4 | 51.7 | 53.0 | 2.4 |
| Price ($/mcf) | 12.96 | 11.20 | 11.31 | 10.86 | 9.92 | 11.24 | 9.61 | 9.43 | -1.9 |
| Expenditures ($) | 651 | 569 | 599 | 548 | 518 | 577 | 497 | 499 | 0.5 |
| **U.S. Average** | | | | | | | | | |
| Consumption (mcf) | 64.2 | 65.5 | 67.2 | 69.1 | 69.3 | 67.1 | 69.6 | 69.0 | -0.9 |
| Price ($/mcf) | 14.57 | 12.35 | 12.71 | 12.86 | 10.83 | 12.64 | 10.42 | 10.79 | 3.5 |
| Expenditures ($) | 936 | 809 | 854 | 889 | 751 | 848 | 725 | 744 | 2.6 |
| **Heating Oil** | | | | | | | | | |
| **U.S. Average** | | | | | | | | | |
| Consumption (gallons) | 616.7 | 624.0 | 633.9 | 678.7 | 643.5 | 639.4 | 679.7 | 671.2 | -1.2 |
| Price ($/gallon) | 2.44 | 2.42 | 3.33 | 2.65 | 2.85 | 2.74 | 3.38 | 3.71 | 9.8 |
| Expenditures ($) | 1,505 | 1,513 | 2,108 | 1,801 | 1,833 | 1,752 | 2,300 | 2,493 | 8.4 |
| **Electricity** | | | | | | | | | |
| **Northeast** | | | | | | | | | |
| Consumption (kwh***) | 8,623 | 8,680 | 8,722 | 9,113 | 8,762 | 8,780 | 9,116 | 9,044 | -0.8 |
| Price ($/kwh) | 0.133 | 0.139 | 0.144 | 0.151 | 0.152 | 0.144 | 0.155 | 0.154 | -0.8 |
| Expenditures ($) | 1,144 | 1,206 | 1,258 | 1,379 | 1,334 | 1,264 | 1,414 | 1,392 | -1.6 |
| **Midwest** | | | | | | | | | |
| Consumption (kwh) | 9,959 | 10,155 | 10,461 | 10,641 | 10,511 | 10,345 | 10,586 | 10,499 | -0.8 |
| Price ($/kwh) | 0.081 | 0.085 | 0.089 | 0.098 | 0.098 | 0.090 | 0.105 | 0.105 | 0.5 |
| Expenditures ($) | 802 | 866 | 934 | 1,038 | 1,034 | 935 | 1,109 | 1,105 | -0.4 |
| **South** | | | | | | | | | |
| Consumption (kwh) | 8,402 | 8,423 | 8,336 | 8,669 | 9,189 | 8,604 | 8,829 | 8,633 | -2.2 |
| Price ($/kwh) | 0.092 | 0.096 | 0.098 | 0.109 | 0.103 | 0.100 | 0.105 | 0.106 | 0.5 |
| Expenditures ($) | 774 | 810 | 820 | 942 | 950 | 859 | 928 | 912 | -1.8 |
| **West** | | | | | | | | | |
| Consumption (kwh) | 7,612 | 7,641 | 7,835 | 7,610 | 7,762 | 7,692 | 7,718 | 7,815 | 1.3 |
| Price ($/kwh) | 0.097 | 0.102 | 0.104 | 0.106 | 0.111 | 0.104 | 0.113 | 0.115 | 1.6 |
| Expenditures ($) | 736 | 782 | 812 | 810 | 865 | 801 | 871 | 895 | 2.8 |
| **U.S. Average** | | | | | | | | | |
| Consumption (kwh) | 8,109 | 8,155 | 8,196 | 8,372 | 8,629 | 8,292 | 8,475 | 8,370 | -1.2 |
| Price ($/kwh) | 0.096 | 0.101 | 0.104 | 0.112 | 0.110 | 0.105 | 0.114 | 0.114 | 0.7 |
| Expenditures ($) | 782 | 824 | 853 | 938 | 952 | 870 | 962 | 956 | -0.6 |

**Table WF01. Average Consumer Prices* and Expenditures for Heating Fuels During the Winter**

Energy Information Administration/Short-Term Energy Outlook -- October 2011

| Fuel / Region | Winter of | | | | | | | Forecast | |
|---|---|---|---|---|---|---|---|---|---|
| | 05-06 | 06-07 | 07-08 | 08-09 | 09-10 | Avg.05-10 | 10-11 | 11-12 | % Change |
| **Propane** | | | | | | | | | |
| **Northeast** | | | | | | | | | |
| Consumption (gallons) | 778.6 | 786.1 | 793.6 | 846.6 | 796.6 | 800.3 | 846.5 | 836.8 | -1.1 |
| Price ($/gallon) | 2.30 | 2.35 | 2.93 | 2.84 | 2.98 | 2.68 | 3.23 | 3.56 | 10.2 |
| Expenditures ($) | 1,790 | 1,849 | 2,324 | 2,405 | 2,376 | 2,149 | 2,734 | 2,979 | 8.9 |
| **Midwest** | | | | | | | | | |
| Consumption (gallons) | 778.7 | 803.4 | 842.7 | 864.3 | 848.6 | 827.6 | 857.7 | 846.8 | -1.3 |
| Price ($/gallon) | 1.81 | 1.79 | 2.23 | 2.08 | 1.97 | 1.98 | 2.12 | 2.22 | 4.8 |
| Expenditures ($) | 1,407 | 1,440 | 1,883 | 1,795 | 1,674 | 1,640 | 1,817 | 1,880 | 3.5 |
| **Number of households by primary space heating fuel (thousands)** | | | | | | | | | |
| **Northeast** | | | | | | | | | |
| Natural gas | 10,257 | 10,305 | 10,445 | 10,623 | 10,753 | 10,476 | 10,796 | 10,851 | 0.5 |
| Heating oil | 6,583 | 6,489 | 6,348 | 6,117 | 5,874 | 6,282 | 5,679 | 5,508 | -3.0 |
| Propane | 727 | 709 | 685 | 695 | 715 | 706 | 729 | 742 | 1.7 |
| Electricity | 2,422 | 2,451 | 2,485 | 2,500 | 2,592 | 2,490 | 2,665 | 2,672 | 0.2 |
| **Midwest** | | | | | | | | | |
| Natural gas | 17,928 | 17,975 | 17,996 | 17,945 | 17,751 | 17,919 | 17,713 | 17,760 | 0.3 |
| Heating oil | 621 | 576 | 524 | 482 | 444 | 529 | 409 | 384 | -6.2 |
| Propane | 2,254 | 2,203 | 2,140 | 2,094 | 2,069 | 2,152 | 2,035 | 1,994 | -2.0 |
| Electricity | 4,142 | 4,241 | 4,384 | 4,490 | 4,663 | 4,384 | 4,736 | 4,772 | 0.8 |
| **South** | | | | | | | | | |
| Natural gas | 13,608 | 13,593 | 13,613 | 13,511 | 13,298 | 13,525 | 13,248 | 13,269 | 0.2 |
| Heating oil | 1,149 | 1,080 | 1,013 | 921 | 873 | 1,007 | 824 | 768 | -6.8 |
| Propane | 2,575 | 2,453 | 2,283 | 2,150 | 2,102 | 2,313 | 2,014 | 1,902 | -5.6 |
| Electricity | 22,664 | 23,221 | 23,845 | 24,417 | 24,977 | 23,825 | 25,494 | 26,057 | 2.2 |
| **West** | | | | | | | | | |
| Natural gas | 14,430 | 14,550 | 14,607 | 14,549 | 14,471 | 14,521 | 14,607 | 14,753 | 1.0 |
| Heating oil | 350 | 330 | 307 | 285 | 281 | 310 | 272 | 261 | -4.1 |
| Propane | 983 | 968 | 912 | 905 | 909 | 935 | 890 | 881 | -1.1 |
| Electricity | 7,153 | 7,233 | 7,409 | 7,522 | 7,657 | 7,395 | 7,745 | 7,848 | 1.3 |
| **U.S. Totals** | | | | | | | | | |
| Natural gas | 56,223 | 56,423 | 56,661 | 56,629 | 56,273 | 56,442 | 56,363 | 56,633 | 0.5 |
| Heating oil | 8,702 | 8,475 | 8,191 | 7,805 | 7,471 | 8,129 | 7,184 | 6,920 | -3.7 |
| Propane | 6,540 | 6,333 | 6,020 | 5,844 | 5,795 | 6,106 | 5,669 | 5,519 | -2.6 |
| Electricity | 36,380 | 37,146 | 38,123 | 38,929 | 39,889 | 38,093 | 40,641 | 41,349 | 1.7 |
| **Heating degree-days** | | | | | | | | | |
| Northeast | 4,744 | 4,804 | 4,849 | 5,252 | 4,889 | 4,907 | 5,257 | 5,185 | -1.4 |
| Midwest | 5,145 | 5,334 | 5,620 | 5,827 | 5,657 | 5,517 | 5,756 | 5,663 | -1.6 |
| South | 2,373 | 2,401 | 2,337 | 2,550 | 2,930 | 2,518 | 2,663 | 2,533 | -4.9 |
| West | 2,919 | 2,946 | 3,119 | 2,920 | 3,048 | 2,990 | 3,016 | 3,105 | 3.0 |
| U.S. Average | 3,586 | 3,657 | 3,746 | 3,904 | 3,960 | 3,770 | 3,950 | 3,888 | -1.6 |

Note: Winter covers the period October 1 through March 31. Fuel consumption per household is based only on households that use that fuel as the primary space-heating fuel. Included in fuel consumption is consumption for water heating, appliances, and lighting (electricity). Per household consumption based on an average of EIA 2001 and 2005 Residential Energy Consumption Surveys corrected for actual and projected heating degree-days.

* Prices include taxes

** thousand cubic feet

*** kilowatthour

**Table 1. U.S. Energy Markets Summary**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Energy Supply** | | | | | | | | | | | | | | | |
| Crude Oil Production (a) | | | | | | | | | | | | | | | |
| (million barrels per day) | **5.49** | **5.40** | **5.46** | **5.54** | **5.57** | **5.61** | **5.60** | *5.84* | *5.77* | *5.75* | *5.69* | *5.69* | **5.47** | *5.65* | *5.72* |
| Dry Natural Gas Production | | | | | | | | | | | | | | | |
| (billion cubic feet per day) | **57.93** | **58.56** | **59.28** | **60.66** | **61.05** | **62.98** | **63.61** | *64.44* | *63.78* | *64.15* | *64.42* | *64.93* | **59.12** | *63.03* | *64.32* |
| Coal Production | | | | | | | | | | | | | | | |
| (million short tons) | **265** | **265** | **278** | **277** | **274** | **258** | **267** | *270* | *272* | *251* | *257* | *265* | **1,085** | *1,069* | *1,045* |
| **Energy Consumption** | | | | | | | | | | | | | | | |
| Liquid Fuels | | | | | | | | | | | | | | | |
| (million barrels per day) | **18.87** | **19.15** | **19.47** | **19.23** | **19.09** | **18.75** | **18.97** | *19.01* | *19.02* | *18.90* | *19.16* | *19.11* | **19.18** | *18.95* | *19.05* |
| Natural Gas | | | | | | | | | | | | | | | |
| (billion cubic feet per day) | **82.95** | **54.38** | **57.90** | **68.99** | **83.90** | **56.47** | **57.92** | *70.86* | *84.01* | *56.26* | *58.91* | *71.62* | **65.99** | *67.23* | *67.69* |
| Coal (b) | | | | | | | | | | | | | | | |
| (million short tons) | **265** | **247** | **286** | **250** | **255** | **242** | **284** | *252* | *264* | *226* | *259* | *248* | **1,048** | *1,033* | *997* |
| Electricity | | | | | | | | | | | | | | | |
| (billion kilowatt hours per day) | **10.61** | **10.02** | **12.01** | **9.92** | **10.60** | **10.14** | **11.96** | *10.03* | *10.65* | *10.11* | *11.64* | *10.14* | **10.64** | *10.69* | *10.64* |
| Renewables (c) | | | | | | | | | | | | | | | |
| (quadrillion Btu) | **1.76** | **1.95** | **1.79** | **1.83** | **2.04** | **2.26** | **2.07** | *1.94* | *2.05* | *2.24* | *2.00* | *2.02* | **7.33** | *8.30* | *8.31* |
| Total Energy Consumption (d) | | | | | | | | | | | | | | | |
| (quadrillion Btu) | **25.71** | **23.15** | **24.59** | **24.62** | **25.93** | **23.14** | **24.69** | *24.80* | *26.26* | *23.12* | *24.22* | *24.97* | **98.07** | *98.56* | *98.56* |
| **Energy Prices** | | | | | | | | | | | | | | | |
| Crude Oil (e) | | | | | | | | | | | | | | | |
| (dollars per barrel) | **75.89** | **75.34** | **74.06** | **81.69** | **93.98** | **108.13** | **98.98** | *94.33* | *98.00* | *98.00* | *98.00* | *98.00* | **76.72** | *98.91* | *98.00* |
| Natural Gas Wellhead | | | | | | | | | | | | | | | |
| (dollars per thousand cubic feet) | **4.79** | **4.07** | **4.11** | **3.67** | **4.06** | **4.10** | **4.03** | *3.71* | *3.83* | *3.85* | *3.90* | *4.12* | **4.15** | *3.97* | *3.93* |
| Coal | | | | | | | | | | | | | | | |
| (dollars per million Btu) | **2.26** | **2.26** | **2.28** | **2.25** | **2.35** | **2.41** | **2.42** | *2.36* | *2.43* | *2.41* | *2.37* | *2.33* | **2.26** | *2.39* | *2.39* |
| **Macroeconomic** | | | | | | | | | | | | | | | |
| Real Gross Domestic Product | | | | | | | | | | | | | | | |
| (billion chained 2005 dollars - SAAR) | **12,938** | **13,059** | **13,140** | **13,216** | **13,228** | **13,261** | **13,301** | *13,347* | *13,415* | *13,488* | *13,553* | *13,628* | **13,088** | *13,284* | *13,521* |
| Percent change from prior year | **2.2** | **3.3** | **3.5** | **3.1** | **2.2** | **1.5** | **1.2** | *1.0* | *1.4* | *1.7* | *1.9* | *2.1* | **3.0** | *1.5* | *1.8* |
| GDP Implicit Price Deflator | | | | | | | | | | | | | | | |
| (Index, 2005=100) | **110.4** | **110.8** | **111.2** | **111.7** | **112.4** | **113.1** | **113.7** | *114.2* | *114.4* | *114.5* | *114.9* | *115.4* | **111.0** | *113.3* | *114.8* |
| Percent change from prior year | **0.6** | **1.1** | **1.4** | **1.6** | **1.8** | **2.1** | **2.3** | *2.2* | *1.8* | *1.2* | *1.1* | *1.0* | **1.2** | *2.1* | *1.3* |
| Real Disposable Personal Income | | | | | | | | | | | | | | | |
| (billion chained 2005 dollars - SAAR) | **9,923** | **10,058** | **10,114** | **10,152** | **10,183** | **10,208** | **10,213** | *10,264* | *10,315* | *10,380* | *10,403* | *10,427* | **10,062** | *10,217* | *10,381* |
| Percent change from prior year | **-0.3** | **1.0** | **3.0** | **3.5** | **2.6** | **1.5** | **1.0** | *1.1* | *1.3* | *1.7* | *1.9* | *1.6* | **1.8** | *1.5* | *1.6* |
| Manufacturing Production Index | | | | | | | | | | | | | | | |
| (Index, 2007=100) | **85.0** | **86.9** | **88.1** | **89.0** | **90.6** | **90.9** | **91.6** | *92.1* | *92.7* | *93.5* | *94.3* | *95.2* | **87.3** | *91.3* | *93.9* |
| Percent change from prior year | **2.2** | **7.5** | **7.2** | **6.6** | **6.6** | **4.6** | **3.9** | *3.5* | *2.3* | *2.8* | *3.0* | *3.3* | **5.8** | *4.6* | *2.9* |
| **Weather** | | | | | | | | | | | | | | | |
| U.S. Heating Degree-Days | **2,311** | **422** | **62** | **1,665** | **2,285** | **517** | **77** | *1,624* | *2,264* | *540* | *98* | *1,632* | **4,460** | *4,503* | *4,534* |
| U.S. Cooling Degree-Days | **12** | **445** | **930** | **68** | **33** | **432** | **942** | *77* | *37* | *348* | *776* | *77* | **1,455** | *1,484* | *1,238* |

- = no data available

Prices are not adjusted for inflation.

(a) Includes lease condensate.

(b) Total consumption includes Independent Power Producer (IPP) consumption.

(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.

(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).

(e) Refers to the refiner average acquisition cost (RAC) of crude oil.

**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.

**Table 2. U.S. Energy Prices**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Crude Oil** (dollars per barrel) | | | | | | | | | | | | | | | |
| West Texas Intermediate Spot Average | **78.64** | **77.79** | **76.05** | **85.10** | **93.50** | **102.22** | **89.72** | *84.00* | *88.00* | *88.00* | *88.00* | *88.00* | **79.40** | *92.36* | *88.00* |
| Imported Average | **75.28** | **74.32** | **73.32** | **81.03** | **94.23** | **108.72** | **100.11** | *95.29* | *99.00* | *99.00* | *99.00* | *99.00* | **75.87** | *99.66* | *99.00* |
| Refiner Average Acquisition Cost | **75.89** | **75.34** | **74.06** | **81.69** | **93.98** | **108.13** | **98.98** | *94.33* | *98.00* | *98.00* | *98.00* | *98.00* | **76.72** | *98.91* | *98.00* |
| **Liquid Fuels** (cents per gallon) | | | | | | | | | | | | | | | |
| **Refiner Prices for Resale** | | | | | | | | | | | | | | | |
| Gasoline | **211** | **218** | **210** | **227** | **267** | **309** | **299** | *269* | *275* | *283* | *279* | *268* | **217** | *286* | *276* |
| Diesel Fuel | **209** | **220** | **215** | **240** | **286** | **316** | **306** | *291* | *291* | *291* | *289* | *288* | **221** | *300* | *290* |
| Heating Oil | **205** | **212** | **204** | **234** | **275** | **305** | **298** | *286* | *285* | *280* | *279* | *282* | **215** | *288* | *283* |
| **Refiner Prices to End Users** | | | | | | | | | | | | | | | |
| Jet Fuel | **210** | **219** | **214** | **238** | **287** | **322** | **306** | *292* | *295* | *292* | *290* | *290* | **220** | *302* | *292* |
| No. 6 Residual Fuel Oil (a) | **172** | **170** | **166** | **182** | **218** | **246** | **241** | *232* | *232* | *229* | *228* | *230* | **172** | *233* | *230* |
| **Retail Prices Including Taxes** | | | | | | | | | | | | | | | |
| Gasoline Regular Grade (b) | **271** | **281** | **272** | **288** | **329** | **380** | **363** | *336* | *340* | *350* | *348* | *334* | **278** | *352* | *343* |
| Gasoline All Grades (b) | **277** | **286** | **277** | **294** | **335** | **385** | **369** | *341* | *345* | *356* | *353* | *339* | **283** | *358* | *349* |
| On-highway Diesel Fuel | **285** | **303** | **294** | **315** | **363** | **401** | **387** | *372* | *375* | *375* | *372* | *372* | **299** | *380* | *373* |
| Heating Oil | **293** | **292** | **281** | **310** | **359** | **391** | **369** | *370* | *373* | *363* | *363* | *371* | **296** | *369* | *371* |
| **Natural Gas** | | | | | | | | | | | | | | | |
| Average Wellhead (dollars per thousand cubic feet) | **4.79** | **4.07** | **4.11** | **3.67** | **4.06** | **4.10** | **4.03** | *3.71* | *3.83* | *3.85* | *3.90* | *4.12* | **4.15** | *3.97* | *3.93* |
| Henry Hub Spot (dollars per thousand cubic feet) | **5.30** | **4.45** | **4.41** | **3.91** | **4.31** | **4.50** | **4.25** | *4.03* | *4.31* | *4.37* | *4.39* | *4.74* | **4.52** | *4.27* | *4.45* |
| Henry Hub Spot (dollars per Million Btu) | **5.15** | **4.32** | **4.28** | **3.80** | **4.18** | **4.37** | **4.12** | *3.92* | *4.18* | *4.24* | *4.26* | *4.60* | **4.39** | *4.15* | *4.32* |
| **End-Use Prices** (dollars per thousand cubic feet) | | | | | | | | | | | | | | | |
| Industrial Sector | **6.51** | **4.98** | **5.07** | **4.89** | **5.41** | **5.13** | **5.15** | *5.37* | *5.64* | *5.28* | *5.32* | *5.95* | **5.40** | *5.27* | *5.56* |
| Commercial Sector | **9.34** | **9.26** | **9.64** | **8.66** | **8.74** | **9.14** | **9.80** | *9.44* | *9.13* | *9.30* | *9.89* | *9.92* | **9.15** | *9.14* | *9.48* |
| Residential Sector | **10.59** | **12.55** | **15.49** | **10.56** | **9.97** | **11.95** | **16.12** | *11.21* | *10.34* | *12.24* | *16.36* | *12.00* | **11.19** | *11.05* | *11.53* |
| **Electricity** | | | | | | | | | | | | | | | |
| **Power Generation Fuel Costs** (dollars per million Btu) | | | | | | | | | | | | | | | |
| Coal | **2.26** | **2.26** | **2.28** | **2.25** | **2.35** | **2.41** | **2.42** | *2.36* | *2.43* | *2.41* | *2.37* | *2.33* | **2.26** | *2.39* | *2.39* |
| Natural Gas | **6.06** | **4.89** | **4.88** | **4.69** | **5.05** | **4.94** | **4.91** | *4.78* | *5.01* | *4.95* | *4.94* | *5.25* | **5.08** | *4.92* | *5.03* |
| Residual Fuel Oil (c) | **12.10** | **12.36** | **12.36** | **14.19** | **15.88** | **18.32** | **18.33** | *17.81* | *18.19* | *18.38* | *18.32* | *18.28* | **12.63** | *17.67* | *18.30* |
| Distillate Fuel Oil | **15.84** | **16.48** | **16.18** | **17.94** | **20.99** | **23.55** | **23.49** | *22.89* | *22.90* | *22.82* | *22.80* | *23.17* | **16.60** | *22.72* | *22.93* |
| **End-Use Prices** (cents per kilowatthour) | | | | | | | | | | | | | | | |
| Industrial Sector | **6.53** | **6.75** | **7.17** | **6.67** | **6.68** | **6.85** | **7.29** | *6.79* | *6.62* | *6.86* | *7.28* | *6.78* | **6.79** | *6.91* | *6.89* |
| Commercial Sector | **9.87** | **10.30** | **10.71** | **10.06** | **10.01** | **10.38** | **10.79** | *10.18* | *10.03* | *10.47* | *10.99* | *10.32* | **10.26** | *10.36* | *10.47* |
| Residential Sector | **10.88** | **11.90** | **12.02** | **11.50** | **11.24** | **11.97** | **12.23** | *11.70* | *11.21* | *12.15* | *12.46* | *11.82* | **11.58** | *11.80* | *11.91* |

- = no data available

Prices are not adjusted for inflation.

