



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 of 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.

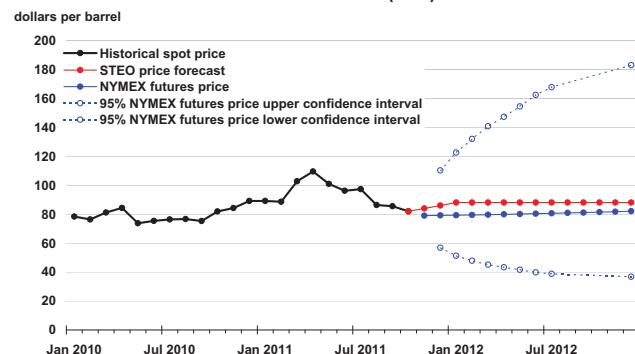
U.S. CO₂ Emissions. EIA estimates that CO₂ emissions from fossil fuels increased by 3.9 percent in 2010 ([U.S. Carbon Dioxide Emissions Growth Chart](#)). Forecast fossil-fuel CO₂ emissions fall by 0.7 percent in 2011, as emission increases from higher natural gas consumption are offset by declines in coal and petroleum consumption. Increases in hydroelectric generation and other renewable energy sources in 2011 also help to mitigate emissions growth. Fossil-fuel CO₂ 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.



Short-Term Energy Outlook

Chart Gallery for October 2011

West Texas Intermediate (WTI) Crude Oil Price

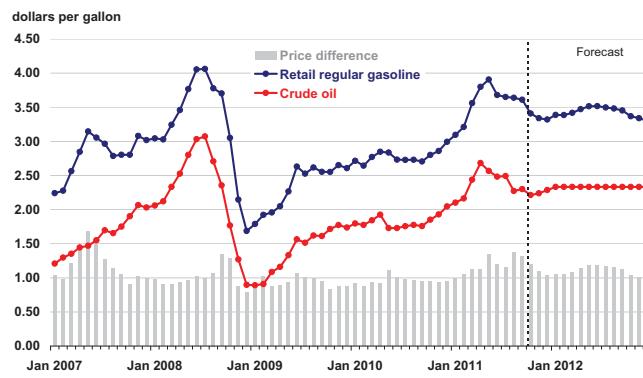


Note: Confidence interval derived from options market information for the 5 trading days ending October 6, 2011
Intervals not calculated for months with sparse trading in "near-the-money" options contracts

Source: Short-Term Energy Outlook, October 2011



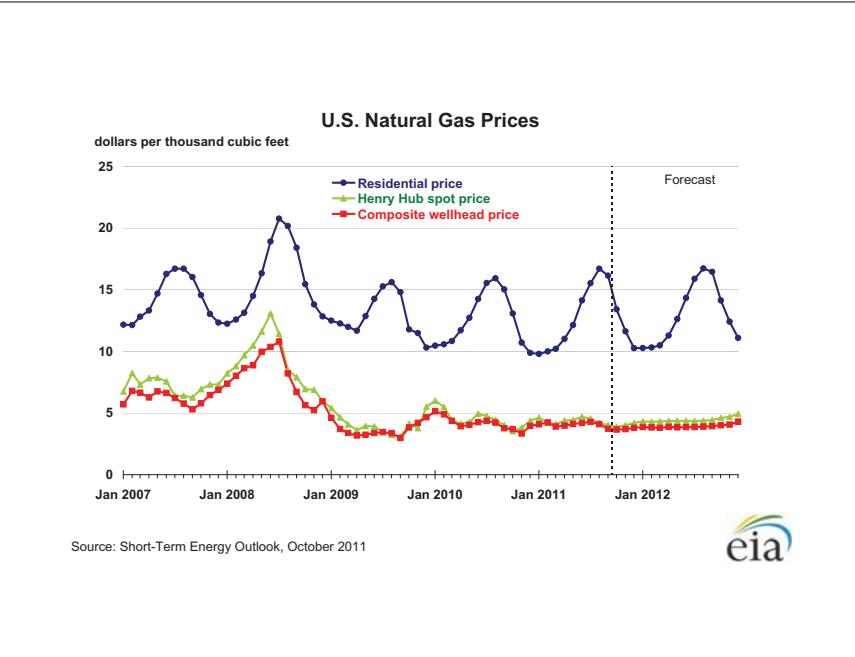
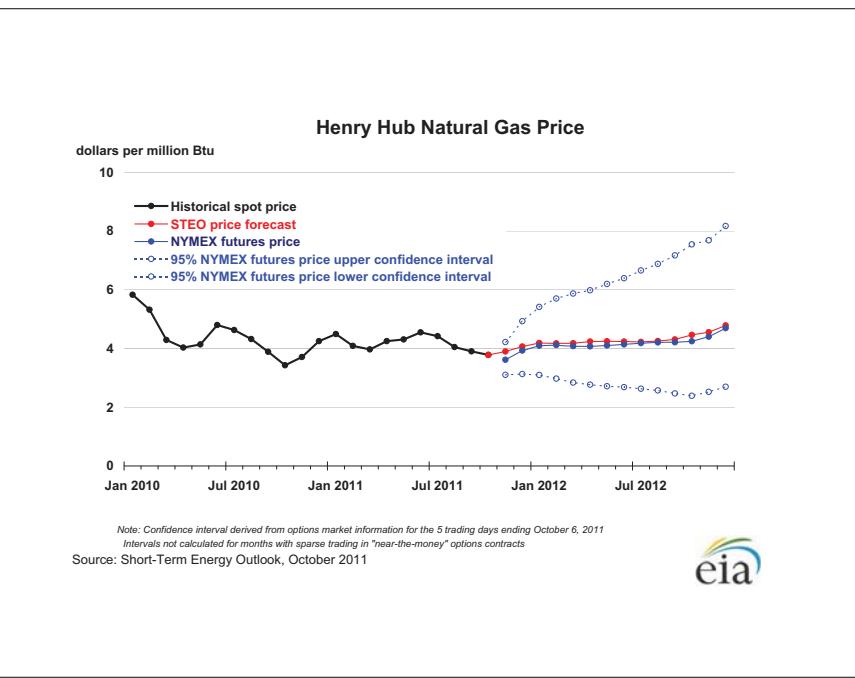
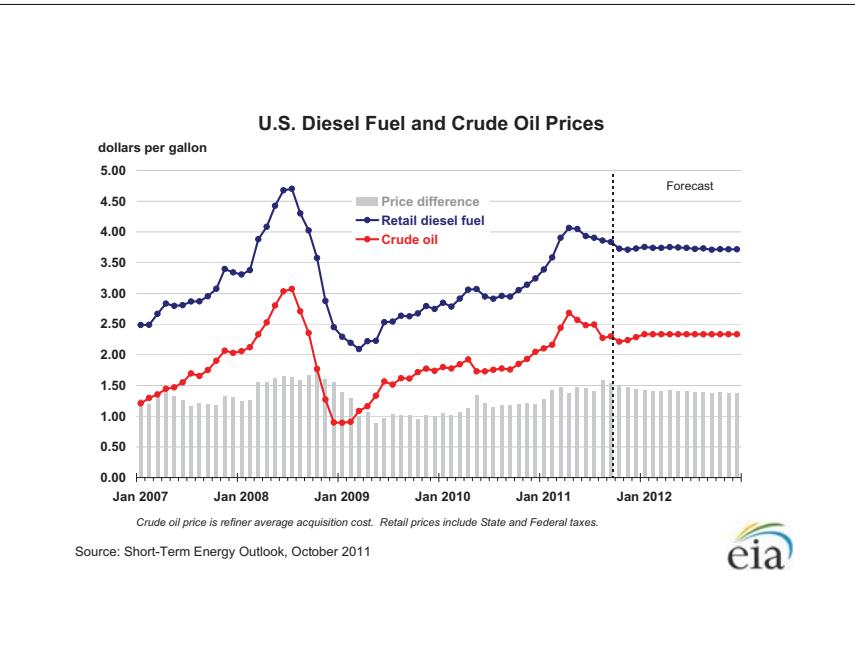
U.S. Gasoline and Crude Oil Prices