(a) Average for all sulfur contents.

(b) Average self-service cash price.

(c) Includes fuel oils No. 4, No. 5, No. 6, and topped crude.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Supply (million barrels per day) (a)** | | | | | | | | | | | | | | | |
| OECD | **21.56** | **21.34** | **21.05** | **21.75** | **21.43** | **21.18** | **21.61** | *21.83* | *21.85* | *21.80* | *21.61* | *21.70* | **21.42** | *21.52* | *21.74* |
| U.S. (50 States) | **9.58** | **9.58** | **9.70** | **9.89** | **9.77** | **9.98** | **9.90** | *10.08* | *9.95* | *10.04* | *10.02* | *10.01* | **9.69** | *9.93* | *10.00* |
| Canada | **3.37** | **3.47** | **3.49** | **3.64** | **3.60** | **3.40** | **3.66** | *3.66* | *3.73* | *3.76* | *3.80* | *3.84* | **3.49** | *3.58* | *3.78* |
| Mexico | **3.02** | **2.99** | **2.97** | **2.95** | **2.99** | **2.98** | **2.95** | *2.92* | *2.94* | *2.92* | *2.91* | *2.89* | **2.98** | *2.96* | *2.91* |
| North Sea (b) | **4.08** | **3.74** | **3.36** | **3.76** | **3.61** | **3.34** | **3.50** | *3.62* | *3.70* | *3.55* | *3.32* | *3.42* | **3.73** | *3.52* | *3.50* |
| Other OECD | **1.51** | **1.55** | **1.54** | **1.51** | **1.46** | **1.48** | **1.60** | *1.54* | *1.54* | *1.54* | *1.56* | *1.54* | **1.53** | *1.52* | *1.55* |
| Non-OECD | **64.55** | **65.30** | **66.18** | **65.95** | **65.99** | **64.95** | **67.35** | *67.00* | *67.37* | *67.53* | *67.83* | *67.95* | **65.50** | *66.33* | *67.67* |
| OPEC | **34.51** | **35.02** | **35.71** | **35.35** | **35.32** | **34.67** | **36.24** | *36.05* | *36.01* | *36.09* | *36.48* | *36.60* | **35.15** | *35.57* | *36.30* |
| Crude Oil Portion | **29.40** | **29.65** | **30.15** | **29.85** | **29.78** | **29.20** | **30.07** | *29.90* | *29.79* | *29.82* | *30.13* | *30.29* | **29.77** | *29.74* | *30.01* |
| Other Liquids | **5.11** | **5.37** | **5.57** | **5.49** | **5.54** | **5.48** | **6.17** | *6.14* | *6.22* | *6.28* | *6.35* | *6.31* | **5.39** | *5.83* | *6.29* |
| Former Soviet Union | **13.11** | **13.15** | **13.18** | **13.27** | **13.28** | **13.27** | **13.38** | *13.38* | *13.60* | *13.51* | *13.37* | *13.25* | **13.18** | *13.33* | *13.43* |
| China | **4.16** | **4.23** | **4.31** | **4.39** | **4.36** | **4.33** | **4.48** | *4.47* | *4.50* | *4.55* | *4.56* | *4.58* | **4.27** | *4.41* | *4.55* |
| Other Non-OECD | **12.78** | **12.89** | **12.97** | **12.95** | **13.03** | **12.67** | **13.25** | *13.10* | *13.26* | *13.37* | *13.42* | *13.52* | **12.90** | *13.01* | *13.39* |
| Total World Supply | **86.11** | **86.64** | **87.23** | **87.70** | **87.42** | **86.13** | **88.96** | *88.83* | *89.22* | *89.33* | *89.44* | *89.65* | **86.93** | *87.84* | *89.41* |
| Non-OPEC Supply | **51.60** | **51.62** | **51.51** | **52.35** | **52.10** | **51.46** | **52.72** | *52.78* | *53.21* | *53.24* | *52.96* | *53.04* | **51.77** | *52.27* | *53.11* |
| **Consumption (million barrels per day) (c)** | | | | | | | | | | | | | | | |
| OECD | **45.88** | **45.26** | **46.57** | **46.68** | **46.19** | **44.50** | **45.83** | *46.43* | *46.32* | *44.75* | *45.53* | *46.10* | **46.10** | *45.74* | *45.68* |
| U.S. (50 States) | **18.87** | **19.15** | **19.47** | **19.23** | **19.09** | **18.75** | **18.97** | *19.01* | *19.01* | *18.90* | *19.16* | *19.11* | **19.18** | *18.95* | *19.05* |
| U.S. Territories | **0.24** | **0.24** | **0.24** | **0.24** | **0.30** | **0.30** | **0.30** | *0.30* | *0.31* | *0.31* | *0.31* | *0.31* | **0.24** | *0.30* | *0.31* |
| Canada | **2.15** | **2.17** | **2.26** | **2.25** | **2.25** | **2.17** | **2.23** | *2.20* | *2.18* | *2.12* | *2.22* | *2.20* | **2.21** | *2.21* | *2.18* |
| Europe | **14.31** | **14.25** | **14.92** | **14.82** | **14.18** | **14.13** | **14.54** | *14.52* | *14.24* | *13.90* | *14.35* | *14.34* | **14.58** | *14.34* | *14.21* |
| Japan | **4.82** | **4.07** | **4.36** | **4.57** | **4.86** | **3.92** | **4.43** | *4.77* | *5.02* | *4.14* | *4.18* | *4.58* | **4.45** | *4.49* | *4.48* |
| Other OECD | **5.48** | **5.37** | **5.32** | **5.57** | **5.52** | **5.24** | **5.36** | *5.62* | *5.56* | *5.38* | *5.31* | *5.56* | **5.43** | *5.44* | *5.45* |
| Non-OECD | **39.70** | **41.03** | **41.28** | **41.86** | **41.17** | **42.88** | **43.42** | *43.13* | *42.87* | *44.28* | *44.86* | *44.62* | **40.97** | *42.66* | *44.16* |
| Former Soviet Union | **4.21** | **4.16** | **4.39** | **4.40** | **4.47** | **4.40** | **4.65** | *4.65* | *4.54* | *4.47* | *4.73* | *4.72* | **4.29** | *4.54* | *4.62* |
| Europe | **0.72** | **0.73** | **0.73** | **0.75** | **0.74** | **0.75** | **0.77** | *0.77* | *0.75* | *0.75* | *0.78* | *0.78* | **0.73** | *0.76* | *0.76* |
| China | **8.74** | **9.18** | **9.04** | **9.79** | **9.28** | **9.99** | **9.99** | *10.24* | *9.90* | *10.44* | *10.59* | *10.84* | **9.19** | *9.88* | *10.45* |
| Other Asia | **9.89** | **10.08** | **9.68** | **10.08** | **10.21** | **10.40** | **10.00** | *10.29* | *10.44* | *10.63* | *10.22* | *10.51* | **9.93** | *10.23* | *10.45* |
| Other Non-OECD | **16.14** | **16.88** | **17.44** | **16.84** | **16.47** | **17.34** | **18.00** | *17.19* | *17.24* | *17.99* | *18.54* | *17.77* | **16.83** | *17.25* | *17.89* |
| Total World Consumption | **85.58** | **86.28** | **87.86** | **88.54** | **87.37** | **87.38** | **89.25** | *89.56* | *89.20* | *89.02* | *90.40* | *90.73* | **87.08** | *88.40* | *89.84* |
| **Inventory Net Withdrawals (million barrels per day)** | | | | | | | | | | | | | | | |
| U.S. (50 States) | **-0.12** | **-0.60** | **-0.21** | **0.73** | **0.27** | **-0.42** | **0.29** | *0.51* | *0.03* | *-0.42* | *-0.14* | *0.52* | **-0.05** | *0.16* | *0.00* |
| Other OECD | **-0.26** | **-0.32** | **0.31** | **0.14** | **0.15** | **-0.08** | **0.00** | *0.09* | *-0.02* | *0.04* | *0.41* | *0.21* | **-0.03** | *0.04* | *0.16* |
| Other Stock Draws and Balance | **-0.15** | **0.57** | **0.53** | **-0.02** | **-0.48** | **1.76** | **0.00** | *0.14* | *-0.04* | *0.07* | *0.69* | *0.35* | **0.23** | *0.35* | *0.27* |
| Total Stock Draw | **-0.53** | **-0.36** | **0.63** | **0.84** | **-0.05** | **1.26** | **0.29** | *0.73* | *-0.02* | *-0.31* | *0.96* | *1.08* | **0.15** | *0.56* | *0.43* |
| **End-of-period Inventories (million barrels)** | | | | | | | | | | | | | | | |
| U.S. Commercial Inventory | **1,060** | **1,115** | **1,135** | **1,068** | **1,043** | **1,081** | **1,085** | *1,039* | *1,036* | *1,074* | *1,087* | *1,039* | **1,068** | *1,039* | *1,039* |
| OECD Commercial Inventory | **2,665** | **2,749** | **2,740** | **2,660** | **2,622** | **2,668** | **2,672** | *2,617* | *2,616* | *2,651* | *2,626* | *2,559* | **2,660** | *2,617* | *2,559* |

- = no data available

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.

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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **North America** | **15.97** | **16.04** | **16.16** | **16.48** | **16.36** | **16.37** | **16.51** | *16.67* | *16.61* | *16.72* | *16.72* | *16.74* | **16.16** | *16.48* | *16.70* |
| Canada | **3.37** | **3.47** | **3.49** | **3.64** | **3.60** | **3.40** | **3.66** | *3.66* | *3.73* | *3.76* | *3.80* | *3.84* | **3.49** | *3.58* | *3.78* |
| Mexico | **3.02** | **2.99** | **2.97** | **2.95** | **2.99** | **2.98** | **2.95** | *2.92* | *2.94* | *2.92* | *2.91* | *2.89* | **2.98** | *2.96* | *2.91* |
| United States | **9.58** | **9.58** | **9.70** | **9.89** | **9.77** | **9.98** | **9.90** | *10.08* | *9.95* | *10.04* | *10.02* | *10.01* | **9.69** | *9.93* | *10.00* |
| **Central and South America** | **4.72** | **4.80** | **4.81** | **4.83** | **4.92** | **4.91** | **5.06** | *5.01* | *5.07* | *5.21* | *5.25* | *5.28* | **4.79** | *4.98* | *5.20* |
| Argentina | **0.80** | **0.79** | **0.79** | **0.75** | **0.78** | **0.70** | **0.72** | *0.71* | *0.73* | *0.73* | *0.73* | *0.73* | **0.78** | *0.73* | *0.73* |
| Brazil | **2.68** | **2.75** | **2.75** | **2.80** | **2.82** | **2.83** | **2.92** | *2.87* | *2.89* | *3.02* | *3.02* | *3.04* | **2.74** | *2.86* | *2.99* |
| Colombia | **0.77** | **0.79** | **0.81** | **0.83** | **0.88** | **0.93** | **0.96** | *0.97* | *1.00* | *1.01* | *1.03* | *1.05* | **0.80** | *0.94* | *1.02* |
| Other Central and S. America | **0.47** | **0.46** | **0.46** | **0.45** | **0.45** | **0.45** | **0.46** | *0.45* | *0.46* | *0.46* | *0.46* | *0.46* | **0.46** | *0.45* | *0.46* |
| **Europe** | **4.92** | **4.61** | **4.24** | **4.65** | **4.52** | **4.26** | **4.42** | *4.53* | *4.59* | *4.44* | *4.22* | *4.32* | **4.61** | *4.43* | *4.40* |
| Norway | **2.32** | **2.11** | **1.93** | **2.18** | **2.10** | **1.94** | **2.09** | *2.07* | *2.14* | *2.12* | *1.98* | *2.03* | **2.13** | *2.05* | *2.07* |
| United Kingdom (offshore) | **1.46** | **1.35** | **1.18** | **1.30** | **1.24** | **1.12** | **1.15** | *1.30* | *1.30* | *1.18* | *1.10* | *1.14* | **1.32** | *1.20* | *1.18* |
| Other North Sea | **0.30** | **0.29** | **0.25** | **0.28** | **0.27** | **0.27** | **0.26** | *0.26* | *0.26* | *0.25* | *0.24* | *0.24* | **0.28** | *0.26* | *0.25* |
| **Former Soviet Union (FSU)** | **13.11** | **13.15** | **13.18** | **13.27** | **13.28** | **13.27** | **13.38** | *13.38* | *13.60* | *13.51* | *13.37* | *13.25* | **13.18** | *13.33* | *13.43* |
| Azerbaijan | **1.00** | **1.05** | **1.05** | **1.06** | **1.00** | **1.00** | **1.00** | *1.11* | *1.19* | *1.19* | *1.14* | *1.09* | **1.04** | *1.03* | *1.15* |
| Kazakhstan | **1.61** | **1.57** | **1.61** | **1.66** | **1.67** | **1.64** | **1.69** | *1.73* | *1.79* | *1.80* | *1.82* | *1.83* | **1.61** | *1.68* | *1.81* |
| Russia | **10.10** | **10.14** | **10.14** | **10.17** | **10.22** | **10.24** | **10.30** | *10.16* | *10.23* | *10.14* | *10.03* | *9.96* | **10.14** | *10.23* | *10.09* |
| Turkmenistan | **0.20** | **0.20** | **0.20** | **0.21** | **0.21** | **0.21** | **0.21** | *0.21* | *0.21* | *0.21* | *0.21* | *0.21* | **0.20** | *0.21* | *0.21* |
| Other FSU | **0.41** | **0.39** | **0.38** | **0.39** | **0.39** | **0.38** | **0.39** | *0.39* | *0.38* | *0.38* | *0.38* | *0.38* | **0.39** | *0.39* | *0.38* |
| **Middle East** | **1.59** | **1.58** | **1.57** | **1.58** | **1.56** | **1.40** | **1.53** | *1.49* | *1.51* | *1.50* | *1.50* | *1.51* | **1.58** | *1.50* | *1.51* |
| Oman | **0.86** | **0.86** | **0.87** | **0.88** | **0.89** | **0.87** | **0.87** | *0.86* | *0.88* | *0.88* | *0.88* | *0.88* | **0.87** | *0.87* | *0.88* |
| Syria | **0.40** | **0.40** | **0.40** | **0.40** | **0.38** | **0.38** | **0.37** | *0.35* | *0.35* | *0.35* | *0.35* | *0.36* | **0.40** | *0.37* | *0.35* |
| Yemen | **0.27** | **0.26** | **0.25** | **0.25** | **0.24** | **0.10** | **0.23** | *0.23* | *0.24* | *0.23* | *0.22* | *0.23* | **0.26** | *0.20* | *0.23* |
| **Asia and Oceania** | **8.68** | **8.84** | **8.99** | **9.00** | **8.90** | **8.73** | **9.23** | *9.15* | *9.24* | *9.29* | *9.33* | *9.36* | **8.88** | *9.00* | *9.30* |
| Australia | **0.56** | **0.58** | **0.55** | **0.53** | **0.46** | **0.47** | **0.59** | *0.55* | *0.55* | *0.55* | *0.56* | *0.53* | **0.55** | *0.52* | *0.55* |
| China | **4.16** | **4.23** | **4.31** | **4.39** | **4.36** | **4.33** | **4.48** | *4.47* | *4.50* | *4.55* | *4.56* | *4.58* | **4.27** | *4.41* | *4.55* |
| India | **0.91** | **0.92** | **0.98** | **1.00** | **1.00** | **0.99** | **1.00** | *0.99* | *1.01* | *1.00* | *1.00* | *1.01* | **0.95** | *1.00* | *1.00* |
| Indonesia | **1.02** | **1.04** | **1.04** | **1.00** | **1.00** | **0.99** | **1.03** | *1.02* | *1.03* | *1.03* | *1.03* | *1.03* | **1.03** | *1.01* | *1.03* |
| Malaysia | **0.68** | **0.67** | **0.65** | **0.66** | **0.66** | **0.58** | **0.67** | *0.65* | *0.65* | *0.63* | *0.63* | *0.65* | **0.67** | *0.64* | *0.64* |
| Vietnam | **0.35** | **0.34** | **0.36** | **0.34** | **0.36** | **0.32** | **0.41** | *0.42* | *0.45* | *0.48* | *0.50* | *0.52* | **0.34** | *0.38* | *0.49* |
| **Africa** | **2.61** | **2.59** | **2.56** | **2.54** | **2.55** | **2.51** | **2.60** | *2.56* | *2.58* | *2.57* | *2.57* | *2.58* | **2.58** | *2.55* | *2.57* |
| Egypt | **0.66** | **0.66** | **0.66** | **0.66** | **0.66** | **0.65** | **0.69** | *0.69* | *0.70* | *0.70* | *0.70* | *0.70* | **0.66** | *0.67* | *0.70* |
| Equatorial Guinea | **0.33** | **0.33** | **0.32** | **0.31** | **0.31** | **0.31** | **0.30** | *0.29* | *0.29* | *0.29* | *0.29* | *0.29* | **0.32** | *0.30* | *0.29* |
| Gabon | **0.23** | **0.23** | **0.23** | **0.22** | **0.22** | **0.20** | **0.22** | *0.21* | *0.21* | *0.21* | *0.20* | *0.20* | **0.23** | *0.21* | *0.21* |
| Sudan | **0.51** | **0.51** | **0.51** | **0.51** | **0.49** | **0.47** | **0.46** | *0.46* | *0.46* | *0.46* | *0.46* | *0.46* | **0.51** | *0.47* | *0.46* |
| **Total non-OPEC liquids** | **51.60** | **51.62** | **51.51** | **52.35** | **52.10** | **51.46** | **52.72** | *52.78* | *53.21* | *53.24* | *52.96* | *53.04* | **51.77** | *52.27* | *53.11* |
| **OPEC non-crude liquids** | **5.11** | **5.37** | **5.57** | **5.49** | **5.54** | **5.48** | **6.17** | *6.14* | *6.22* | *6.28* | *6.35* | *6.31* | **5.39** | *5.83* | *6.29* |
| **Non-OPEC + OPEC non-crude** | **56.71** | **56.99** | **57.08** | **57.85** | **57.64** | **56.93** | **58.89** | *58.93* | *59.43* | *59.52* | *59.31* | *59.35* | **57.16** | *58.10* | *59.40* |