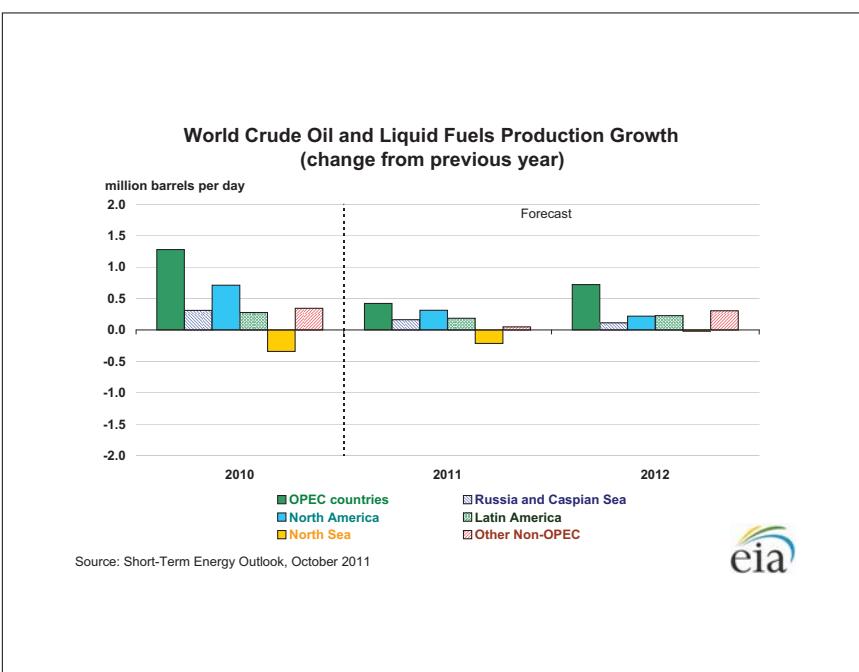
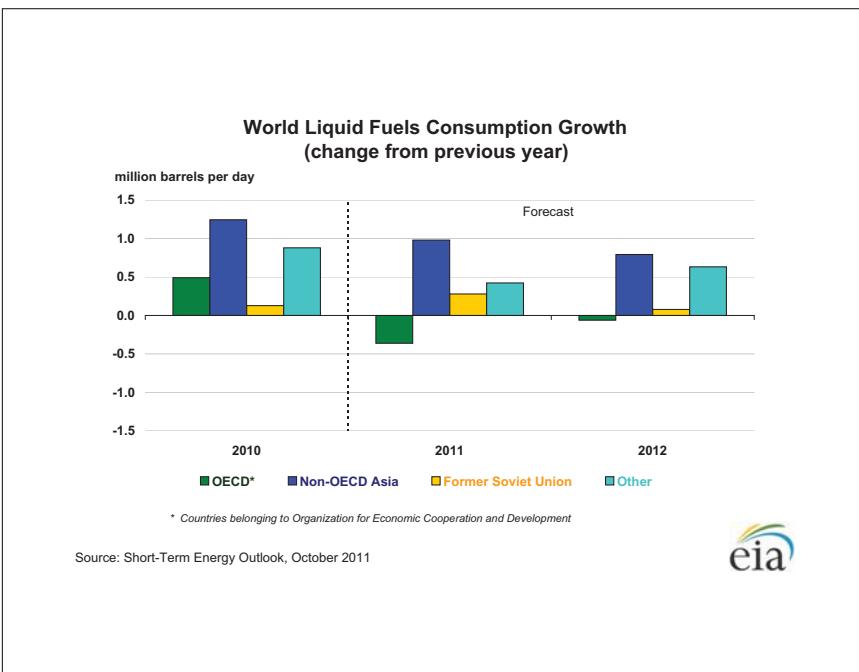
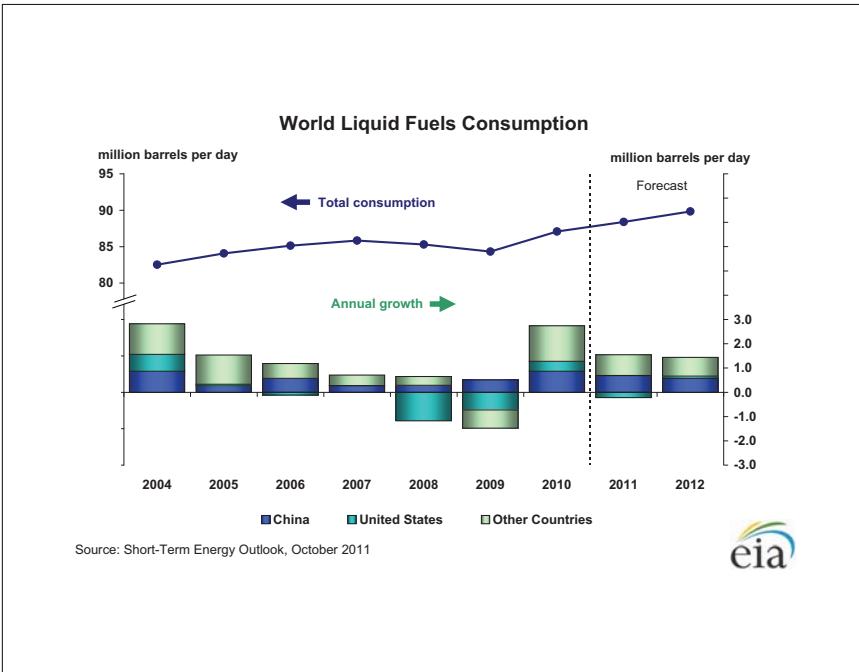