- = 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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Crude Oil** | | | | | | | | | | | | | | | |
| Algeria | **1.35** | **1.30** | **1.27** | **1.27** | **1.27** | **1.27** | **1.27** | - | - | - | - | - | **1.30** | - | - |
| Angola | **1.97** | **1.94** | **1.79** | **1.70** | **1.70** | **1.60** | **1.70** | - | - | - | - | - | **1.85** | - | - |
| Ecudaor | **0.47** | **0.48** | **0.49** | **0.50** | **0.50** | **0.50** | **0.48** | - | - | - | - | - | **0.49** | - | - |
| Iran | **3.80** | **3.80** | **3.70** | **3.70** | **3.70** | **3.70** | **3.65** | - | - | - | - | - | **3.75** | - | - |
| Iraq | **2.42** | **2.37** | **2.32** | **2.40** | **2.53** | **2.53** | **2.63** | - | - | - | - | - | **2.37** | - | - |
| Kuwait | **2.30** | **2.23** | **2.30** | **2.30** | **2.33** | **2.50** | **2.53** | - | - | - | - | - | **2.28** | - | - |
| Libya | **1.65** | **1.65** | **1.65** | **1.65** | **1.09** | **0.17** | **0.07** | - | - | - | - | - | **1.65** | - | - |
| Nigeria | **2.03** | **1.95** | **2.08** | **2.12** | **2.13** | **2.15** | **2.19** | - | - | - | - | - | **2.05** | - | - |
| Qatar | **0.84** | **0.85** | **0.85** | **0.85** | **0.85** | **0.85** | **0.85** | - | - | - | - | - | **0.85** | - | - |
| Saudi Arabia | **8.20** | **8.70** | **9.30** | **8.90** | **9.03** | **9.13** | **9.90** | - | - | - | - | - | **8.78** | - | - |
| United Arab Emirates | **2.30** | **2.30** | **2.30** | **2.30** | **2.43** | **2.60** | **2.60** | - | - | - | - | - | **2.30** | - | - |
| Venezuela | **2.07** | **2.09** | **2.10** | **2.17** | **2.20** | **2.20** | **2.20** | - | - | - | - | - | **2.11** | - | - |
| OPEC Total | **29.40** | **29.65** | **30.15** | **29.85** | **29.78** | **29.20** | **30.07** | *29.90* | *29.79* | *29.82* | *30.13* | *30.29* | **29.77** | *29.74* | *30.01* |
| **Other Liquids** | **5.11** | **5.37** | **5.57** | **5.49** | **5.54** | **5.48** | **6.17** | *6.14* | *6.22* | *6.28* | *6.35* | *6.31* | **5.39** | *5.83* | *6.29* |
| **Total OPEC Supply** | **34.51** | **35.02** | **35.71** | **35.35** | **35.32** | **34.67** | **36.24** | *36.05* | *36.01* | *36.09* | *36.48* | *36.60* | **35.15** | *35.57* | *36.30* |
| **Crude Oil Production Capacity** | | | | | | | | | | | | | | | |
| Algeria | **1.35** | **1.30** | **1.27** | **1.27** | **1.27** | **1.27** | **1.27** | - | - | - | - | - | **1.30** | - | - |
| Angola | **1.97** | **1.94** | **1.79** | **1.70** | **1.70** | **1.60** | **1.70** | - | - | - | - | - | **1.85** | - | - |
| Ecudaor | **0.47** | **0.48** | **0.49** | **0.50** | **0.50** | **0.50** | **0.48** | - | - | - | - | - | **0.49** | - | - |
| Iran | **3.80** | **3.80** | **3.70** | **3.70** | **3.70** | **3.70** | **3.65** | - | - | - | - | - | **3.75** | - | - |
| Iraq | **2.42** | **2.37** | **2.32** | **2.40** | **2.53** | **2.53** | **2.63** | - | - | - | - | - | **2.37** | - | - |
| Kuwait | **2.60** | **2.60** | **2.60** | **2.60** | **2.55** | **2.55** | **2.55** | - | - | - | - | - | **2.60** | - | - |
| Libya | **1.65** | **1.65** | **1.65** | **1.65** | **1.09** | **0.17** | **0.07** | - | - | - | - | - | **1.65** | - | - |
| Nigeria | **2.03** | **1.95** | **2.08** | **2.12** | **2.13** | **2.15** | **2.19** | - | - | - | - | - | **2.05** | - | - |
| Qatar | **0.85** | **0.85** | **0.85** | **0.85** | **0.85** | **0.85** | **0.85** | - | - | - | - | - | **0.85** | - | - |
| Saudi Arabia | **12.00** | **12.25** | **12.25** | **12.25** | **12.25** | **12.25** | **12.25** | - | - | - | - | - | **12.19** | - | - |
| United Arab Emirates | **2.60** | **2.60** | **2.60** | **2.60** | **2.66** | **2.66** | **2.66** | - | - | - | - | - | **2.60** | - | - |
| Venezuela | **2.07** | **2.09** | **2.10** | **2.17** | **2.20** | **2.20** | **2.20** | - | - | - | - | - | **2.11** | - | - |
| OPEC Total | **33.69** | **33.85** | **33.70** | **33.81** | **33.41** | **32.42** | **32.50** | *32.71* | *33.10* | *33.33* | *33.64* | *33.80* | **33.76** | *32.76* | *33.47* |
| **Surplus Crude Oil Production Capacity** | | | | | | | | | | | | | | | |
| Algeria | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Angola | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Ecudaor | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Iran | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Iraq | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Kuwait | **0.30** | **0.37** | **0.30** | **0.30** | **0.22** | **0.05** | **0.02** | - | - | - | - | - | **0.32** | - | - |
| Libya | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Nigeria | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Qatar | **0.01** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| Saudi Arabia | **3.80** | **3.55** | **2.95** | **3.35** | **3.22** | **3.12** | **2.35** | - | - | - | - | - | **3.41** | - | - |
| United Arab Emirates | **0.30** | **0.30** | **0.30** | **0.30** | **0.23** | **0.06** | **0.06** | - | - | - | - | - | **0.30** | - | - |
| Venezuela | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | - | - | - | - | - | **0.00** | - | - |
| OPEC Total | **4.29** | **4.19** | **3.55** | **3.95** | **3.63** | **3.22** | **2.43** | *2.81* | *3.31* | *3.51* | *3.51* | *3.51* | **3.99** | *3.02* | *3.46* |

- = no data available

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.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2010 | 2011 | 2012 |
| **North America** | **23.11** | **23.43** | **23.79** | **23.55** | **23.37** | **22.97** | **23.31** | *23.34* | *23.31* | *23.14* | *23.48* | *23.43* | **23.47** | *23.25* | *23.34* |
| Canada | **2.15** | **2.17** | **2.26** | **2.25** | **2.25** | **2.17** | **2.23** | *2.20* | *2.18* | *2.12* | *2.22* | *2.20* | **2.21** | *2.21* | *2.18* |
| Mexico | **2.07** | **2.10** | **2.05** | **2.07** | **2.03** | **2.05** | **2.11** | *2.11* | *2.10* | *2.12* | *2.09* | *2.10* | **2.07** | *2.07* | *2.11* |
| United States | **18.87** | **19.15** | **19.47** | **19.23** | **19.09** | **18.75** | **18.97** | *19.01* | *19.01* | *18.90* | *19.16* | *19.11* | **19.18** | *18.95* | *19.05* |
| **Central and South America** | **6.12** | **6.36** | **6.51** | **6.45** | **6.38** | **6.61** | **6.63** | *6.62* | *6.59* | *6.83* | *6.86* | *6.84* | **6.36** | *6.56* | *6.78* |
| Brazil | **2.52** | **2.63** | **2.73** | **2.72** | **2.66** | **2.77** | **2.83** | *2.81* | *2.81* | *2.92* | *2.98* | *2.97* | **2.65** | *2.77* | *2.92* |
| **Europe** | **15.03** | **14.98** | **15.65** | **15.58** | **14.92** | **14.87** | **15.31** | *15.30* | *14.99* | *14.65* | *15.13* | *15.11* | **15.31** | *15.10* | *14.97* |
| **Former Soviet Union** | **4.21** | **4.16** | **4.39** | **4.40** | **4.47** | **4.40** | **4.65** | *4.65* | *4.54* | *4.47* | *4.73* | *4.72* | **4.29** | *4.54* | *4.62* |
| Russia | **2.88** | **2.85** | **3.00** | **3.01** | **3.04** | **2.99** | **3.17** | *3.16* | *3.07* | *3.03* | *3.20* | *3.19* | **2.94** | *3.09* | *3.12* |
| **Middle East** | **6.96** | **7.37** | **7.82** | **7.25** | **7.08** | **7.74** | **8.40** | *7.57* | *7.59* | *8.11* | *8.67* | *7.88* | **7.35** | *7.70* | *8.06* |
| **Asia and Oceania** | **26.86** | **26.61** | **26.35** | **27.94** | **27.85** | **27.52** | **27.69** | *28.82* | *28.83* | *28.48* | *28.22* | *29.41* | **26.94** | *27.97* | *28.73* |
| China | **8.74** | **9.18** | **9.04** | **9.79** | **9.28** | **9.99** | **9.99** | *10.24* | *9.90* | *10.44* | *10.59* | *10.84* | **9.19** | *9.88* | *10.45* |
| Japan | **4.82** | **4.07** | **4.36** | **4.57** | **4.86** | **3.92** | **4.43** | *4.77* | *5.02* | *4.14* | *4.18* | *4.58* | **4.45** | *4.49* | *4.48* |
| India | **3.23** | **3.29** | **2.99** | **3.23** | **3.39** | **3.38** | **3.10** | *3.35* | *3.50* | *3.49* | *3.20* | *3.46* | **3.18** | *3.30* | *3.41* |
| **Africa** | **3.28** | **3.38** | **3.34** | **3.37** | **3.29** | **3.27** | **3.24** | *3.28* | *3.35* | *3.33* | *3.31* | *3.34* | **3.34** | *3.27* | *3.33* |
| **Total OECD Liquid Fuels Consumption** | **45.88** | **45.26** | **46.57** | **46.68** | **46.19** | **44.50** | **45.83** | *46.43* | *46.32* | *44.75* | *45.53* | *46.10* | **46.10** | *45.74* | *45.68* |
| **Total non-OECD Liquid Fuels Consumption** | **39.70** | **41.03** | **41.28** | **41.86** | **41.17** | **42.88** | **43.42** | *43.13* | *42.87* | *44.28* | *44.86* | *44.62* | **40.97** | *42.66* | *44.16* |
| **Total World Liquid Fuels Consumption** | **85.58** | **86.28** | **87.86** | **88.54** | **87.37** | **87.38** | **89.25** | *89.56* | *89.20* | *89.02* | *90.40* | *90.73* | **87.08** | *88.40* | *89.84* |
| **World Real Gross Domestic Product (a)** | | | | | | | | | | | | | | | |
| Index, 2007 Q1 = 100 | **105.53** | **106.79** | **107.60** | **108.52** | **109.30** | **109.84** | **110.59** | *111.52* | *112.59* | *113.60* | *114.67* | *115.83* | **107.12** | *110.32* | *114.18* |
| Percent change from prior year | **4.3** | **4.9** | **4.5** | **4.2** | **3.6** | **2.9** | **2.8** | *2.8* | *3.0* | *3.4* | *3.7* | *3.9* | **4.5** | *3.0* | *3.5* |
| **Real U.S. Dollar Exchange Rate (a)** | | | | | | | | | | | | | | | |
| Index, January 2007 = 100 | **97.52** | **99.77** | **98.63** | **96.10** | **97.24** | **96.93** | **96.36** | *95.81* | *95.58* | *95.67* | *95.73* | *95.79* | **98.00** | *96.58* | *95.69* |
| Percent change from prior year | **-6.4** | **-1.1** | **0.8** | **0.8** | **-0.3** | **-2.8** | **-2.3** | *-0.3* | *-1.7* | *-1.3* | *-0.7* | *0.0* | **-1.6** | *-1.4* | *-0.9* |

- = 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.

(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.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Supply (million barrels per day)** | | | | | | | | | | | | | | | |
| Crude Oil Supply | | | | | | | | | | | | | | | |
| Domestic Production (a) | **5.49** | **5.40** | **5.46** | **5.54** | **5.57** | **5.61** | **5.60** | *5.84* | *5.77* | *5.75* | *5.69* | *5.69* | **5.47** | *5.65* | *5.72* |
| Alaska | **0.64** | **0.58** | **0.57** | **0.61** | **0.56** | **0.58** | **0.51** | *0.57* | *0.55* | *0.53* | *0.51* | *0.49* | **0.60** | *0.55* | *0.52* |
| Federal Gulf of Mexico (b) | **1.65** | **1.52** | **1.52** | **1.51** | **1.54** | **1.46** | **1.28** | *1.40* | *1.43* | *1.40* | *1.35* | *1.36* | **1.55** | *1.42* | *1.38* |
| Lower 48 States (excl GOM) | **3.20** | **3.30** | **3.37** | **3.42** | **3.47** | **3.57** | **3.81** | *3.87* | *3.79* | *3.81* | *3.82* | *3.85* | **3.32** | *3.68* | *3.82* |
| Crude Oil Net Imports (c) | **8.82** | **9.73** | **9.52** | **8.61** | **8.68** | **8.95** | **9.04** | *8.72* | *8.85* | *9.21* | *9.30* | *8.72* | **9.17** | *8.85* | *9.02* |
| SPR Net Withdrawals | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.33** | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | **0.00** | *0.08* | *0.00* |
| Commercial Inventory Net Withdrawals | **-0.38** | **-0.07** | **0.03** | **0.32** | **-0.32** | **0.05** | **0.24** | *0.15* | *-0.27* | *0.04* | *0.14* | *0.14* | **-0.02** | *0.03* | *0.02* |
| Crude Oil Adjustment (d) | **0.04** | **0.18** | **0.12** | **0.06** | **0.31** | **0.21** | **0.24** | *-0.03* | *0.06* | *0.09* | *0.04* | *-0.02* | **0.10** | *0.18* | *0.04* |
| Total Crude Oil Input to Refineries | **13.98** | **15.24** | **15.13** | **14.54** | **14.23** | **14.81** | **15.45** | *14.67* | *14.42* | *15.08* | *15.16* | *14.54* | **14.72** | *14.79* | *14.80* |
| Other Supply | | | | | | | | | | | | | | | |
| Refinery Processing Gain | **1.03** | **1.06** | **1.10** | **1.08** | **1.03** | **1.06** | **1.09** | *1.05* | *1.00* | *1.02* | *1.05* | *1.04* | **1.07** | *1.06* | *1.03* |
| Natural Gas Liquids Production | **2.05** | **2.07** | **2.06** | **2.13** | **2.04** | **2.19** | **2.14** | *2.14* | *2.11* | *2.20* | *2.21* | *2.20* | **2.07** | *2.13* | *2.18* |
| Renewables and Oxygenate Production (e) | **0.87** | **0.89** | **0.91** | **0.95** | **0.95** | **0.94** | **0.93** | *0.92* | *0.94* | *0.94* | *0.94* | *0.94* | **0.91** | *0.94* | *0.94* |
| Fuel Ethanol Production | **0.84** | **0.85** | **0.87** | **0.91** | **0.91** | **0.89** | **0.89** | *0.89* | *0.91* | *0.91* | *0.91* | *0.91* | **0.87** | *0.90* | *0.91* |
| Petroleum Products Adjustment (f) | **0.15** | **0.16** | **0.18** | **0.18** | **0.18** | **0.19** | **0.14** | *0.13* | *0.13* | *0.13* | *0.13* | *0.13* | **0.17** | *0.16* | *0.13* |
| Product Net Imports (c) | **0.54** | **0.26** | **0.35** | **-0.06** | **0.05** | **0.02** | **-0.46** | *-0.26* | *0.12* | *-0.02* | *-0.07* | *-0.12* | **0.27** | *-0.16* | *-0.02* |
| Pentanes Plus | **-0.03** | **-0.01** | **0.01** | **0.01** | **0.01** | **0.06** | **0.00** | *-0.02* | *-0.01* | *-0.01* | *-0.01* | *-0.02* | **-0.01** | *0.01* | *-0.01* |
| Liquefied Petroleum Gas | **0.08** | **-0.01** | **-0.02** | **0.03** | **0.04** | **-0.08** | **-0.04** | *-0.01* | *0.06* | *-0.05* | *-0.07* | *-0.05* | **0.02** | *-0.02* | *-0.03* |
| Unfinished Oils | **0.52** | **0.57** | **0.65** | **0.68** | **0.62** | **0.65** | **0.66** | *0.64* | *0.61* | *0.61* | *0.72* | *0.61* | **0.61** | *0.64* | *0.64* |
| Other HC/Oxygenates | **-0.06** | **-0.07** | **-0.09** | **-0.09** | **-0.10** | **-0.11** | **-0.08** | *-0.09* | *-0.09* | *-0.09* | *-0.09* | *-0.09* | **-0.08** | *-0.10* | *-0.09* |
| Motor Gasoline Blend Comp. | **0.61** | **0.74** | **0.83** | **0.62** | **0.65** | **0.83** | **0.59** | *0.63* | *0.68* | *0.74* | *0.71* | *0.70* | **0.70** | *0.68* | *0.71* |
| Finished Motor Gasoline | **-0.12** | **-0.11** | **-0.12** | **-0.30** | **-0.30** | **-0.31** | **-0.25** | *-0.38* | *-0.33* | *-0.30* | *-0.22* | *-0.34* | **-0.16** | *-0.31* | *-0.30* |
| Jet Fuel | **0.01** | **0.02** | **0.03** | **-0.01** | **-0.04** | **0.01** | **-0.03** | *-0.06* | *-0.04* | *-0.01* | *-0.03* | *-0.05* | **0.01** | *-0.03* | *-0.03* |
| Distillate Fuel Oil | **-0.10** | **-0.48** | **-0.54** | **-0.58** | **-0.44** | **-0.62** | **-0.74** | *-0.46* | *-0.44* | *-0.46* | *-0.55* | *-0.35* | **-0.43** | *-0.57* | *-0.45* |
| Residual Fuel Oil | **-0.02** | **-0.03** | **-0.07** | **-0.03** | **0.02** | **-0.03** | **-0.18** | *-0.09* | *-0.01* | *-0.05* | *-0.10* | *-0.10* | **-0.04** | *-0.07* | *-0.06* |
| Other Oils (g) | **-0.35** | **-0.38** | **-0.34** | **-0.39** | **-0.39** | **-0.38** | **-0.40** | *-0.41* | *-0.32* | *-0.40* | *-0.42* | *-0.43* | **-0.36** | *-0.40* | *-0.39* |
| Product Inventory Net Withdrawals | **0.26** | **-0.53** | **-0.24** | **0.41** | **0.60** | **-0.46** | **-0.28** | *0.36* | *0.30* | *-0.47* | *-0.28* | *0.38* | **-0.03** | *0.05* | *-0.02* |
| Total Supply | **18.87** | **19.15** | **19.47** | **19.23** | **19.08** | **18.75** | **19.00** | *19.02* | *19.02* | *18.90* | *19.16* | *19.11* | **19.18** | *18.96* | *19.05* |
| **Consumption (million barrels per day)** | | | | | | | | | | | | | | | |
| Natural Gas Liquids and Other Liquids | | | | | | | | | | | | | | | |
| Pentanes Plus | **0.09** | **0.07** | **0.11** | **0.10** | **0.10** | **0.11** | **0.10** | *0.10* | *0.09* | *0.08* | *0.09* | *0.10* | **0.09** | *0.10* | *0.09* |
| Liquefied Petroleum Gas | **2.46** | **1.89** | **2.03** | **2.32** | **2.45** | **1.95** | **1.99** | *2.25* | *2.44* | *1.98* | *2.05* | *2.29* | **2.17** | *2.16* | *2.19* |
| Unfinished Oils | **0.03** | **0.02** | **0.00** | **0.00** | **0.06** | **-0.03** | **0.01** | *0.01* | *0.01* | *0.00* | *0.00* | *0.02* | **0.01** | *0.01* | *0.01* |
| Finished Liquid Fuels | | | | | | | | | | | | | | | |
| Motor Gasoline | **8.63** | **9.19** | **9.22** | **8.92** | **8.60** | **8.86** | **8.98** | *8.78* | *8.59* | *8.90* | *9.08* | *8.83* | **8.99** | *8.81* | *8.85* |
| Jet Fuel | **1.38** | **1.47** | **1.48** | **1.40** | **1.36** | **1.47** | **1.47** | *1.39* | *1.36* | *1.45* | *1.47* | *1.39* | **1.43** | *1.42* | *1.42* |
| Distillate Fuel Oil | **3.79** | **3.71** | **3.75** | **3.94** | **3.95** | **3.75** | **3.72** | *3.95* | *3.97* | *3.76* | *3.74* | *4.01* | **3.80** | *3.84* | *3.87* |
| Residual Fuel Oil | **0.55** | **0.54** | **0.53** | **0.52** | **0.60** | **0.52** | **0.42** | *0.49* | *0.56* | *0.52* | *0.46* | *0.48* | **0.54** | *0.50* | *0.50* |
| Other Oils (f) | **1.93** | **2.25** | **2.35** | **2.04** | **1.96** | **2.11** | **2.29** | *2.04* | *1.99* | *2.19* | *2.27* | *2.01* | **2.14** | *2.10* | *2.12* |
| Total Consumption | **18.87** | **19.15** | **19.47** | **19.23** | **19.09** | **18.75** | **18.97** | *19.01* | *19.02* | *18.90* | *19.16* | *19.11* | **19.18** | *18.95* | *19.05* |
| **Total Liquid Fuels Net Imports** | **9.36** | **9.99** | **9.87** | **8.55** | **8.74** | **8.97** | **8.57** | *8.46* | *8.97* | *9.19* | *9.23* | *8.60* | **9.44** | *8.68* | *9.00* |
| **End-of-period Inventories (million barrels)** | | | | | | | | | | | | | | | |
| Commercial Inventory | | | | | | | | | | | | | | | |
| Crude Oil (excluding SPR) | **359.2** | **365.5** | **362.8** | **333.4** | **362.6** | **358.5** | **336.4** | *322.8* | *347.1* | *343.2* | *330.3* | *317.1* | **333.4** | *322.8* | *317.1* |
| Pentanes Plus | **9.4** | **11.5** | **11.9** | **12.5** | **10.8** | **15.3** | **17.0** | *14.0* | *13.0* | *14.4* | *15.0* | *12.5* | **12.5** | *14.0* | *12.5* |
| Liquefied Petroleum Gas | **72.9** | **119.9** | **141.4** | **108.3** | **68.7** | **105.3** | **131.9** | *100.5* | *70.4* | *110.1* | *137.6* | *103.7* | **108.3** | *100.5* | *103.7* |
| Unfinished Oils | **87.2** | **84.2** | **83.3** | **80.6** | **87.4** | **91.9** | **83.9** | *80.4* | *89.7* | *86.3* | *85.9* | *80.0* | **80.6** | *80.4* | *80.0* |
| Other HC/Oxygenates | **22.6** | **20.5** | **18.9** | **19.4** | **23.2** | **21.2** | **19.8** | *19.4* | *21.4* | *20.5* | *21.0* | *20.5* | **19.4** | *19.4* | *20.5* |
| Total Motor Gasoline | **225.0** | **215.6** | **219.3** | **219.4** | **214.9** | **215.2** | **213.9** | *219.0* | *219.1* | *217.9* | *212.5* | *220.8* | **219.4** | *219.0* | *220.8* |
| Finished Motor Gasoline | **81.9** | **71.8** | **70.2** | **63.3** | **60.8** | **56.4** | **56.3** | *55.7* | *53.2* | *56.1* | *56.1* | *56.4* | **63.3** | *55.7* | *56.4* |
| Motor Gasoline Blend Comp. | **143.1** | **143.8** | **149.0** | **156.2** | **154.1** | **158.8** | **157.6** | *163.2* | *165.9* | *161.8* | *156.4* | *164.4* | **156.2** | *163.2* | *164.4* |
| Jet Fuel | **42.2** | **44.8** | **46.8** | **43.2** | **40.0** | **42.3** | **46.4** | *43.6* | *43.6* | *43.8* | *44.5* | *42.0* | **43.2** | *43.6* | *42.0* |
| Distillate Fuel Oil | **146.8** | **157.9** | **166.7** | **164.3** | **148.5** | **143.7** | **156.9** | *158.4* | *139.1* | *147.8* | *157.5* | *158.6* | **164.3** | *158.4* | *158.6* |
| Residual Fuel Oil | **40.7** | **42.7** | **40.1** | **41.3** | **37.1** | **37.4** | **33.6** | *34.5* | *37.2* | *38.3* | *37.6* | *37.8* | **41.3** | *34.5* | *37.8* |
| Other Oils (f) | **54.4** | **52.3** | **43.4** | **45.0** | **49.6** | **50.5** | **45.3** | *45.9* | *54.9* | *51.9* | *44.6* | *45.4* | **45.0** | *45.9* | *45.4* |
| Total Commercial Inventory | **1,060** | **1,115** | **1,135** | **1,068** | **1,043** | **1,081** | **1,085** | *1,039* | *1,036* | *1,074* | *1,087* | *1,039* | **1,068** | *1,039* | *1,039* |
| Crude Oil in SPR | **727** | **727** | **727** | **727** | **727** | **727** | **696** | *696* | *696* | *696* | *696* | *696* | **727** | *696* | *696* |
| Heating Oil Reserve | **2.0** | **2.0** | **2.0** | **2.0** | **0.0** | **0.0** | **0.0** | *1.0* | *1.0* | *1.0* | *1.0* | *1.0* | **2.0** | *1.0* | *1.0* |

- = no data available

(a) Includes lease condensate.

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

(c) Net imports equals gross imports minus gross exports.

(d) Crude oil adjustment balances supply and consumption and was previously referred to as "Unaccounted for Crude Oil."

(e) Renewables and oxygenate production includes pentanes plus, oxygenates (excluding fuel ethanol), and renewable fuels.

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

(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.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Refinery and Blender Net Inputs** | | | | | | | | | | | | | | | |
| Crude Oil | **13.98** | **15.24** | **15.13** | **14.54** | **14.23** | **14.81** | **15.45** | *14.67* | *14.42* | *15.08* | *15.16* | *14.54* | **14.72** | *14.79* | *14.80* |
| Pentanes Plus | **0.14** | **0.15** | **0.16** | **0.17** | **0.17** | **0.18** | **0.16** | *0.17* | *0.16* | *0.17* | *0.17* | *0.17* | **0.16** | *0.17* | *0.17* |
| Liquefied Petroleum Gas | **0.30** | **0.24** | **0.24** | **0.37** | **0.34** | **0.26** | **0.26** | *0.38* | *0.33* | *0.25* | *0.25* | *0.37* | **0.29** | *0.31* | *0.30* |
| Other Hydrocarbons/Oxygenates | **0.88** | **0.97** | **0.98** | **0.99** | **0.96** | **1.01** | **0.98** | *0.93* | *0.95* | *0.97* | *0.95* | *0.95* | **0.96** | *0.97* | *0.96* |
| Unfinished Oils | **0.41** | **0.58** | **0.66** | **0.71** | **0.48** | **0.63** | **0.74** | *0.67* | *0.49* | *0.65* | *0.72* | *0.65* | **0.59** | *0.63* | *0.63* |
| Motor Gasoline Blend Components | **0.48** | **0.73** | **0.86** | **0.61** | **0.60** | **0.82** | **0.62** | *0.57* | *0.63* | *0.76* | *0.76* | *0.62* | **0.67** | *0.65* | *0.69* |
| 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 | **16.20** | **17.91** | **18.03** | **17.38** | **16.78** | **17.72** | **18.21** | *17.40* | *16.97* | *17.89* | *18.02* | *17.32* | **17.38** | *17.53* | *17.55* |
| **Refinery Processing Gain** | **1.03** | **1.06** | **1.10** | **1.08** | **1.03** | **1.06** | **1.09** | *1.05* | *1.00* | *1.02* | *1.05* | *1.04* | **1.07** | *1.06* | *1.03* |
| **Refinery and Blender Net Production** | | | | | | | | | | | | | | | |
| Liquefied Petroleum Gas | **0.58** | **0.86** | **0.75** | **0.44** | **0.52** | **0.81** | **0.74** | *0.43* | *0.53* | *0.82* | *0.76* | *0.42* | **0.66** | *0.63* | *0.63* |
| Finished Motor Gasoline | **8.59** | **9.13** | **9.36** | **9.14** | **8.76** | **9.12** | **9.22** | *9.11* | *8.84* | *9.17* | *9.25* | *9.13* | **9.06** | *9.05* | *9.10* |
| Jet Fuel | **1.35** | **1.47** | **1.47** | **1.38** | **1.37** | **1.49** | **1.55** | *1.42* | *1.40* | *1.46* | *1.50* | *1.41* | **1.42** | *1.46* | *1.44* |
| Distillate Fuel | **3.68** | **4.31** | **4.39** | **4.50** | **4.21** | **4.31** | **4.60** | *4.44* | *4.20* | *4.32* | *4.40* | *4.37* | **4.22** | *4.39* | *4.32* |
| Residual Fuel | **0.61** | **0.59** | **0.57** | **0.56** | **0.53** | **0.55** | **0.56** | *0.59* | *0.59* | *0.58* | *0.56* | *0.58* | **0.58** | *0.56* | *0.58* |
| Other Oils (a) | **2.40** | **2.61** | **2.59** | **2.44** | **2.41** | **2.50** | **2.63** | *2.46* | *2.42* | *2.56* | *2.61* | *2.45* | **2.51** | *2.50* | *2.51* |
| Total Refinery and Blender Net Production | **17.22** | **18.97** | **19.13** | **18.46** | **17.80** | **18.78** | **19.30** | *18.45* | *17.98* | *18.91* | *19.08* | *18.36* | **18.45** | *18.59* | *18.58* |
| **Refinery Distillation Inputs** | **14.32** | **15.66** | **15.65** | **15.06** | **14.69** | **15.22** | **15.82** | *15.05* | *14.76* | *15.39* | *15.50* | *14.90* | **15.18** | *15.20* | *15.14* |
| **Refinery Operable Distillation Capacity** | **17.59** | **17.57** | **17.59** | **17.55** | **17.70** | **17.74** | **17.74** | *17.74* | *17.74* | *17.74* | *17.74* | *17.74* | **17.57** | *17.73* | *17.74* |
| **Refinery Distillation Utilization Factor** | **0.81** | **0.89** | **0.89** | **0.86** | **0.83** | **0.86** | **0.89** | *0.85* | *0.83* | *0.87* | *0.87* | *0.84* | **0.86** | *0.86* | *0.85* |

- = no data available

(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.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Prices (cents per gallon)** | | | | | | | | | | | | | | | |
| **Refiner Wholesale Price** | **211** | **218** | **210** | **227** | **267** | **309** | **299** | *269* | *275* | *283* | *279* | *268* | **217** | *286* | *276* |
| **Gasoline Regular Grade Retail Prices Including Taxes** | | | | | | | | | | | | | | | |
| PADD 1 | **271** | **278** | **265** | **288** | **329** | **377** | **364** | *335* | *339* | *348* | *346* | *333* | **275** | *352* | *342* |
| PADD 2 | **265** | **276** | **270** | **286** | **326** | **380** | **364** | *329* | *333* | *344* | *342* | *326* | **274** | *350* | *336* |
| PADD 3 | **259** | **269** | **257** | **272** | **314** | **365** | **349** | *320* | *326* | *336* | *331* | *319* | **264** | *337* | *328* |
| PADD 4 | **264** | **284** | **279** | **279** | **311** | **365** | **355** | *335* | *331* | *345* | *347* | *331* | **276** | *342* | *339* |
| PADD 5 | **294** | **304** | **304** | **311** | **353** | **400** | **377** | *362* | *364* | *379* | *376* | *361* | **303** | *373* | *370* |
| U.S. Average | **271** | **281** | **272** | **288** | **329** | **380** | **363** | *336* | *340* | *350* | *348* | *334* | **278** | *352* | *343* |
| **Gasoline All Grades Including Taxes** | **277** | **286** | **277** | **294** | **335** | **385** | **369** | *341* | *345* | *356* | *353* | *339* | **283** | *358* | *349* |
| | | | | | | | | | | | | | | | |
| **End-of-period Inventories (million barrels)** | | | | | | | | | | | | | | | |
| **Total Gasoline Inventories** | | | | | | | | | | | | | | | |
| PADD 1 | **56.8** | **60.1** | **55.3** | **52.7** | **55.0** | **55.1** | **55.4** | *56.9* | *56.9* | *57.5* | *55.7* | *57.9* | **52.7** | *56.9* | *57.9* |
| PADD 2 | **55.2** | **49.3** | **52.5** | **49.1** | **50.5** | **49.5** | **49.3** | *49.9* | *51.3* | *50.5* | *50.0* | *50.8* | **49.1** | *49.9* | *50.8* |
| PADD 3 | **74.9** | **72.5** | **73.9** | **78.4** | **70.3** | **73.5** | **74.9** | *75.1* | *74.7* | *73.4* | *71.5* | *74.8* | **78.4** | *75.1* | *74.8* |
| PADD 4 | **5.9** | **6.4** | **6.5** | **7.0** | **6.5** | **6.6** | **6.0** | *6.7* | *6.5* | *6.2* | *6.3* | *6.9* | **7.0** | *6.7* | *6.9* |
| PADD 5 | **32.3** | **27.3** | **31.1** | **32.3** | **32.7** | **30.4** | **28.3** | *30.4* | *29.7* | *30.2* | *29.0* | *30.5* | **32.3** | *30.4* | *30.5* |
| U.S. Total | **225.0** | **215.6** | **219.3** | **219.4** | **214.9** | **215.2** | **213.9** | *219.0* | *219.1* | *217.9* | *212.5* | *220.8* | **219.4** | *219.0* | *220.8* |
| **Finished Gasoline Inventories** | | | | | | | | | | | | | | | |
| U.S. Total | **81.9** | **71.8** | **70.2** | **63.3** | **60.8** | **56.4** | **56.3** | *55.7* | *53.2* | *56.1* | *56.1* | *56.4* | **63.3** | *55.7* | *56.4* |
| **Gasoline Blending Components Inventories** | | | | | | | | | | | | | | | |
| U.S. Total | **143.1** | **143.8** | **149.0** | **156.2** | **154.1** | **158.8** | **157.6** | *163.2* | *165.9* | *161.8* | *156.4* | *164.4* | **156.2** | *163.2* | *164.4* |

- = 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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Supply (billion cubic feet per day)** | | | | | | | | | | | | | | | |
| Total Marketed Production | **60.59** | **61.27** | **61.97** | **63.46** | **63.83** | **65.96** | **66.63** | *67.49* | *66.80* | *67.19* | *67.47* | *68.00* | **61.83** | *65.99* | *67.37* |
| Alaska | **1.16** | **0.98** | **0.89** | **1.11** | **1.12** | **1.00** | **0.89** | *1.07* | *1.04* | *0.82* | *0.85* | *0.97* | **1.03** | *1.02* | *0.92* |
| Federal GOM (a) | **6.67** | **6.22** | **5.94** | **5.82** | **5.60** | **5.23** | **4.80** | *5.25* | *5.20* | *5.19* | *4.94* | *5.05* | **6.16** | *5.22* | *5.09* |
| Lower 48 States (excl GOM) | **52.77** | **54.07** | **55.14** | **56.54** | **57.10** | **59.73** | **60.94** | *61.17* | *60.57* | *61.18* | *61.68* | *61.99* | **54.64** | *59.75* | *61.36* |
| Total Dry Gas Production | **57.93** | **58.56** | **59.28** | **60.66** | **61.05** | **62.98** | **63.61** | *64.44* | *63.78* | *64.15* | *64.42* | *64.93* | **59.12** | *63.03* | *64.32* |
| Gross Imports | **11.42** | **9.65** | **9.95** | **10.00** | **11.07** | **8.99** | **9.03** | *9.01* | *10.25* | *8.62* | *8.79* | *8.62* | **10.25** | *9.52* | *9.07* |
| Pipeline | **9.87** | **8.44** | **9.01** | **8.97** | **9.84** | **7.94** | **8.52** | *8.27* | *9.34* | *7.88* | *8.36* | *7.91* | **9.07** | *8.64* | *8.37* |
| LNG | **1.55** | **1.22** | **0.94** | **1.03** | **1.23** | **1.05** | **0.51** | *0.74* | *0.91* | *0.74* | *0.42* | *0.71* | **1.18** | *0.88* | *0.69* |
| Gross Exports | **3.12** | **2.77** | **2.71** | **3.85** | **4.50** | **4.16** | **3.64** | *4.05* | *4.47* | *4.13* | *3.98* | *4.29* | **3.11** | *4.08* | *4.22* |
| Net Imports | **8.29** | **6.89** | **7.23** | **6.14** | **6.57** | **4.83** | **5.39** | *4.96* | *5.78* | *4.48* | *4.81* | *4.32* | **7.13** | *5.43* | *4.85* |
| Supplemental Gaseous Fuels | **0.20** | **0.16** | **0.19** | **0.19** | **0.20** | **0.14** | **0.17** | *0.19* | *0.19* | *0.16* | *0.17* | *0.19* | **0.18** | *0.18* | *0.18* |
| Net Inventory Withdrawals | **16.26** | **-11.94** | **-8.22** | **4.08** | **16.97** | **-10.45** | **-9.55** | *2.94* | *14.70* | *-11.59* | *-9.27* | *4.22* | **-0.01** | *-0.08* | *-0.50* |
| Total Supply | **82.68** | **53.67** | **58.48** | **71.07** | **84.80** | **57.51** | **59.62** | *72.53* | *84.45* | *57.20* | *60.13* | *73.65* | **66.42** | *68.56* | *68.85* |
| Balancing Item (b) | **0.28** | **0.70** | **-0.58** | **-2.08** | **-0.89** | **-1.04** | **-1.70** | *-1.67* | *-0.44* | *-0.94* | *-1.22* | *-2.03* | **-0.43** | *-1.33* | *-1.16* |
| Total Primary Supply | **82.95** | **54.38** | **57.90** | **68.99** | **83.90** | **56.47** | **57.92** | *70.86* | *84.01* | *56.26* | *58.91* | *71.62* | **65.99** | *67.23* | *67.69* |
| **Consumption (billion cubic feet per day)** | | | | | | | | | | | | | | | |
| Residential | **26.46** | **7.32** | **3.75** | **16.73** | **26.14** | **7.51** | **3.63** | *17.25* | *25.86* | *6.79* | *3.63* | *17.44* | **13.51** | *13.58* | *13.41* |
| Commercial | **14.59** | **5.70** | **4.22** | **10.46** | **14.72** | **5.87** | **4.17** | *10.61* | *14.69* | *5.82* | *4.09* | *10.65* | **8.72** | *8.82* | *8.81* |
| Industrial | **19.70** | **17.12** | **17.01** | **18.53** | **20.20** | **17.75** | **17.27** | *18.73* | *20.22* | *17.70* | *17.41* | *19.01* | **18.08** | *18.48* | *18.58* |
| Electric Power (c) | **16.37** | **19.11** | **27.66** | **17.62** | **16.79** | **19.87** | **27.23** | *18.28* | *16.87* | *20.28* | *28.07* | *18.50* | **20.21** | *20.57* | *20.94* |
| Lease and Plant Fuel | **3.58** | **3.62** | **3.66** | **3.75** | **3.77** | **3.89** | **3.93** | *3.98* | *3.94* | *3.97* | *3.98* | *4.01* | **3.65** | *3.90* | *3.98* |
| Pipeline and Distribution Use | **2.17** | **1.42** | **1.52** | **1.81** | **2.20** | **1.48** | **1.60** | *1.92* | *2.34* | *1.61* | *1.63* | *1.92* | **1.73** | *1.80* | *1.88* |
| 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 | **82.95** | **54.38** | **57.90** | **68.99** | **83.90** | **56.47** | **57.92** | *70.86* | *84.01* | *56.26* | *58.91* | *71.62* | **65.99** | *67.23* | *67.69* |
| **End-of-period Inventories (billion cubic feet)** | | | | | | | | | | | | | | | |
| Working Gas Inventory | **1,662** | **2,741** | **3,500** | **3,107** | **1,581** | **2,530** | **3,409** | *3,138* | *1,801* | *2,856* | *3,708* | *3,320* | **3,107** | *3,138* | *3,320* |
| Producing Region (d) | **627** | **962** | **1,092** | **1,077** | **738** | **992** | **1,060** | *1,070* | *774* | *1,042* | *1,167* | *1,108* | **1,077** | *1,070* | *1,108* |
| East Consuming Region (d) | **744** | **1,330** | **1,913** | **1,591** | **618** | **1,188** | **1,881** | *1,668* | *763* | *1,398* | *2,049* | *1,767* | **1,591** | *1,668* | *1,767* |
| West Consuming Region (d) | **291** | **450** | **495** | **439** | **225** | **350** | **468** | *401* | *264* | *415* | *492* | *445* | **439** | *401* | *445* |

- = no data available

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

(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.

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

(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).