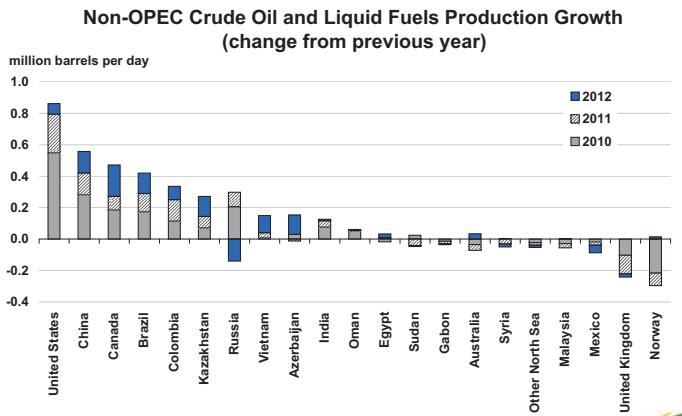
Crude oil price is refiner average acquisition cost. Retail prices include State and Federal taxes.

Source: Short-Term Energy Outlook, October 2011





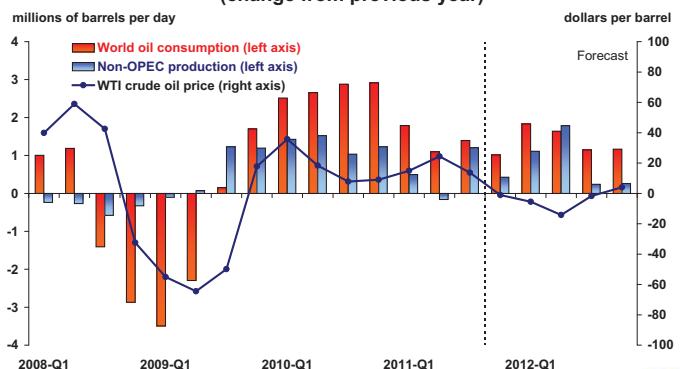




Source: Short-Term Energy Outlook, October 2011



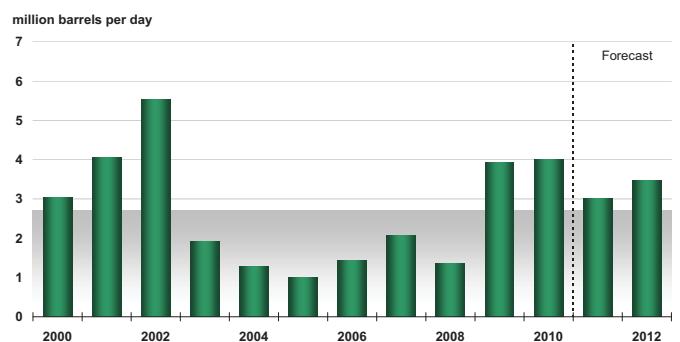
**World Consumption and Non-OPEC Production
(change from previous year)**