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Wholesale/Spot** | | | | | | | | | | | | | | | |
| U.S. Average Wellhead ..... | **4.79** | **4.07** | **4.11** | **3.67** | **4.06** | **4.10** | **4.03** | *3.71* | *3.83* | *3.85* | *3.90* | *4.12* | **4.15** | *3.97* | *3.93* |
| Henry Hub Spot Price ..... | **5.30** | **4.45** | **4.41** | **3.91** | **4.31** | **4.50** | **4.25** | *4.03* | *4.31* | *4.37* | *4.39* | *4.74* | **4.52** | *4.27* | *4.45* |
| **Residential** | | | | | | | | | | | | | | | |
| New England ..... | **14.33** | **15.56** | **17.73** | **14.29** | **13.99** | **14.28** | **17.84** | *14.67* | *13.99* | *14.88* | *18.13* | *15.39* | **14.78** | *14.50* | *14.83* |
| Middle Atlantic ..... | **12.79** | **15.17** | **18.46** | **12.74** | **11.85** | **14.08** | **18.23** | *13.65* | *12.37* | *13.90* | *18.25* | *14.38* | **13.46** | *13.10* | *13.55* |
| E. N. Central ..... | **9.50** | **12.24** | **16.66** | **9.37** | **8.87** | **10.97** | **16.37** | *9.58* | *8.93* | *11.27* | *16.75* | *10.54* | **10.23** | *9.83* | *10.17* |
| W. N. Central ..... | **9.08** | **11.90** | **16.65** | **9.34** | **8.83** | **11.17** | **17.21** | *9.29* | *8.83* | *11.42* | *17.57* | *10.07* | **9.92** | *9.76* | *10.01* |
| S. Atlantic ..... | **12.61** | **18.74** | **24.07** | **12.28** | **11.97** | **17.54** | **23.93** | *14.60* | *12.74* | *17.48* | *24.45* | *15.50* | **13.71** | *14.16* | *14.87* |
| E. S. Central ..... | **10.50** | **14.81** | **17.75** | **10.73** | **9.91** | **13.69** | **19.06** | *12.17* | *11.26* | *14.53* | *19.10* | *13.25* | **11.33** | *11.45* | *12.58* |
| W. S. Central ..... | **9.80** | **14.06** | **18.30** | **10.22** | **8.60** | **14.31** | **18.82** | *10.81* | *9.24* | *14.03* | *19.01* | *11.46* | **11.01** | *10.63* | *11.23* |
| Mountain ..... | **9.24** | **9.83** | **13.03** | **9.25** | **8.87** | **9.77** | **13.84** | *8.80* | *8.64* | *9.61* | *13.40* | *9.63* | **9.63** | *9.37* | *9.45* |
| Pacific ..... | **10.43** | **10.47** | **11.10** | **9.89** | **9.98** | **10.91** | **11.36** | *9.73* | *9.92* | *10.17* | *10.97* | *10.31* | **10.37** | *10.27* | *10.20* |
| U.S. Average ..... | **10.59** | **12.55** | **15.49** | **10.56** | **9.97** | **11.95** | **16.12** | *11.21* | *10.34* | *12.24* | *16.36* | *12.00* | **11.19** | *11.05* | *11.53* |
| **Commercial** | | | | | | | | | | | | | | | |
| New England ..... | **11.68** | **11.68** | **11.45** | **11.01** | **11.14** | **10.64** | **10.72** | *11.67* | *11.75* | *11.94* | *12.06* | *12.34* | **11.47** | *11.16* | *11.96* |
| Middle Atlantic ..... | **10.76** | **9.77** | **9.51** | **9.70** | **9.85** | **9.55** | **9.19** | *10.40* | *10.09* | *9.88* | *9.88* | *10.93* | **10.15** | *9.88* | *10.26* |
| E. N. Central ..... | **8.97** | **9.25** | **9.67** | **8.14** | **8.42** | **8.98** | **9.86** | *8.76* | *8.61* | *9.12* | *9.61* | *9.18* | **8.82** | *8.71* | *8.92* |
| W. N. Central ..... | **8.36** | **8.38** | **9.53** | **7.70** | **7.93** | **8.44** | **9.69** | *7.83* | *7.89* | *8.22* | *9.73* | *8.20* | **8.28** | *8.12* | *8.16* |
| S. Atlantic ..... | **10.53** | **10.74** | **10.74** | **9.50** | **9.80** | **10.82** | **11.42** | *11.06* | *10.63* | *11.05* | *11.38* | *11.47* | **10.28** | *10.64* | *11.06* |
| E. S. Central ..... | **9.45** | **10.21** | **10.41** | **9.14** | **8.80** | **9.55** | **10.80** | *10.42* | *9.65* | *10.18* | *10.82* | *10.93* | **9.57** | *9.56* | *10.19* |
| W. S. Central ..... | **8.52** | **9.09** | **9.19** | **7.62** | **7.34** | **8.58** | **8.95** | *8.57* | *7.85* | *8.49* | *9.38* | *9.11* | **8.50** | *8.12* | *8.50* |
| Mountain ..... | **8.33** | **8.11** | **8.89** | **8.12** | **7.99** | **7.98** | **9.04** | *7.95* | *7.66* | *7.56* | *8.67* | *8.51* | **8.29** | *8.09* | *7.98* |
| Pacific ..... | **9.48** | **8.97** | **9.21** | **9.10** | **9.15** | **9.19** | **9.37** | *8.95* | *8.81* | *8.37* | *8.79* | *9.39* | **9.21** | *9.14* | *8.87* |
| U.S. Average ..... | **9.34** | **9.26** | **9.64** | **8.66** | **8.74** | **9.14** | **9.80** | *9.44* | *9.13* | *9.30* | *9.89* | *9.92* | **9.15** | *9.14* | *9.48* |
| **Industrial** | | | | | | | | | | | | | | | |
| New England ..... | **11.41** | **9.74** | **9.07** | **10.21** | **10.67** | **9.81** | **9.43** | *10.40* | *11.10* | *10.48* | *9.77* | *11.22* | **10.37** | *10.21* | *10.80* |
| Middle Atlantic ..... | **10.04** | **9.01** | **9.01** | **9.54** | **9.58** | **9.27** | **9.04** | *10.21* | *10.00* | *8.97* | *9.15* | *10.92* | **9.60** | *9.65* | *9.95* |
| E. N. Central ..... | **7.98** | **7.01** | **6.96** | **6.88** | **7.39** | **7.19** | **7.20** | *7.10* | *7.47* | *7.37* | *7.48* | *7.90* | **7.38** | *7.24* | *7.58* |
| W. N. Central ..... | **6.73** | **5.65** | **5.53** | **5.74** | **6.28** | **5.78** | **5.47** | *5.62* | *6.24* | *5.47* | *5.36* | *6.15* | **6.00** | *5.79* | *5.87* |
| S. Atlantic ..... | **7.61** | **6.14** | **6.28** | **6.09** | **6.52** | **6.24** | **6.26** | *6.42* | *6.57* | *6.32* | *6.40* | *7.14* | **6.61** | *6.37* | *6.63* |
| E. S. Central ..... | **7.21** | **5.64** | **5.61** | **5.44** | **5.83** | **5.58** | **5.55** | *5.97* | *6.21* | *5.81* | *5.99* | *6.79* | **6.06** | *5.75* | *6.23* |
| W. S. Central ..... | **5.58** | **4.36** | **4.59** | **3.98** | **4.24** | **4.46** | **4.58** | *4.39* | *4.39* | *4.64* | *4.78* | *4.92* | **4.62** | *4.42* | *4.69* |
| Mountain ..... | **7.32** | **6.36** | **6.59** | **6.40** | **6.81** | **6.42** | **7.20** | *7.35* | *7.26* | *6.45* | *7.24* | *8.13* | **6.72** | *6.94* | *7.31* |
| Pacific ..... | **7.77** | **7.01** | **7.01** | **6.92** | **7.45** | **7.22** | **7.37** | *7.70* | *7.81* | *7.02* | *7.44* | *8.37* | **7.21** | *7.45* | *7.71* |
| U.S. Average ..... | **6.51** | **4.98** | **5.07** | **4.89** | **5.41** | **5.13** | **5.15** | *5.37* | *5.64* | *5.28* | *5.32* | *5.95* | **5.40** | *5.27* | *5.56* |

- = 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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Supply (million short tons)** | | | | | | | | | | | | | | | |
| Production | **265.3** | **265.1** | **278.2** | **276.6** | **273.6** | **258.1** | ***267.0*** | *269.8* | *272.4* | *250.7* | *256.7* | *265.3* | **1085.3** | *1068.6* | *1045.1* |
| Appalachia | **84.4** | **84.4** | **83.5** | **83.8** | **87.3** | **84.2** | ***81.4*** | *85.6* | *81.4* | *77.2* | *79.1* | *82.0* | **336.1** | *338.5* | *319.7* |
| Interior | **37.7** | **37.8** | **41.4** | **40.7** | **41.5** | **38.3** | ***38.5*** | *40.0* | *38.7* | *35.9* | *34.8* | *36.5* | **157.6** | *158.3* | *145.8* |
| Western | **143.3** | **142.8** | **153.3** | **152.1** | **144.8** | **135.7** | ***147.1*** | *144.2* | *152.3* | *137.7* | *142.8* | *146.8* | **591.6** | *571.8* | *579.6* |
| Primary Inventory Withdrawals | **-2.4** | **1.5** | **6.2** | **0.3** | **4.8** | **-1.7** | ***1.0*** | *1.2* | *-4.6* | *0.5* | *3.8* | *-0.2* | **5.6** | *5.2* | *-0.5* |
| Imports | **4.8** | **5.1** | **4.7** | **4.8** | **3.4** | **3.4** | ***3.9*** | *4.5* | *4.4* | *4.4* | *5.2* | *4.8* | **19.4** | *15.1* | *18.7* |
| Exports | **17.8** | **22.0** | **21.1** | **20.9** | **26.6** | **27.0** | ***22.8*** | *22.1* | *19.5* | *22.9* | *22.2* | *21.4* | **81.7** | *98.5* | *86.0* |
| Metallurgical Coal | **14.2** | **15.6** | **13.0** | **13.3** | **17.2** | **17.8** | ***14.8*** | *15.0* | *15.2* | *15.7* | *13.9* | *14.2* | **56.1** | *64.8* | *59.0* |
| Steam Coal | **3.6** | **6.4** | **8.0** | **7.6** | **9.5** | **9.1** | ***8.1*** | *7.1* | *4.3* | *7.2* | *8.4* | *7.2* | **25.6** | *33.7* | *27.1* |
| Total Primary Supply | **249.9** | **249.7** | **268.0** | **260.8** | **255.2** | **232.8** | ***249.0*** | *253.4* | *252.7* | *232.6* | *243.4* | *248.4* | **1028.5** | *990.5* | *977.2* |
| Secondary Inventory Withdrawals | **13.1** | **-3.8** | **18.1** | **-12.5** | **7.2** | **2.3** | ***20.6*** | *-4.4* | *7.9* | *-9.8* | *12.7* | *-3.7* | **14.9** | *25.7* | *7.1* |
| Waste Coal (a) | **3.1** | **3.3** | **3.2** | **3.2** | **3.2** | **3.2** | ***3.2*** | *3.2* | *3.2* | *3.2* | *3.2* | *3.2* | **12.7** | *12.7* | *12.8* |
| Total Supply | **266.1** | **249.1** | **289.4** | **251.6** | **265.6** | **238.3** | ***272.8*** | *252.1* | *263.8* | *226.0* | *259.4* | *247.9* | **1056.1** | *1028.9* | *997.1* |
| **Consumption (million short tons)** | | | | | | | | | | | | | | | |
| Coke Plants | **4.9** | **5.4** | **5.5** | **5.4** | **5.2** | **5.7** | ***6.7*** | *6.4* | *6.4* | *6.0* | *6.7* | *6.4* | **21.1** | *24.0* | *25.5* |
| Electric Power Sector (b) | **246.3** | **229.8** | **267.9** | **231.6** | **235.1** | **223.7** | ***265.1*** | *233.0* | *244.1* | *207.1* | *240.1* | *228.4* | **975.6** | *957.0* | *919.6* |
| Retail and Other Industry | **13.4** | **12.3** | **12.8** | **13.2** | **14.4** | **12.4** | ***12.3*** | *12.7* | *13.4* | *12.9* | *12.6* | *13.2* | **51.6** | *51.7* | *52.1* |
| Residential and Commercial | **1.0** | **0.6** | **0.6** | **0.8** | **1.0** | **0.6** | ***0.6*** | *0.8* | *1.1* | *0.8* | *0.8* | *1.2* | **3.1** | *3.0* | *3.9* |
| Other Industrial | **12.4** | **11.7** | **12.1** | **12.4** | **13.3** | **11.8** | ***11.7*** | *11.9* | *12.3* | *12.1* | *11.7* | *12.0* | **48.5** | *48.7* | *48.1* |
| Total Consumption | **264.6** | **247.4** | **286.1** | **250.1** | **254.7** | **241.8** | ***284.1*** | *252.1* | *263.8* | *226.0* | *259.4* | *247.9* | **1048.3** | *1032.7* | *997.1* |
| Discrepancy (c) | **1.5** | **1.7** | **3.2** | **1.4** | **11.0** | **-3.5** | ***-11.3*** | *0.0* | *0.0* | *0.0* | *0.0* | *0.0* | **7.8** | *-3.8* | *0.0* |
| **End-of-period Inventories (million short tons)** | | | | | | | | | | | | | | | |
| Primary Inventories (d) | **50.2** | **48.7** | **42.4** | **42.2** | **37.3** | **39.1** | ***38.1*** | *36.9* | *41.5* | *41.0* | *37.2* | *37.4* | **42.2** | *36.9* | *37.4* |
| Secondary Inventories | **184.0** | **187.8** | **169.7** | **182.2** | **174.9** | **172.6** | ***152.0*** | *156.5* | *148.6* | *158.4* | *145.7* | *149.4* | **182.2** | *156.5* | *149.4* |
| Electric Power Sector | **177.8** | **181.1** | **162.8** | **175.2** | **167.0** | **166.0** | ***144.8*** | *148.9* | *142.0* | *151.1* | *137.8* | *141.2* | **175.2** | *148.9* | *141.2* |
| Retail and General Industry | **4.2** | **4.3** | **4.5** | **4.5** | **5.5** | **4.1** | ***4.6*** | *4.9* | *4.2* | *4.5* | *5.1* | *5.4* | **4.5** | *4.9* | *5.4* |
| Coke Plants | **1.6** | **2.0** | **1.9** | **1.9** | **2.0** | **2.1** | ***2.0*** | *2.1* | *1.8* | *2.2* | *2.2* | *2.2* | **1.9** | *2.1* | *2.2* |
| **Coal Market Indicators** | | | | | | | | | | | | | | | |
| Coal Miner Productivity (Tons per hour) | **5.58** | **5.58** | **5.59** | **5.60** | **5.57** | **5.57** | ***5.57*** | *5.57* | *5.70* | *5.70* | *5.70* | *5.70* | **5.59** | *5.57* | *5.70* |
| Total Raw Steel Production (Million short tons per day) | **0.234** | **0.253** | **0.245** | **0.237** | **0.257** | **0.261** | ***0.266*** | *0.254* | *0.267* | *0.279* | *0.268* | *0.259* | **0.242** | *0.260* | *0.268* |
| Cost of Coal to Electric Utilities (Dollars per million Btu) | **2.26** | **2.26** | **2.28** | **2.25** | **2.35** | **2.41** | ***2.42*** | *2.36* | *2.43* | *2.41* | *2.37* | *2.33* | **2.26** | *2.39* | *2.39* |

- = no data available

(a) Waste coal includes waste coal and cloal slurry reprocessed into briquettes.

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

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

(d) Primary stocks are held at the mines and distribution points.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

**Table 7a. U.S. Electricity Industry Overview**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Electricity Supply (billion kilowatthours per day)** | | | | | | | | | | | | | | | |
| Electricity Generation | **11.01** | **10.90** | **12.65** | **10.58** | **11.04** | **10.92** | **12.80** | *10.67* | *11.16* | *10.91* | *12.31* | *10.81* | **11.29** | *11.36* | *11.30* |
| Electric Power Sector (a) | **10.61** | **10.50** | **12.22** | **10.19** | **10.65** | **10.53** | **12.39** | *10.28* | *10.74* | *10.51* | *11.87* | *10.40* | **10.88** | *10.97* | *10.88* |
| Industrial Sector | **0.38** | **0.38** | **0.40** | **0.37** | **0.37** | **0.37** | **0.39** | *0.37* | *0.39* | *0.38* | *0.41* | *0.39* | **0.38** | *0.37* | *0.39* |
| Commercial 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* |
| Net Imports | **0.12** | **0.07** | **0.06** | **0.04** | **0.08** | **0.10** | **0.14** | *0.09* | *0.08* | *0.08* | *0.11* | *0.07* | **0.07** | *0.10* | *0.08* |
| Total Supply | **11.13** | **10.97** | **12.71** | **10.62** | **11.12** | **11.02** | **12.94** | *10.76* | *11.24* | *10.99* | *12.41* | *10.88* | **11.36** | *11.46* | *11.38* |
| Losses and Unaccounted for (b) | **0.52** | **0.95** | **0.70** | **0.70** | **0.52** | **0.88** | **0.97** | *0.73* | *0.59* | *0.89* | *0.77* | *0.75* | **0.72** | *0.78* | *0.75* |
| **Electricity Consumption (billion kilowatthours per day)** | | | | | | | | | | | | | | | |
| Retail Sales | **10.25** | **9.66** | **11.62** | **9.56** | **10.25** | **9.79** | **11.59** | *9.68* | *10.28* | *9.74* | *11.25* | *9.77* | **10.27** | *10.33* | *10.26* |
| Residential Sector | **4.26** | **3.41** | **4.74** | **3.48** | **4.15** | **3.51** | **4.73** | *3.52* | *4.20* | *3.43* | *4.39* | *3.57* | **3.97** | *3.98* | *3.90* |
| Commercial Sector | **3.45** | **3.57** | **4.09** | **3.45** | **3.45** | **3.58** | **4.07** | *3.53* | *3.46* | *3.59* | *4.02* | *3.52* | **3.64** | *3.66* | *3.65* |
| Industrial Sector | **2.51** | **2.66** | **2.76** | **2.61** | **2.62** | **2.68** | **2.78** | *2.61* | *2.60* | *2.70* | *2.81* | *2.66* | **2.64** | *2.67* | *2.69* |
| 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 (c) | **0.37** | **0.36** | **0.39** | **0.36** | **0.35** | **0.35** | **0.37** | *0.35* | *0.37* | *0.37* | *0.40* | *0.37* | **0.37** | *0.36* | *0.38* |
| Total Consumption | **10.61** | **10.02** | **12.01** | **9.92** | **10.60** | **10.14** | **11.96** | *10.03* | *10.65* | *10.11* | *11.64* | *10.14* | **10.64** | *10.69* | *10.64* |
| **Prices** | | | | | | | | | | | | | | | |
| **Power Generation Fuel Costs (dollars per million Btu)** | | | | | | | | | | | | | | | |
| Coal | **2.26** | **2.26** | **2.28** | **2.25** | **2.35** | **2.41** | **2.42** | *2.36* | *2.43* | *2.41* | *2.37* | *2.33* | **2.26** | *2.39* | *2.39* |
| Natural Gas | **6.06** | **4.89** | **4.88** | **4.69** | **5.05** | **4.94** | **4.91** | *4.78* | *5.01* | *4.95* | *4.94* | *5.25* | **5.08** | *4.92* | *5.03* |
| Residual Fuel Oil | **12.10** | **12.36** | **12.36** | **14.19** | **15.88** | **18.32** | **18.33** | *17.81* | *18.19* | *18.38* | *18.32* | *18.28* | **12.63** | *17.67* | *18.30* |
| Distillate Fuel Oil | **15.84** | **16.48** | **16.18** | **17.94** | **20.99** | **23.55** | **23.49** | *22.89* | *22.90* | *22.82* | *22.80* | *23.17* | **16.60** | *22.72* | *22.93* |
| **End-Use Prices (cents per kilowatthour)** | | | | | | | | | | | | | | | |
| Residential Sector | **10.88** | **11.90** | **12.02** | **11.50** | **11.24** | **11.97** | **12.23** | *11.70* | *11.21* | *12.15* | *12.46* | *11.82* | **11.58** | *11.80* | *11.91* |
| Commercial Sector | **9.87** | **10.30** | **10.71** | **10.06** | **10.01** | **10.38** | **10.79** | *10.18* | *10.03* | *10.47* | *10.99* | *10.32* | **10.26** | *10.36* | *10.47* |
| Industrial Sector | **6.53** | **6.75** | **7.17** | **6.67** | **6.68** | **6.85** | **7.29** | *6.79* | *6.62* | *6.86* | *7.28* | *6.78* | **6.79** | *6.91* | *6.89* |

- = no data available

Prices are not adjusted for inflation.

(a) Electric utilities and independent power producers.

(b) Includes transmission and distribution losses, data collection time-frame differences, and estimation error.

(c) 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 EIA *Monthly Energy Review* .