Source: Short-Term Energy Outlook, October 2011



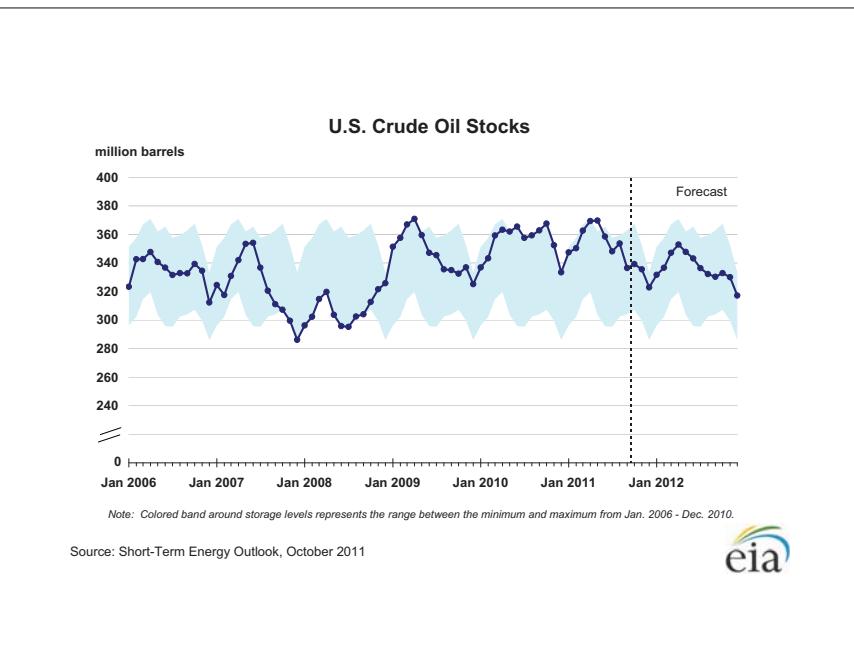
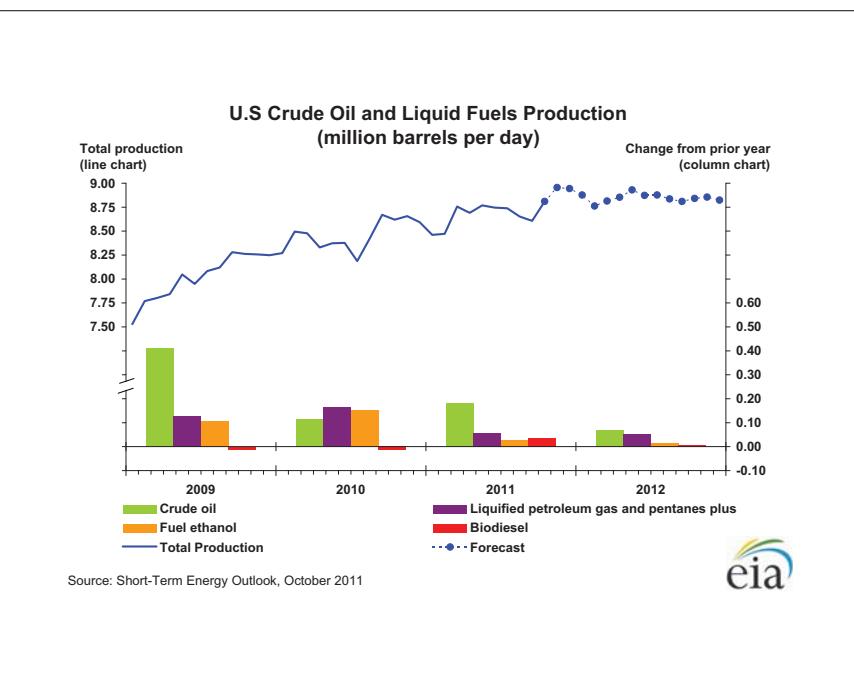
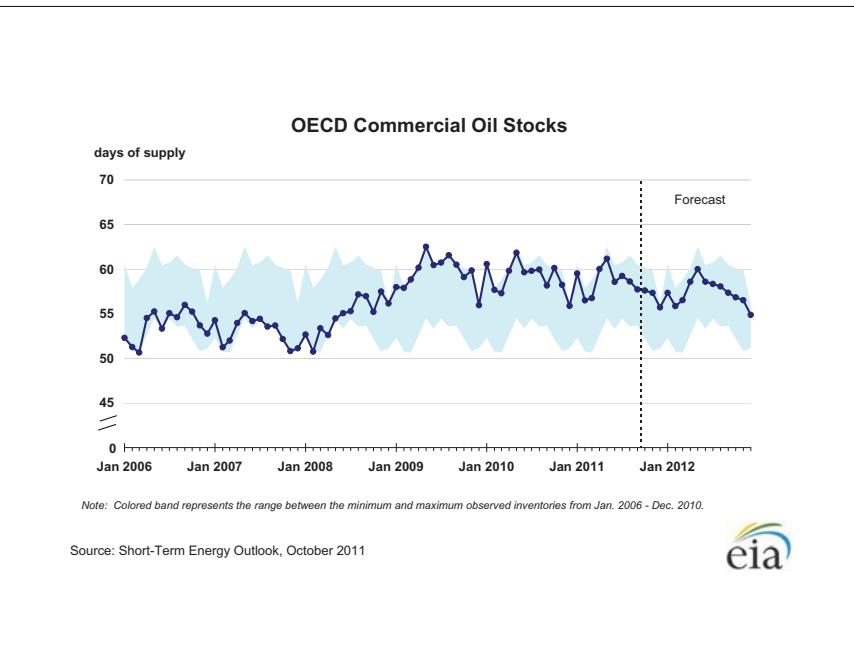
OPEC Surplus Crude Oil Production Capacity