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Residential Sector** | | | | | | | | | | | | | | | |
| New England | **141** | **114** | **150** | **122** | **145** | **116** | **147** | *126* | *149* | *119* | *144* | *128* | **132** | *134* | *135* |
| Middle Atlantic | **394** | **326** | **444** | **335** | **405** | **329** | **420** | *346* | *417* | *334* | *407* | *350* | **375** | *375* | *377* |
| E. N. Central | **579** | **456** | **639** | **481** | **577** | **456** | **615** | *484* | *584* | *456* | *569* | *490* | **539** | *533* | *525* |
| W. N. Central | **337** | **250** | **350** | **261** | **331** | **249** | **348** | *268* | *334* | *252* | *325* | *274* | **300** | *299* | *296* |
| S. Atlantic | **1,129** | **878** | **1,232** | **891** | **1,042** | **910** | **1,187** | *881* | *1,070* | *865* | *1,109* | *887* | **1,032** | *1,005* | *983* |
| E. S. Central | **405** | **291** | **428** | **294** | **373** | **296** | **406** | *286* | *373* | *285* | *385* | *296* | **354** | *340* | *335* |
| W. S. Central | **595** | **514** | **771** | **467** | **574** | **562** | **857** | *477* | *554* | *510* | *712* | *486* | **587** | *618* | *566* |
| Mountain | **243** | **227** | **325** | **225** | **248** | **227** | **327** | *232* | *253* | *236* | *321* | *238* | **255** | *258* | *262* |
| Pacific contiguous | **424** | **346** | **391** | **390** | **441** | **353** | **408** | *402* | *447* | *358* | *407* | *405* | **388** | *401* | *404* |
| AK and HI | **15** | **13** | **13** | **15** | **15** | **13** | **13** | *15* | *15* | *13* | *13* | *15* | **14** | *14* | *14* |
| Total | **4,261** | **3,414** | **4,742** | **3,482** | **4,152** | **3,511** | **4,729** | *3,517* | *4,196* | *3,428* | *4,393* | *3,569* | **3,975** | *3,977* | *3,897* |
| **Commercial Sector** | | | | | | | | | | | | | | | |
| New England | **123** | **120** | **137** | **119** | **123** | **119** | **135** | *123* | *126* | *121* | *133* | *120* | **125** | *125* | *125* |
| Middle Atlantic | **443** | **434** | **506** | **425** | **435** | **421** | **494** | *434* | *443* | *430* | *488* | *428* | **452** | *446* | *447* |
| E. N. Central | **490** | **491** | **555** | **481** | **497** | **486** | **555** | *489* | *496* | *494* | *545* | *484* | **504** | *507* | *505* |
| W. N. Central | **266** | **267** | **302** | **261** | **268** | **262** | **300** | *267* | *264* | *266* | *297* | *263* | **274** | *274* | *272* |
| S. Atlantic | **792** | **852** | **965** | **804** | **789** | **860** | **957** | *824* | *792* | *858* | *966* | *832* | **853** | *858* | *863* |
| E. S. Central | **220** | **228** | **271** | **213** | **216** | **226** | **265** | *213* | *213* | *225* | *260* | *211* | **233** | *230* | *228* |
| W. S. Central | **442** | **479** | **578** | **450** | **447** | **503** | **582** | *461* | *448* | *493* | *550* | *468* | **487** | *498* | *490* |
| Mountain | **234** | **251** | **285** | **241** | **237** | **250** | **286** | *247* | *236* | *254* | *287* | *248* | **253** | *255* | *256* |
| Pacific contiguous | **420** | **432** | **478** | **442** | **425** | **432** | **478** | *451* | *426* | *432* | *479* | *447* | **443** | *447* | *446* |
| AK and HI | **17** | **16** | **17** | **17** | **18** | **17** | **17** | *17* | *17* | *17* | *17* | *18* | **17** | *17* | *17* |
| Total | **3,447** | **3,571** | **4,092** | **3,453** | **3,454** | **3,575** | **4,068** | *3,527* | *3,461* | *3,590* | *4,022* | *3,520* | **3,642** | *3,657* | *3,649* |
| **Industrial Sector** | | | | | | | | | | | | | | | |
| New England | **76** | **77** | **83** | **76** | **75** | **76** | **81** | *75* | *75* | *76* | *81* | *74* | **78** | *77* | *76* |
| Middle Atlantic | **178** | **186** | **192** | **181** | **195** | **193** | **192** | *182* | *190* | *195* | *194* | *185* | **184** | *190* | *191* |
| E. N. Central | **523** | **544** | **551** | **534** | **539** | **541** | **554** | *528* | *531* | *544* | *555* | *535* | **538** | *541* | *541* |
| W. N. Central | **222** | **235** | **245** | **233** | **233** | **236** | **250** | *233* | *234* | *243* | *253* | *241* | **234** | *238* | *243* |
| S. Atlantic | **360** | **397** | **406** | **379** | **377** | **399** | **404** | *373* | *368* | *401* | *412* | *382* | **385** | *388* | *391* |
| E. S. Central | **336** | **334** | **334** | **334** | **343** | **327** | **337** | *345* | *347* | *337* | *345* | *351* | **334** | *338* | *345* |
| W. S. Central | **397** | **432** | **464** | **421** | **420** | **445** | **461** | *423* | *420* | *446* | *469* | *429* | **429** | *437* | *441* |
| Mountain | **195** | **209** | **232** | **207** | **204** | **217** | **238** | *211* | *206* | *218* | *241* | *213* | **211** | *217* | *219* |
| Pacific contiguous | **214** | **228** | **245** | **229** | **221** | **234** | **245** | *229* | *217* | *229* | *247* | *230* | **229** | *232* | *231* |
| AK and HI | **13** | **14** | **14** | **14** | **14** | **13** | **14** | *13* | *13* | *14* | *14* | *14* | **14** | *14* | *14* |
| Total | **2,514** | **2,655** | **2,765** | **2,607** | **2,620** | **2,682** | **2,776** | *2,613* | *2,601* | *2,702* | *2,810* | *2,655* | **2,636** | *2,673* | *2,692* |
| **Total All Sectors** (a) | | | | | | | | | | | | | | | |
| New England | **342** | **312** | **371** | **318** | **345** | **312** | **365** | *325* | *351* | *317* | *360* | *324* | **336** | *337* | *338* |
| Middle Atlantic | **1,027** | **957** | **1,152** | **952** | **1,047** | **955** | **1,117** | *973* | *1,062* | *970* | *1,102* | *976* | **1,022** | *1,023* | *1,028* |
| E. N. Central | **1,594** | **1,492** | **1,746** | **1,498** | **1,614** | **1,485** | **1,727** | *1,503* | *1,613* | *1,495* | *1,670* | *1,511* | **1,583** | *1,582* | *1,572* |
| W. N. Central | **825** | **752** | **897** | **755** | **832** | **747** | **898** | *768* | *833* | *761* | *875* | *778* | **808** | *812* | *812* |
| S. Atlantic | **2,286** | **2,130** | **2,606** | **2,078** | **2,211** | **2,173** | **2,552** | *2,082* | *2,234* | *2,127* | *2,491* | *2,105* | **2,275** | *2,255* | *2,240* |
| E. S. Central | **960** | **854** | **1,032** | **842** | **932** | **849** | **1,008** | *844* | *933* | *847* | *990* | *858* | **922** | *908* | *907* |
| W. S. Central | **1,433** | **1,425** | **1,813** | **1,338** | **1,441** | **1,510** | **1,900** | *1,362* | *1,422* | *1,449* | *1,731* | *1,384* | **1,503** | *1,554* | *1,497* |
| Mountain | **672** | **687** | **842** | **673** | **688** | **693** | **851** | *689* | *694* | *709* | *848* | *700* | **719** | *731* | *738* |
| Pacific contiguous | **1,061** | **1,008** | **1,117** | **1,063** | **1,089** | **1,022** | **1,133** | *1,086* | *1,093* | *1,021* | *1,136* | *1,084* | **1,063** | *1,083* | *1,084* |
| AK and HI | **45** | **43** | **44** | **45** | **46** | **43** | **44** | *45* | *46* | *43* | *45* | *46* | **45** | *45* | *45* |
| Total | **10,246** | **9,660** | **11,620** | **9,562** | **10,247** | **9,789** | **11,594** | *9,678* | *10,280* | *9,741* | *11,248* | *9,766* | **10,274** | *10,329* | *10,260* |

- = no data available

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

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Residential Sector** | | | | | | | | | | | | | | | |
| New England | **16.56** | **16.60** | **16.46** | **16.43** | **15.99** | **16.13** | **16.80** | *16.75* | *16.55* | *16.76* | *16.70* | *16.61* | **16.51** | *16.43* | *16.65* |
| Middle Atlantic | **14.82** | **16.16** | **16.65** | **15.39** | **15.20** | **15.99** | **16.53** | *15.11* | *14.84* | *16.17* | *17.12* | *15.56* | **15.79** | *15.73* | *15.92* |
| E. N. Central | **10.50** | **11.88** | **11.82** | **11.38** | **11.01** | **12.04** | **12.15** | *11.61* | *11.00* | *12.22* | *12.26* | *11.71* | **11.39** | *11.70* | *11.78* |
| W. N. Central | **8.33** | **10.08** | **10.61** | **9.45** | **9.06** | **10.54** | **10.90** | *9.52* | *8.95* | *10.49* | *10.96* | *9.64* | **9.61** | *10.01* | *9.99* |
| S. Atlantic | **10.46** | **11.31** | **11.42** | **10.94** | **10.86** | **11.47** | **11.71** | *11.29* | *10.72* | *11.51* | *11.84* | *11.38* | **11.03** | *11.34* | *11.36* |
| E. S. Central | **8.81** | **9.90** | **10.02** | **10.05** | **9.77** | **10.32** | **10.36** | *10.28* | *9.54* | *10.44* | *10.46* | *10.31* | **9.66** | *10.18* | *10.17* |
| W. S. Central | **10.28** | **11.00** | **10.79** | **10.46** | **10.08** | **10.78** | **10.80** | *10.40* | *10.19* | *10.88* | *10.95* | *10.45* | **10.64** | *10.55* | *10.64* |
| Mountain | **9.71** | **10.83** | **11.22** | **9.97** | **9.76** | **10.84** | **11.28** | *10.27* | *9.94* | *11.06* | *11.49* | *10.47* | **10.50** | *10.59* | *10.79* |
| Pacific | **12.03** | **12.47** | **13.37** | **12.20** | **12.02** | **12.49** | **14.02** | *12.43* | *12.05* | *12.79* | *14.15* | *12.51* | **12.51** | *12.74* | *12.86* |
| U.S. Average | **10.88** | **11.90** | **12.02** | **11.50** | **11.24** | **11.97** | **12.23** | *11.70* | *11.21* | *12.15* | *12.46* | *11.82* | **11.58** | *11.80* | *11.91* |
| **Commercial Sector** | | | | | | | | | | | | | | | |
| New England | **15.27** | **14.71** | **15.33** | **14.46** | **14.41** | **14.40** | **14.75** | *14.27* | *14.83* | *14.80* | *15.12* | *14.54* | **14.96** | *14.47* | *14.83* |
| Middle Atlantic | **13.23** | **13.93** | **14.60** | **13.43** | **13.23** | **13.61** | **14.42** | *12.93* | *12.98* | *13.79* | *14.91* | *13.38* | **13.83** | *13.58* | *13.80* |
| E. N. Central | **9.17** | **9.51** | **9.59** | **9.28** | **9.29** | **9.66** | **9.58** | *9.33* | *9.20* | *9.53* | *9.68* | *9.41* | **9.40** | *9.47* | *9.46* |
| W. N. Central | **7.08** | **7.93** | **8.60** | **7.58** | **7.60** | **8.46** | **8.77** | *7.62* | *7.52* | *8.35* | *8.92* | *7.76* | **7.83** | *8.13* | *8.16* |
| S. Atlantic | **9.13** | **9.33** | **9.42** | **9.35** | **9.45** | **9.53** | **9.70** | *9.64* | *9.44* | *9.60* | *9.85* | *9.77* | **9.31** | *9.59* | *9.68* |
| E. S. Central | **8.86** | **9.33** | **9.54** | **9.75** | **9.67** | **9.83** | **9.88** | *9.90* | *9.47* | *9.78* | *9.91* | *9.89* | **9.38** | *9.83* | *9.77* |
| W. S. Central | **8.95** | **8.80** | **8.74** | **8.53** | **8.57** | **8.66** | **8.87** | *8.57* | *8.64* | *8.70* | *8.86* | *8.51* | **8.75** | *8.68* | *8.68* |
| Mountain | **8.20** | **9.04** | **9.25** | **8.40** | **8.32** | **9.04** | **9.34** | *8.74* | *8.49* | *9.18* | *9.42* | *8.84* | **8.76** | *8.89* | *9.01* |
| Pacific | **10.78** | **12.20** | **14.05** | **11.40** | **10.97** | **12.32** | **13.97** | *11.82* | *11.23* | *12.68* | *14.32* | *12.06* | **12.17** | *12.32* | *12.62* |
| U.S. Average | **9.87** | **10.30** | **10.71** | **10.06** | **10.01** | **10.38** | **10.79** | *10.18* | *10.03* | *10.47* | *10.99* | *10.32* | **10.26** | *10.36* | *10.47* |
| **Industrial Sector** | | | | | | | | | | | | | | | |
| New England | **12.33** | **12.91** | **12.78** | **12.62** | **12.68** | **12.63** | **12.85** | *12.64* | *12.75* | *12.61* | *12.82* | *12.64* | **12.66** | *12.70* | *12.71* |
| Middle Atlantic | **8.50** | **8.52** | **8.71** | **8.30** | **8.62** | **8.41** | **8.50** | *8.16* | *8.24* | *8.43* | *8.66* | *8.19* | **8.51** | *8.43* | *8.38* |
| E. N. Central | **6.34** | **6.48** | **6.71** | **6.52** | **6.41** | **6.51** | **6.81** | *6.54* | *6.40* | *6.58* | *6.82* | *6.52* | **6.51** | *6.57* | *6.58* |
| W. N. Central | **5.43** | **5.74** | **6.45** | **5.67** | **5.75** | **6.11** | **6.58** | *5.76* | *5.62* | *6.01* | *6.61* | *5.76* | **5.84** | *6.06* | *6.01* |
| S. Atlantic | **6.45** | **6.53** | **7.00** | **6.54** | **6.53** | **6.74** | **7.16** | *6.75* | *6.42* | *6.59* | *7.07* | *6.71* | **6.64** | *6.80* | *6.71* |
| E. S. Central | **5.31** | **5.85** | **6.33** | **5.97** | **5.85** | **6.19** | **6.62** | *6.07* | *5.66* | *6.11* | *6.52* | *6.08* | **5.87** | *6.18* | *6.09* |
| W. S. Central | **6.08** | **6.00** | **6.14** | **5.80** | **5.77** | **6.00** | **6.35** | *6.01* | *6.04* | *6.04* | *6.14* | *5.83* | **6.01** | *6.04* | *6.01* |
| Mountain | **5.69** | **6.17** | **6.87** | **5.65** | **5.60** | **6.07** | **6.81** | *5.86* | *5.90* | *6.30* | *6.97* | *6.03* | **6.13** | *6.11* | *6.33* |
| Pacific | **7.29** | **7.84** | **8.73** | **7.68** | **7.43** | **7.73** | **8.70** | *7.84* | *7.42* | *7.94* | *8.85* | *8.00* | **7.91** | *7.94* | *8.08* |
| U.S. Average | **6.53** | **6.75** | **7.17** | **6.67** | **6.68** | **6.85** | **7.29** | *6.79* | *6.62* | *6.86* | *7.28* | *6.78* | **6.79** | *6.91* | *6.89* |
| **All Sectors** (a) | | | | | | | | | | | | | | | |
| New England | **15.12** | **14.92** | **15.19** | **14.74** | **14.66** | **14.58** | **15.12** | *14.82* | *15.09* | *14.98* | *15.21* | *14.89* | **15.00** | *14.81* | *15.05* |
| Middle Atlantic | **13.01** | **13.63** | **14.40** | **13.13** | **13.13** | **13.37** | **14.18** | *12.80* | *12.84* | *13.50* | *14.59* | *13.15* | **13.58** | *13.40* | *13.54* |
| E. N. Central | **8.72** | **9.13** | **9.50** | **8.97** | **8.94** | **9.24** | **9.61** | *9.08* | *8.93* | *9.27* | *9.61* | *9.13* | **9.09** | *9.23* | *9.24* |
| W. N. Central | **7.14** | **7.96** | **8.80** | **7.64** | **7.66** | **8.41** | **8.99** | *7.72* | *7.56* | *8.31* | *9.01* | *7.80* | **7.91** | *8.22* | *8.19* |
| S. Atlantic | **9.37** | **9.63** | **9.99** | **9.52** | **9.62** | **9.83** | **10.23** | *9.82* | *9.56* | *9.81* | *10.28* | *9.90* | **9.64** | *9.89* | *9.90* |
| E. S. Central | **7.60** | **8.16** | **8.70** | **8.36** | **8.30** | **8.59** | **8.99** | *8.46* | *8.08* | *8.54* | *8.94* | *8.48* | **8.21** | *8.60* | *8.52* |
| W. S. Central | **8.71** | **8.74** | **8.95** | **8.35** | **8.35** | **8.66** | **9.13** | *8.41* | *8.48* | *8.64* | *8.98* | *8.36* | **8.71** | *8.68* | *8.64* |
| Mountain | **8.02** | **8.76** | **9.35** | **8.08** | **8.03** | **8.70** | **9.38** | *8.38* | *8.25* | *8.92* | *9.51* | *8.54* | **8.60** | *8.67* | *8.84* |
| Pacific | **10.57** | **11.30** | **12.64** | **10.89** | **10.76** | **11.32** | **12.83** | *11.20* | *10.80* | *11.64* | *13.05* | *11.36* | **11.37** | *11.55* | *11.73* |
| U.S. Average | **9.47** | **9.89** | **10.40** | **9.66** | **9.66** | **9.99** | **10.54** | *9.82* | *9.65* | *10.06* | *10.63* | *9.90* | **9.88** | *10.02* | *10.08* |

- = no data available

Prices are not adjusted for inflation.

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

**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 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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

**Table 7d. U.S. Electricity Generation by Fuel and Sector (Billion Kilowatthours per day)**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Electric Power Sector (a)** | | | | | | | | | | | | | | | |
| Coal | **5.181** | **4.750** | **5.450** | **4.688** | **4.887** | **4.570** | **5.516** | *4.760* | *5.103* | *4.313* | *4.908* | *4.705* | **5.017** | *4.934* | *4.757* |
| Natural Gas | **2.011** | **2.306** | **3.329** | **2.188** | **2.059** | **2.378** | **3.290** | *2.248* | *2.083* | *2.466* | *3.426* | *2.293* | **2.461** | *2.497* | *2.569* |
| Other Gases | **0.009** | **0.009** | **0.008** | **0.006** | **0.008** | **0.008** | **0.009** | *0.008* | *0.009* | *0.009* | *0.009* | *0.009* | **0.008** | *0.008* | *0.009* |
| Petroleum | **0.094** | **0.095** | **0.111** | **0.078** | **0.082** | **0.070** | **0.093** | *0.074* | *0.077* | *0.081* | *0.087* | *0.077* | **0.094** | *0.080* | *0.080* |
| Residual Fuel Oil | **0.034** | **0.042** | **0.054** | **0.027** | **0.025** | **0.024** | **0.041** | *0.022* | *0.021* | *0.028* | *0.033* | *0.023* | **0.039** | *0.028* | *0.026* |
| Distillate Fuel Oil | **0.023** | **0.016** | **0.019** | **0.020** | **0.017** | **0.018** | **0.016** | *0.014* | *0.015* | *0.015* | *0.014* | *0.016* | **0.020** | *0.016* | *0.015* |
| Petroleum Coke | **0.034** | **0.034** | **0.035** | **0.028** | **0.037** | **0.026** | **0.039** | *0.035* | *0.036* | *0.035* | *0.037* | *0.034* | **0.033** | *0.035* | *0.036* |
| Other Petroleum | **0.003** | **0.002** | **0.002** | **0.003** | **0.003** | **0.002** | **0.003** | *0.003* | *0.005* | *0.003* | *0.003* | *0.003* | **0.002** | *0.002* | *0.003* |
| Nuclear | **2.249** | **2.116** | **2.314** | **2.164** | **2.258** | **1.943** | **2.255** | *2.093* | *2.230* | *2.181* | *2.321* | *2.152* | **2.211** | *2.137* | *2.221* |
| Pumped Storage Hydroelectric | **-0.008** | **-0.008** | **-0.015** | **-0.014** | **-0.011** | **-0.016** | **-0.021** | *-0.016* | *-0.016* | *-0.015* | *-0.020* | *-0.016* | **-0.011** | *-0.016* | *-0.017* |
| Renewables: | | | | | | | | | | | | | | | |
| Conventional Hydroelectric | **0.697** | **0.797** | **0.658** | **0.647** | **0.900** | **1.051** | **0.832** | *0.643* | *0.754* | *0.913* | *0.667* | *0.643* | **0.700** | *0.856* | *0.744* |
| Geothermal | **0.044** | **0.043** | **0.042** | **0.043** | **0.046** | **0.044** | **0.044** | *0.044* | *0.045* | *0.044* | *0.046* | *0.046* | **0.043** | *0.045* | *0.045* |
| Solar | **0.001** | **0.005** | **0.005** | **0.002** | **0.003** | **0.007** | **0.007** | *0.002* | *0.004* | *0.011* | *0.012* | *0.004* | **0.004** | *0.005* | *0.008* |
| Wind | **0.235** | **0.291** | **0.221** | **0.290** | **0.329** | **0.382** | **0.269** | *0.329* | *0.360* | *0.410* | *0.310* | *0.387* | **0.259** | *0.327* | *0.366* |
| Wood and Wood Waste | **0.032** | **0.029** | **0.034** | **0.030** | **0.030** | **0.026** | **0.032** | *0.030* | *0.031* | *0.028* | *0.034* | *0.033* | **0.032** | *0.030* | *0.032* |
| Other Renewables | **0.042** | **0.045** | **0.044** | **0.045** | **0.042** | **0.046** | **0.045** | *0.043* | *0.045* | *0.048* | *0.050* | *0.048* | **0.044** | *0.044* | *0.048* |
| Other Fuels (b) | **0.017** | **0.020** | **0.020** | **0.019** | **0.017** | **0.019** | **0.019** | *0.019* | *0.020* | *0.021* | *0.021* | *0.020* | **0.019** | *0.019* | *0.020* |
| Subtotal Electric Power Sector | **10.605** | **10.497** | **12.221** | **10.187** | **10.650** | **10.529** | **12.390** | *10.280* | *10.744* | *10.509* | *11.871* | *10.401* | **10.880** | *10.965* | *10.883* |
| **Commercial Sector (c)** | | | | | | | | | | | | | | | |
| Coal | **0.003** | **0.003** | **0.003** | **0.003** | **0.003** | **0.002** | **0.003** | *0.003* | *0.003* | *0.003* | *0.003* | *0.003* | **0.003** | *0.003* | *0.003* |
| Natural Gas | **0.011** | **0.011** | **0.014** | **0.012** | **0.011** | **0.011** | **0.013** | *0.012* | *0.012* | *0.011* | *0.013* | *0.012* | **0.012** | *0.012* | *0.012* |
| Petroleum | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | *0.000* | *0.000* | *0.000* | *0.000* | *0.000* | **0.000** | *0.000* | *0.000* |
| Renewables (d) | **0.004** | **0.005** | **0.005** | **0.005** | **0.004** | **0.005** | **0.005** | *0.004* | *0.004* | *0.005* | *0.005* | *0.004* | **0.005** | *0.005* | *0.005* |
| Other Fuels (b) | **0.002** | **0.002** | **0.002** | **0.002** | **0.002** | **0.002** | **0.002** | *0.002* | *0.002* | *0.002* | *0.002* | *0.002* | **0.002** | *0.002* | *0.002* |
| Subtotal Commercial Sector | **0.022** | **0.022** | **0.025** | **0.022** | **0.022** | **0.021** | **0.023** | *0.021* | *0.022* | *0.022* | *0.024* | *0.022* | **0.023** | *0.022* | *0.022* |
| **Industrial Sector (c)** | | | | | | | | | | | | | | | |
| Coal | **0.052** | **0.047** | **0.055** | **0.048** | **0.049** | **0.047** | **0.051** | *0.048* | *0.050* | *0.050* | *0.054* | *0.051* | **0.051** | *0.049* | *0.051* |
| Natural Gas | **0.216** | **0.211** | **0.228** | **0.211** | **0.209** | **0.212** | **0.217** | *0.210* | *0.223* | *0.216* | *0.232* | *0.218* | **0.216** | *0.212* | *0.223* |
| Other Gases | **0.022** | **0.023** | **0.024** | **0.022** | **0.022** | **0.022** | **0.025** | *0.022* | *0.023* | *0.023* | *0.028* | *0.024* | **0.023** | *0.023* | *0.025* |
| Petroleum | **0.007** | **0.007** | **0.007** | **0.006** | **0.006** | **0.005** | **0.005** | *0.005* | *0.006* | *0.005* | *0.006* | *0.006* | **0.006** | *0.005* | *0.006* |
| Renewables: | | | | | | | | | | | | | | | |
| Conventional Hydroelectric | **0.006** | **0.005** | **0.003** | **0.004** | **0.005** | **0.006** | **0.003** | *0.004* | *0.006* | *0.006* | *0.003* | *0.004* | **0.004** | *0.005* | *0.005* |
| Wood and Wood Waste | **0.072** | **0.072** | **0.075** | **0.072** | **0.067** | **0.068** | **0.073** | *0.071* | *0.071* | *0.070* | *0.078* | *0.074* | **0.072** | *0.070* | *0.073* |
| Other Renewables (e) | **0.002** | **0.002** | **0.002** | **0.002** | **0.002** | **0.002** | **0.002** | *0.002* | *0.002* | *0.002* | *0.002* | *0.002* | **0.002** | *0.002* | *0.002* |
| Other Fuels (b) | **0.009** | **0.010** | **0.011** | **0.009** | **0.008** | **0.009** | **0.010** | *0.009* | *0.009* | *0.010* | *0.011* | *0.010* | **0.010** | *0.009* | *0.010* |
| Subtotal Industrial Sector | **0.384** | **0.377** | **0.404** | **0.374** | **0.368** | **0.371** | **0.385** | *0.371* | *0.390* | *0.383* | *0.414* | *0.389* | **0.385** | *0.374* | *0.394* |
| **Total All Sectors** | **11.011** | **10.897** | **12.650** | **10.583** | **11.039** | **10.921** | **12.799** | *10.673* | *11.156* | *10.914* | *12.309* | *10.812* | **11.288** | *11.361* | *11.299* |

- = no data available

(a) Electric utilities and independent power producers.

(b) "Other" includes non-biogenic municipal solid waste, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, tires and miscellaneous technologies.

(c) Commercial and industrial sectors include electricity output from combined heat and power (CHP) facilities and some electric-only plants.

(d) "Renewables" in commercial sector includes wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy and wind.

(e) "Other Renewables" in industrial sector includes black liquor, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy and wind.

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

Values of 0.000 may indicate positive levels of generation that are less than 0.0005 billion kilowatthours per day.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

**Table 7e. U.S. Fuel Consumption for Electricity Generation by Sector**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Electric Power Sector (a)** | | | | | | | | | | | | | | | |
| Coal (mmst/d) | **2.72** | **2.51** | **2.90** | **2.51** | **2.60** | **2.45** | **2.87** | *2.52* | *2.67* | *2.27* | *2.60* | *2.47* | **2.66** | *2.61* | *2.50* |
| Natural Gas (bcf/d) | **15.48** | **18.25** | **26.72** | **16.78** | **15.83** | **19.00** | **26.27** | *17.24* | *15.79* | *19.27* | *26.95* | *17.41* | **19.33** | *19.61* | *19.87* |
| Petroleum (mmb/d) (b) | **0.17** | **0.17** | **0.20** | **0.14** | **0.15** | **0.13** | **0.17** | *0.13* | *0.14* | *0.15* | *0.16* | *0.14* | **0.17** | *0.14* | *0.15* |
| Residual Fuel Oil (mmb/d) | **0.06** | **0.07** | **0.09** | **0.04** | **0.04** | **0.04** | **0.07** | *0.03* | *0.03* | *0.04* | *0.05* | *0.04* | **0.07** | *0.05* | *0.04* |
| Distillate Fuel Oil (mmb/d) | **0.04** | **0.03** | **0.04** | **0.04** | **0.03** | **0.03** | **0.03** | *0.03* | *0.03* | *0.03* | *0.03* | *0.03* | **0.04** | *0.03* | *0.03* |
| Petroleum Coke (mmst/d) | **0.07** | **0.07** | **0.07** | **0.05** | **0.07** | **0.05** | **0.07** | *0.07* | *0.07* | *0.07* | *0.07* | *0.07* | **0.06** | *0.07* | *0.07* |
| Other Petroleum (mmb/d) | **0.01** | **0.00** | **0.00** | **0.01** | **0.00** | **0.00** | **0.01** | *0.01* | *0.01* | *0.01* | *0.01* | *0.01* | **0.00** | *0.00* | *0.01* |
| **Commercial Sector (c)** | | | | | | | | | | | | | | | |
| Coal (mmst/d) | **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* |
| Natural Gas (bcf/d) | **0.09** | **0.09** | **0.11** | **0.10** | **0.09** | **0.09** | **0.10** | *0.09* | *0.10* | *0.09* | *0.10* | *0.10* | **0.10** | *0.10* | *0.10* |
| Petroleum (mmb/d) (b) | **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* |
| **Industrial Sector (c)** | | | | | | | | | | | | | | | |
| Coal (mmst/d) | **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* |
| Natural Gas (bcf/d) | **1.48** | **1.44** | **1.57** | **1.44** | **1.48** | **1.48** | **1.51** | *1.43* | *1.55* | *1.49* | *1.61* | *1.49* | **1.48** | *1.47* | *1.53* |
| Petroleum (mmb/d) (b) | **0.01** | **0.01** | **0.01** | **0.01** | **0.01** | **0.01** | **0.01** | *0.01* | *0.01* | *0.01* | *0.01* | *0.01* | **0.01** | *0.01* | *0.01* |
| **Total All Sectors** | | | | | | | | | | | | | | | |
| Coal (mmst/d) | **2.75** | **2.53** | **2.93** | **2.53** | **2.62** | **2.47** | **2.89** | *2.54* | *2.69* | *2.29* | *2.62* | *2.49* | **2.68** | *2.63* | *2.52* |
| Natural Gas (bcf/d) | **17.05** | **19.79** | **28.40** | **18.32** | **17.40** | **20.56** | **27.88** | *18.76* | *17.43* | *20.85* | *28.66* | *19.00* | **20.91** | *21.17* | *21.50* |
| Petroleum (mmb/d) (b) | **0.18** | **0.18** | **0.21** | **0.15** | **0.16** | **0.13** | **0.17** | *0.14* | *0.15* | *0.15* | *0.16* | *0.15* | **0.18** | *0.15* | *0.15* |
| | | | | | | | | | | | | | | | |
| **End-of-period Fuel Inventories Held by Electric Power Sector** | | | | | | | | | | | | | | | |
| Coal (mmst) | **177.8** | **181.1** | **162.8** | **175.2** | **167.0** | **166.0** | **144.8** | *148.9* | *142.0* | *151.1* | *137.8* | *141.2* | **175.2** | *148.9* | *141.2* |
| Residual Fuel Oil (mmb) | **18.7** | **17.4** | **17.4** | **16.7** | **15.6** | **16.5** | **15.1** | *13.4* | *13.5* | *15.3* | *14.9* | *14.2* | **16.7** | *13.4* | *14.2* |
| Distillate Fuel Oil (mmb) | **17.3** | **17.2** | **17.0** | **17.1** | **16.8** | **17.1** | **16.7** | *17.0* | *16.5* | *16.5* | *16.7* | *16.9* | **17.1** | *17.0* | *16.9* |
| Petroleum Coke (mmb) | **5.8** | **5.5** | **6.1** | **5.4** | **2.8** | **2.8** | **3.0** | *2.9* | *3.0* | *3.0* | *3.1* | *3.1* | **5.4** | *2.9* | *3.1* |

- = no data available

(a) Electric utilities and independent power producers.

(b) Petroleum category may include petroleum coke, which is converted from short tons to barrels by multiplying by 5.

(c) Commercial and industrial sectors include electricity output from combined heat and power (CHP) facilities and some electric-only plants.

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

Physical Units: mmst/d = million short tons per day; mmb/d = million barrels per day; bcf/d = billion cubic feet per day; mmb = million barrels.

Values of 0.00 may indicate positive levels of fuel consumption that are less than 0.005 units per day.

**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.

**Projections:** Generated by simulation of the EIA Regional Short-Term Energy Model.

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

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Supply** | | | | | | | | | | | | | | | |
| Hydroelectric Power (a) | **0.618** | **0.713** | **0.593** | **0.585** | **0.795** | **0.939** | **0.757** | *0.587* | *0.681* | *0.825* | *0.608* | *0.587* | **2.509** | *3.078* | *2.701* |
| Geothermal | **0.053** | **0.053** | **0.053** | **0.054** | **0.055** | **0.054** | **0.100** | *0.101* | *0.102* | *0.100* | *0.103* | *0.104* | **0.212** | *0.310* | *0.408* |
| Solar | **0.025** | **0.029** | **0.029** | **0.026** | **0.026** | **0.030** | **0.031** | *0.026* | *0.027* | *0.034* | *0.035* | *0.028* | **0.109** | *0.114* | *0.124* |
| Wind | **0.208** | **0.261** | **0.200** | **0.263** | **0.292** | **0.342** | **0.244** | *0.298* | *0.323* | *0.367* | *0.281* | *0.350* | **0.933** | *1.176* | *1.322* |
| Wood | **0.490** | **0.491** | **0.508** | **0.497** | **0.478** | **0.470** | **0.506** | *0.495* | *0.493* | *0.482* | *0.533* | *0.516* | **1.986** | *1.949* | *2.024* |
| Ethanol (b) | **0.270** | **0.275** | **0.284** | **0.298** | **0.293** | **0.290** | **0.290** | *0.293* | *0.294* | *0.295* | *0.299* | *0.299* | **1.128** | *1.165* | *1.187* |
| Biodiesel (b) | **0.011** | **0.012** | **0.010** | **0.007** | **0.014** | **0.024** | **0.035** | *0.037* | *0.032* | *0.029* | *0.029* | *0.029* | **0.039** | *0.110* | *0.120* |
| Other Renewables (c) | **0.110** | **0.115** | **0.114** | **0.115** | **0.111** | **0.115** | **0.118** | *0.113* | *0.113* | *0.120* | *0.128* | *0.121* | **0.454** | *0.456* | *0.481* |
| Total | **1.786** | **1.949** | **1.792** | **1.844** | **2.065** | **2.264** | **2.087** | *1.950* | *2.065* | *2.252* | *2.016* | *2.033* | **7.371** | *8.366* | *8.366* |
| **Consumption** | | | | | | | | | | | | | | | |
| **Electric Power Sector** | | | | | | | | | | | | | | | |
| Hydroelectric Power (a) | **0.618** | **0.715** | **0.596** | **0.587** | **0.798** | **0.942** | **0.754** | *0.583* | *0.676* | *0.819* | *0.605* | *0.583* | **2.516** | *3.077* | *2.683* |
| Geothermal | **0.038** | **0.038** | **0.038** | **0.039** | **0.041** | **0.039** | **0.085** | *0.086* | *0.087* | *0.085* | *0.088* | *0.089* | **0.153** | *0.251* | *0.349* |
| Solar | **0.001** | **0.005** | **0.005** | **0.002** | **0.003** | **0.006** | **0.007** | *0.002* | *0.003* | *0.010* | *0.011* | *0.004* | **0.013** | *0.017* | *0.028* |
| Wind | **0.208** | **0.261** | **0.200** | **0.263** | **0.292** | **0.342** | **0.244** | *0.298* | *0.323* | *0.367* | *0.281* | *0.350* | **0.933** | *1.176* | *1.322* |
| Wood and Wood Waste | **0.048** | **0.044** | **0.049** | **0.046** | **0.045** | **0.038** | **0.048** | *0.045* | *0.047* | *0.041* | *0.051* | *0.050* | **0.189** | *0.177* | *0.190* |
| Other Renewables (c) | **0.060** | **0.064** | **0.063** | **0.064** | **0.061** | **0.065** | **0.066** | *0.063* | *0.064* | *0.068* | *0.072* | *0.069* | **0.252** | *0.255* | *0.274* |
| Subtotal | **0.975** | **1.127** | **0.952** | **1.001** | **1.239** | **1.434** | **1.204** | *1.078* | *1.200* | *1.391* | *1.108* | *1.145* | **4.055** | *4.954* | *4.844* |
| **Industrial Sector** | | | | | | | | | | | | | | | |
| Hydroelectric Power (a) | **0.005** | **0.005** | **0.003** | **0.003** | **0.005** | **0.005** | **0.003** | *0.003* | *0.005* | *0.006* | *0.003* | *0.004* | **0.016** | *0.016* | *0.017* |
| 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* |
| Wood and Wood Waste | **0.321** | **0.324** | **0.335** | **0.326** | **0.312** | **0.309** | **0.335** | *0.328* | *0.323* | *0.319* | *0.359* | *0.343* | **1.307** | *1.284* | *1.344* |
| Other Renewables (c) | **0.041** | **0.042** | **0.042** | **0.042** | **0.041** | **0.041** | **0.044** | *0.042* | *0.041* | *0.043* | *0.047* | *0.044* | **0.168** | *0.169* | *0.174* |
| Subtotal | **0.372** | **0.376** | **0.385** | **0.378** | **0.363** | **0.361** | **0.386** | *0.379* | *0.374* | *0.372* | *0.414* | *0.396* | **1.511** | *1.489* | *1.556* |
| **Commercial Sector** | | | | | | | | | | | | | | | |
| Hydroelectric Power (a) | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | **0.000** | *0.000* | *0.000* | *0.000* | *0.000* | *0.000* | **0.001** | *0.001* | *0.001* |
| 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* | **0.019** | *0.018* | *0.018* |
| Wood and Wood Waste | **0.017** | **0.018** | **0.018** | **0.018** | **0.017** | **0.018** | **0.018** | *0.018* | *0.018* | *0.018* | *0.018* | *0.018* | **0.070** | *0.070* | *0.071* |
| Other Renewables (c) | **0.008** | **0.009** | **0.008** | **0.008** | **0.008** | **0.008** | **0.008** | *0.008* | *0.008* | *0.008* | *0.009* | *0.008* | **0.034** | *0.033* | *0.033* |
| Subtotal | **0.031** | **0.033** | **0.032** | **0.032** | **0.031** | **0.032** | **0.032** | *0.031* | *0.031* | *0.032* | *0.033* | *0.032* | **0.127** | *0.126* | *0.128* |
| **Residential Sector** | | | | | | | | | | | | | | | |
| Geothermal | **0.009** | **0.009** | **0.009** | **0.009** | **0.009** | **0.009** | **0.009** | *0.009* | *0.009* | *0.009* | *0.009* | *0.009* | **0.037** | *0.037* | *0.037* |
| Wood and Wood Waste | **0.104** | **0.105** | **0.106** | **0.106** | **0.104** | **0.105** | **0.105** | *0.104* | *0.105* | *0.105* | *0.105* | *0.105* | **0.420** | *0.417* | *0.418* |
| Solar | **0.024** | **0.024** | **0.024** | **0.024** | **0.024** | **0.024** | **0.024** | *0.024* | *0.024* | *0.024* | *0.024* | *0.024* | **0.097** | *0.096* | *0.096* |
| Subtotal | **0.136** | **0.138** | **0.140** | **0.140** | **0.136** | **0.138** | **0.138** | *0.138* | *0.138* | *0.138* | *0.138* | *0.138* | **0.554** | *0.550* | *0.551* |
| **Transportation Sector** | | | | | | | | | | | | | | | |
| Ethanol (b) | **0.251** | **0.275** | **0.280** | **0.284** | **0.263** | **0.277** | **0.276** | *0.281* | *0.275* | *0.286* | *0.284* | *0.287* | **1.091** | *1.097* | *1.132* |
| Biodiesel (b) | **0.009** | **0.011** | **0.010** | **0.008** | **0.015** | **0.028** | **0.033** | *0.035* | *0.032* | *0.029* | *0.029* | *0.029* | **0.039** | *0.112* | *0.119* |
| Total Consumption | **1.765** | **1.948** | **1.788** | **1.831** | **2.036** | **2.256** | **2.067** | *1.937* | *2.045* | *2.243* | *2.001* | *2.021* | **7.332** | *8.295* | *8.311* |

- = no data available

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

(b) Fuel ethanol and biodiesel supply represents domestic production only. 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 s

(c) Other renewable energy sources include municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

**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 EIA Regional Short-Term Energy Model.

**Table 9a. U.S. Macroeconomic Indicators and $CO_2$ Emissions**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Macroeconomic** | | | | | | | | | | | | | | | |
| Real Gross Domestic Product | | | | | | | | | | | | | | | |
| (billion chained 2005 dollars - SAAR) | **12,938** | **13,059** | **13,140** | **13,216** | **13,228** | **13,261** | **13,301** | *13,347* | *13,415* | *13,488* | *13,553* | *13,628* | **13,088** | *13,284* | *13,521* |
| Real Disposable Personal Income | | | | | | | | | | | | | | | |
| (billion chained 2005 Dollars - SAAR) | **9,923** | **10,058** | **10,114** | **10,152** | **10,183** | **10,208** | **10,213** | *10,264* | *10,315* | *10,380* | *10,403* | *10,427* | **10,062** | *10,217* | *10,381* |
| Real Fixed Investment | | | | | | | | | | | | | | | |
| (billion chained 2005 dollars-SAAR) | **1,582** | **1,654** | **1,664** | **1,694** | **1,699** | **1,735** | **1,758** | *1,783* | *1,795* | *1,813* | *1,832* | *1,858* | **1,648** | *1,744* | *1,825* |
| Business Inventory Change | | | | | | | | | | | | | | | |
| (billion chained 2005 dollars-SAAR) | **12.38** | **4.84** | **24.17** | **39.65** | **33.28** | **23.56** | **14.83** | *11.36* | *6.52* | *8.85* | *8.80* | *8.96* | **20.26** | *20.76* | *8.28* |
| Housing Stock | | | | | | | | | | | | | | | |
| (millions) | **123.5** | **123.6** | **123.6** | **123.5** | **123.5** | **123.5** | **123.5** | *123.5* | *123.5* | *123.5* | *123.6* | *123.6* | **123.5** | *123.5* | *123.6* |
| Non-Farm Employment | | | | | | | | | | | | | | | |
| (millions) | **129.3** | **130.0** | **129.9** | **130.1** | **130.5** | **131.0** | **131.2** | *131.3* | *131.6* | *132.1* | *132.5* | *132.9* | **129.8** | *131.0* | *132.3* |
| Commercial Employment | | | | | | | | | | | | | | | |
| (millions) | **87.3** | **87.6** | **87.9** | **88.2** | **88.6** | **89.1** | **89.3** | *89.6* | *90.1* | *90.6* | *91.1* | *91.5* | **87.8** | *89.1* | *90.8* |
| **Industrial Production Indices (Index, 2007=100)** | | | | | | | | | | | | | | | |
| Total Industrial Production | **88.0** | **89.5** | **91.0** | **91.7** | **92.8** | **93.0** | **93.9** | *94.0* | *94.4* | *94.9* | *95.5* | *96.1* | **90.1** | *93.4* | *95.2* |
| Manufacturing | **85.0** | **86.9** | **88.1** | **89.0** | **90.6** | **90.9** | **91.6** | *92.1* | *92.7* | *93.5* | *94.3* | *95.2* | **87.3** | *91.3* | *93.9* |
| Food | **100.6** | **101.4** | **103.3** | **103.9** | **103.1** | **102.9** | **103.0** | *103.1* | *103.3* | *103.6* | *104.1* | *104.5* | **102.3** | *103.0* | *103.9* |
| Paper | **88.7** | **89.5** | **88.8** | **89.1** | **89.7** | **88.0** | **88.0** | *87.9* | *87.9* | *88.0* | *88.3* | *88.7* | **89.0** | *88.4* | *88.2* |
| Chemicals | **86.9** | **86.3** | **86.5** | **87.0** | **88.6** | **88.8** | **88.2** | *88.1* | *88.3* | *88.6* | *89.1* | *89.6* | **86.7** | *88.4* | *88.9* |
| Petroleum | **92.9** | **96.9** | **98.0** | **98.0** | **96.2** | **96.9** | **98.1** | *98.4* | *98.6* | *98.8* | *99.0* | *99.1* | **96.5** | *97.4* | *98.9* |
| Stone, Clay, Glass | **64.6** | **68.0** | **68.8** | **69.1** | **67.5** | **69.6** | **69.8** | *69.6* | *69.8* | *70.1* | *70.8* | *71.5* | **67.6** | *69.1* | *70.5* |
| Primary Metals | **81.7** | **84.1** | **82.1** | **85.3** | **90.4** | **90.7** | **92.2** | *92.7* | *92.8* | *93.2* | *94.0* | *94.5* | **83.3** | *91.5* | *93.6* |
| Resins and Synthetic Products | **76.0** | **74.7** | **78.1** | **79.1** | **78.8** | **74.2** | **73.6** | *73.6* | *73.6* | *73.8* | *74.3* | *74.7* | **77.0** | *75.0* | *74.1* |
| Agricultural Chemicals | **100.9** | **93.2** | **89.5** | **92.5** | **99.9** | **99.4** | **98.7** | *97.8* | *97.3* | *97.3* | *97.7* | *97.8* | **94.0** | *99.0* | *97.5* |
| Natural Gas-weighted (a) | **85.5** | **86.2** | **86.6** | **87.5** | **89.0** | **88.4** | **88.7** | *88.7* | *88.7* | *88.9* | *89.4* | *89.7* | **86.5** | *88.7* | *89.2* |
| **Price Indexes** | | | | | | | | | | | | | | | |
| Consumer Price Index (all urban consumers) | | | | | | | | | | | | | | | |
| (index, 1982-1984=1.00) | **2.18** | **2.17** | **2.18** | **2.19** | **2.22** | **2.25** | **2.26** | *2.27* | *2.28* | *2.28* | *2.29* | *2.30* | **2.18** | *2.25* | *2.29* |
| Producer Price Index: All Commodities | | | | | | | | | | | | | | | |
| (index, 1982=1.00) | **1.85** | **1.83** | **1.82** | **1.90** | **1.99** | **2.02** | **2.02** | *2.02* | *2.01* | *2.00* | *2.01* | *2.04* | **1.85** | *2.01* | *2.01* |
| Producer Price Index: Petroleum | | | | | | | | | | | | | | | |
| (index, 1982=1.00) | **2.17** | **2.26** | **2.20** | **2.38** | **2.74** | **3.22** | **3.06** | *2.84* | *2.87* | *2.90* | *2.87* | *2.82* | **2.25** | *2.96* | *2.87* |
| GDP Implicit Price Deflator | | | | | | | | | | | | | | | |
| (index, 2005=100) | **110.4** | **110.8** | **111.2** | **111.7** | **112.4** | **113.1** | **113.7** | *114.2* | *114.4* | *114.5* | *114.9* | *115.4* | **111.0** | *113.3* | *114.8* |
| **Miscellaneous** | | | | | | | | | | | | | | | |
| Vehicle Miles Traveled (b) | | | | | | | | | | | | | | | |
| (million miles/day) | **7,663** | **8,555** | **8,523** | **8,127** | **7,657** | **8,400** | **8,374** | *8,034* | *7,710* | *8,444* | *8,470* | *8,080* | **8,219** | *8,118* | *8,177* |
| Air Travel Capacity | | | | | | | | | | | | | | | |
| (Available ton-miles/day, thousands) | **491** | **530** | **546** | **526** | **519** | **549** | **542** | *520* | *516* | *558* | *554* | *530* | **523** | *533* | *540* |
| Aircraft Utilization | | | | | | | | | | | | | | | |
| (Revenue ton-miles/day, thousands) | **293** | **330** | **341** | **323** | **307** | **339** | **343** | *311* | *297* | *351* | *346* | *315* | **322** | *325* | *327* |
| Airline Ticket Price Index | | | | | | | | | | | | | | | |
| (index, 1982-1984=100) | **266.4** | **282.0** | **282.2** | **282.2** | **298.2** | **308.1** | **308.3** | *309.6* | *310.1* | *316.7* | *311.2* | *296.7* | **278.2** | *306.1* | *308.7* |
| Raw Steel Production | | | | | | | | | | | | | | | |
| (million short tons per day) | **0.234** | **0.253** | **0.245** | **0.237** | **0.257** | **0.261** | **0.266** | *0.254* | *0.267* | *0.279* | *0.268* | *0.259* | **0.242** | *0.260* | *0.268* |
| **Carbon Dioxide ($CO_2$) Emissions (million metric tons)** | | | | | | | | | | | | | | | |
| Petroleum | **569** | **588** | **599** | **593** | **575** | **573** | **589** | *584* | *576* | *576* | *587* | *587* | **2,349** | *2,321* | *2,326* |
| Natural Gas | **401** | **263** | **283** | **338** | **403** | **273** | **291** | *348* | *408* | *273* | *289* | *351* | **1,285** | *1,315* | *1,320* |
| Coal | **502** | **471** | **543** | **474** | **483** | **459** | **530** | *478* | *500* | *430* | *492* | *471* | **1,990** | *1,950* | *1,894* |
| Total Fossil Fuels | **1,472** | **1,322** | **1,425** | **1,405** | **1,461** | **1,305** | **1,410** | *1,410* | *1,484* | *1,279* | *1,368* | *1,409* | **5,624** | *5,586* | *5,540* |

- = no data available

(a) Natural gas share weights of individual sector indices based on EIA*Manufacturing Energy Consumption Survey,* 2002.

(b) Total highway travel includes gasoline and diesel fuel vehicles.

**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 U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration.

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.

**Table 9b. U.S. Regional Macroeconomic Data**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Real Gross State Product (Billion $2005)** | | | | | | | | | | | | | | | |
| New England | **708** | **715** | **720** | **724** | **723** | **725** | **726** | *728* | *731* | *734* | *737* | *740* | **717** | *726* | *735* |
| Middle Atlantic | **1,913** | **1,929** | **1,937** | **1,948** | **1,949** | **1,953** | **1,958** | *1,965* | *1,973* | *1,982* | *1,990* | *1,999* | **1,932** | *1,956* | *1,986* |
| E. N. Central | **1,797** | **1,814** | **1,822** | **1,828** | **1,828** | **1,829** | **1,832** | *1,839* | *1,849* | *1,858* | *1,865* | *1,871* | **1,815** | *1,832* | *1,860* |
| W. N. Central | **850** | **858** | **864** | **869** | **868** | **870** | **872** | *874* | *879* | *883* | *887* | *891* | **860** | *871* | *885* |
| S. Atlantic | **2,371** | **2,392** | **2,407** | **2,420** | **2,423** | **2,431** | **2,440** | *2,449* | *2,463* | *2,478* | *2,492* | *2,508* | **2,397** | *2,436* | *2,485* |
| E. S. Central | **608** | **613** | **616** | **619** | **619** | **620** | **622** | *624* | *628* | *632* | *635* | *639* | **614** | *622* | *633* |
| W. S. Central | **1,490** | **1,508** | **1,522** | **1,535** | **1,539** | **1,545** | **1,552** | *1,559* | *1,570* | *1,581* | *1,590* | *1,601* | **1,514** | *1,549* | *1,586* |
| Mountain | **864** | **872** | **878** | **884** | **885** | **887** | **890** | *893* | *898* | *903* | *908* | *913* | **874** | *888* | *905* |
| Pacific | **2,314** | **2,335** | **2,350** | **2,367** | **2,370** | **2,376** | **2,384** | *2,392* | *2,402* | *2,414* | *2,426* | *2,443* | **2,341** | *2,380* | *2,421* |
| **Industrial Output, Manufacturing (Index, Year 2007=100)** | | | | | | | | | | | | | | | |
| New England | **87.2** | **89.1** | **90.4** | **91.4** | **93.0** | **93.1** | **93.6** | *94.0* | *94.4* | *94.7* | *95.3* | *95.8* | **89.5** | *93.4* | *95.1* |
| Middle Atlantic | **85.3** | **87.0** | **88.1** | **89.0** | **90.6** | **90.8** | **91.3** | *91.6* | *92.0* | *92.6* | *93.3* | *94.0* | **87.4** | *91.1* | *93.0* |
| E. N. Central | **81.4** | **83.9** | **85.2** | **85.7** | **87.4** | **87.6** | **88.0** | *88.4* | *88.9* | *89.8* | *90.8* | *91.7* | **84.0** | *87.8* | *90.3* |
| W. N. Central | **87.7** | **90.0** | **91.5** | **92.3** | **94.1** | **94.4** | **94.9** | *95.3* | *96.0* | *96.9* | *97.8* | *98.9* | **90.4** | *94.7* | *97.4* |
| S. Atlantic | **82.2** | **83.6** | **84.5** | **84.9** | **86.3** | **86.5** | **86.9** | *87.3* | *87.8* | *88.5* | *89.3* | *90.1* | **83.8** | *86.8* | *88.9* |
| E. S. Central | **82.1** | **84.0** | **85.1** | **85.6** | **87.2** | **87.7** | **88.5** | *89.3* | *90.2* | *91.4* | *92.6* | *93.8* | **84.2** | *88.2* | *92.0* |
| W. S. Central | **88.2** | **90.7** | **92.6** | **93.8** | **95.5** | **95.9** | **96.7** | *97.4* | *98.2* | *99.1* | *100.1* | *101.1* | **91.3** | *96.4* | *99.6* |
| Mountain | **83.9** | **85.8** | **87.0** | **88.1** | **90.1** | **90.4** | **91.2** | *91.8* | *92.5* | *93.1* | *93.9* | *94.6* | **86.2** | *90.9* | *93.5* |
| Pacific | **86.8** | **88.0** | **88.7** | **89.7** | **91.6** | **92.0** | **92.8** | *93.5* | *94.2* | *94.7* | *95.4* | *96.1* | **88.3** | *92.5* | *95.1* |
| **Real Personal Income (Billion $2005)** | | | | | | | | | | | | | | | |
| New England | **620** | **633** | **636** | **638** | **644** | **646** | **646** | *649* | *652* | *656* | *659* | *661* | **632** | *646* | *657* |
| Middle Atlantic | **1,668** | **1,699** | **1,706** | **1,714** | **1,732** | **1,737** | **1,741** | *1,750* | *1,761* | *1,775* | *1,783* | *1,791* | **1,697** | *1,740* | *1,778* |
| E. N. Central | **1,544** | **1,569** | **1,583** | **1,587** | **1,605** | **1,608** | **1,606** | *1,608* | *1,615* | *1,625* | *1,630* | *1,635* | **1,571** | *1,607* | *1,626* |
| W. N. Central | **707** | **715** | **724** | **730** | **740** | **743** | **743** | *743* | *748* | *753* | *755* | *757* | **719** | *742* | *753* |
| S. Atlantic | **2,057** | **2,084** | **2,101** | **2,110** | **2,135** | **2,143** | **2,147** | *2,159* | *2,176* | *2,192* | *2,202* | *2,213* | **2,088** | *2,146* | *2,196* |
| E. S. Central | **543** | **552** | **557** | **559** | **566** | **568** | **568** | *570* | *573* | *578* | *580* | *583* | **553** | *568* | *579* |
| W. S. Central | **1,218** | **1,236** | **1,250** | **1,261** | **1,277** | **1,284** | **1,288** | *1,295* | *1,306* | *1,316* | *1,324* | *1,332* | **1,241** | *1,286* | *1,319* |
| Mountain | **710** | **718** | **724** | **728** | **736** | **739** | **740** | *744* | *750* | *756* | *761* | *765* | **720** | *740* | *758* |
| Pacific | **1,873** | **1,893** | **1,906** | **1,918** | **1,941** | **1,948** | **1,951** | *1,960* | *1,974* | *1,987* | *1,996* | *2,006* | **1,897** | *1,950* | *1,991* |
| **Households (Thousands)** | | | | | | | | | | | | | | | |
| New England | **5,498** | **5,498** | **5,498** | **5,498** | **5,497** | **5,493** | **5,493** | *5,494* | *5,499* | *5,508* | *5,518* | *5,530* | **5,498** | *5,494* | *5,530* |
| Middle Atlantic | **15,217** | **15,210** | **15,224** | **15,231** | **15,240** | **15,240** | **15,246** | *15,252* | *15,261* | *15,278* | *15,298* | *15,319* | **15,231** | *15,252* | *15,319* |
| E. N. Central | **17,732** | **17,725** | **17,710** | **17,697** | **17,687** | **17,672** | **17,668** | *17,663* | *17,680* | *17,708* | *17,740* | *17,777* | **17,697** | *17,663* | *17,777* |
| W. N. Central | **8,065** | **8,068** | **8,077** | **8,085** | **8,094** | **8,100** | **8,110** | *8,122* | *8,140* | *8,163* | *8,187* | *8,212* | **8,085** | *8,122* | *8,212* |
| S. Atlantic | **22,256** | **22,294** | **22,315** | **22,342** | **22,374** | **22,403** | **22,441** | *22,484* | *22,544* | *22,624* | *22,714* | *22,812* | **22,342** | *22,484* | *22,812* |
| E. S. Central | **7,100** | **7,107** | **7,113** | **7,117** | **7,123** | **7,125** | **7,131** | *7,143* | *7,158* | *7,178* | *7,201* | *7,225* | **7,117** | *7,143* | *7,225* |
| W. S. Central | **12,841** | **12,871** | **12,896** | **12,921** | **12,950** | **12,976** | **13,011** | *13,053* | *13,105* | *13,162* | *13,221* | *13,287* | **12,921** | *13,053* | *13,287* |
| Mountain | **7,926** | **7,942** | **7,961** | **7,980** | **7,998** | **8,015** | **8,035** | *8,060* | *8,094* | *8,133* | *8,172* | *8,216* | **7,980** | *8,060* | *8,216* |
| Pacific | **16,950** | **16,969** | **16,997** | **17,033** | **17,056** | **17,075** | **17,101** | *17,134* | *17,182* | *17,241* | *17,303* | *17,364* | **17,033** | *17,134* | *17,364* |
| **Total Non-farm Employment (Millions)** | | | | | | | | | | | | | | | |
| New England | **6.7** | **6.7** | **6.8** | **6.8** | **6.8** | **6.8** | **6.8** | *6.8* | *6.8* | *6.8* | *6.8* | *6.8* | **6.7** | *6.8* | *6.8* |
| Middle Atlantic | **17.9** | **18.0** | **17.9** | **17.9** | **18.0** | **18.1** | **18.1** | *18.1* | *18.1* | *18.2* | *18.2* | *18.3* | **17.9** | *18.1* | *18.2* |
| E. N. Central | **19.9** | **20.0** | **20.0** | **20.0** | **20.0** | **20.1** | **20.1** | *20.1* | *20.1* | *20.2* | *20.2* | *20.3* | **20.0** | *20.1* | *20.2* |
| W. N. Central | **9.8** | **9.8** | **9.8** | **9.8** | **9.9** | **9.9** | **9.9** | *9.9* | *9.9* | *10.0* | *10.0* | *10.0* | **9.8** | *9.9* | *10.0* |
| S. Atlantic | **24.6** | **24.8** | **24.8** | **24.8** | **24.8** | **24.9** | **25.0** | *25.0* | *25.1* | *25.2* | *25.3* | *25.4* | **24.7** | *24.9* | *25.2* |
| E. S. Central | **7.3** | **7.3** | **7.3** | **7.3** | **7.4** | **7.4** | **7.4** | *7.4* | *7.4* | *7.5* | *7.5* | *7.5* | **7.3** | *7.4* | *7.5* |
| W. S. Central | **14.8** | **14.9** | **14.9** | **15.0** | **15.1** | **15.2** | **15.2** | *15.2* | *15.3* | *15.4* | *15.4* | *15.5* | **14.9** | *15.2* | *15.4* |
| Mountain | **9.0** | **9.0** | **9.0** | **9.0** | **9.1** | **9.1** | **9.1** | *9.1* | *9.2* | *9.2* | *9.2* | *9.3* | **9.0** | *9.1* | *9.2* |
| Pacific | **19.1** | **19.2** | **19.1** | **19.2** | **19.3** | **19.3** | **19.4** | *19.4* | *19.4* | *19.5* | *19.6* | *19.6* | **19.2** | *19.3* | *19.5* |

- = 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.

**Projections:** Macroeconomic projections are based on the Global Insight Model of the U.S. Economy.

**Table 9c. U.S. Regional Weather Data**

Energy Information Administration/Short-Term Energy Outlook - October 2011

| | 2010 | | | | 2011 | | | | 2012 | | | | Year | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 1st | 2nd | 3rd | 4th | 2010 | 2011 | 2012 |
| **Heating Degree-days** | | | | | | | | | | | | | | | |
| New England | **2,948** | **634** | **81** | **2,280** | **3,314** | **846** | **105** | *2,271* | *3,255* | *929* | *187* | *2,262* | **5,942** | *6,536* | *6,633* |
| Middle Atlantic | **2,805** | **477** | **57** | **2,116** | **3,023** | **609** | **67** | *2,064* | *3,002* | *751* | *126* | *2,058* | **5,455** | *5,763* | *5,937* |
| E. N. Central | **3,217** | **523** | **99** | **2,369** | **3,306** | **755** | **182** | *2,294* | *3,274* | *797* | *153* | *2,308* | **6,209** | *6,537* | *6,532* |
| W. N. Central | **3,475** | **536** | **142** | **2,430** | **3,517** | **769** | **200** | *2,493* | *3,393* | *729* | *181* | *2,506* | **6,583** | *6,979* | *6,809* |
| South Atlantic | **1,804** | **144** | **7** | **1,264** | **1,501** | **179** | **18** | *1,058* | *1,531* | *242* | *25* | *1,058* | **3,219** | *2,756* | *2,856* |
| E. S. Central | **2,297** | **169** | **11** | **1,516** | **1,866** | **247** | **44** | *1,372* | *1,895* | *288* | *32* | *1,376* | **3,993** | *3,529* | *3,591* |
| W. S. Central | **1,608** | **79** | **2** | **833** | **1,273** | **101** | **9** | *837* | *1,208* | *99* | *9* | *889* | **2,521** | *2,220* | *2,205* |
| Mountain | **2,313** | **780** | **116** | **1,745** | **2,338** | **773** | **71** | *1,925* | *2,346* | *734* | *167* | *1,935* | **4,954** | *5,107* | *5,182* |
| Pacific | **1,312** | **678** | **93** | **1,086** | **1,481** | **675** | **52** | *1,148* | *1,467* | *563* | *107* | *1,145* | **3,170** | *3,356* | *3,282* |
| U.S. Average | **2,311** | **422** | **62** | **1,665** | **2,285** | **517** | **77** | *1,624* | *2,264* | *540* | *98* | *1,632* | **4,460** | *4,503* | *4,534* |
| **Heating Degree-days, 30-year Normal (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** | **129** | **526** | **0** | **0** | **111** | **496** | *0* | *0* | *70* | *351* | *0* | **656** | *607* | *421* |
| Middle Atlantic | **0** | **261** | **730** | **5** | **0** | **216** | **670** | *5* | *0* | *141* | *514* | *5* | **996** | *891* | *660* |
| E. N. Central | **0** | **282** | **684** | **10** | **0** | **227** | **668** | *9* | *1* | *197* | *504* | *8* | **976** | *904* | *710* |
| W. N. Central | **1** | **320** | **787** | **15** | **1** | **294** | **810** | *13* | *3* | *264* | *653* | *12* | **1,123** | *1,118* | *932* |
| South Atlantic | **34** | **772** | **1,292** | **168** | **99** | **789** | **1,262** | *203* | *115* | *576* | *1,086* | *209* | **2,265** | *2,353* | *1,986* |
| E. S. Central | **8** | **679** | **1,256** | **61** | **9** | **653** | **1,134** | *62* | *33* | *472* | *1,008* | *62* | **2,005** | *1,858* | *1,575* |
| W. S. Central | **27** | **950** | **1,593** | **179** | **113** | **1,091** | **1,767** | *193* | *92* | *812* | *1,432* | *176* | **2,749** | *3,164* | *2,512* |
| Mountain | **11** | **370** | **991** | **78** | **11** | **316** | **971** | *61* | *14* | *376* | *865* | *70* | **1,450** | *1,359* | *1,325* |
| Pacific | **7** | **120** | **495** | **33** | **2** | **68** | **606** | *41* | *7* | *150* | *513* | *41* | **655** | *717* | *711* |
| U.S. Average | **12** | **445** | **930** | **68** | **33** | **432** | **942** | *77* | *37* | *348* | *776* | *77* | **1,455** | *1,484* | *1,238* |
| **Cooling Degree-days, 30-year Normal (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* | *0* | *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 | **29** | **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* |

- = no data available

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

**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, 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.