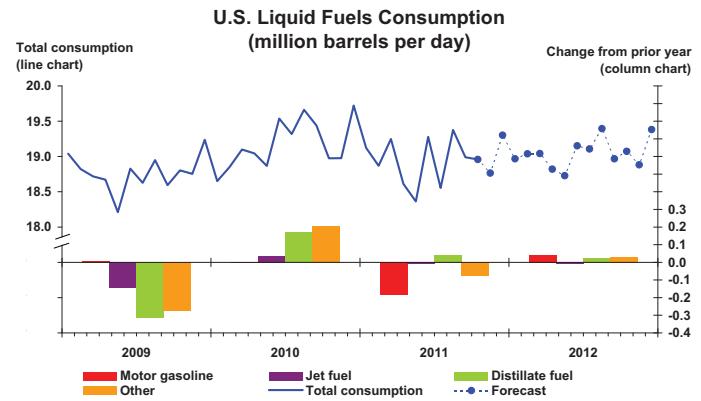


Note: Shaded area represents 2000-2010 average (2.7 million barrels per day)

Source: Short-Term Energy Outlook, October 2011



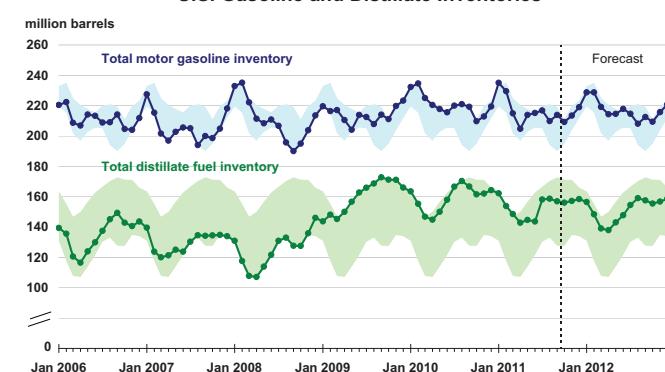




Source: Short-Term Energy Outlook, October 2011



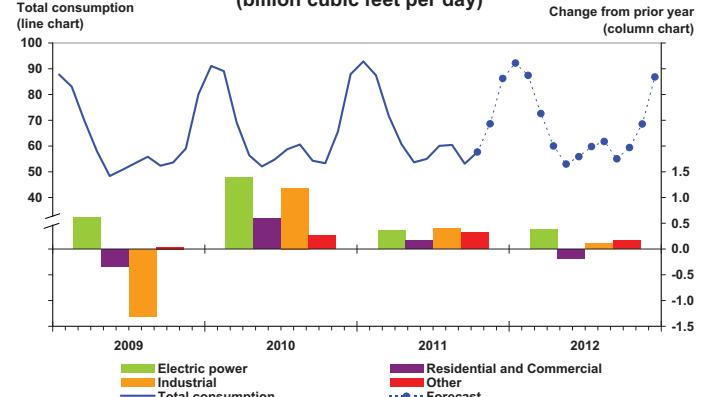
U.S. Gasoline and Distillate Inventories



Source: Short-Term Energy Outlook, October 2011

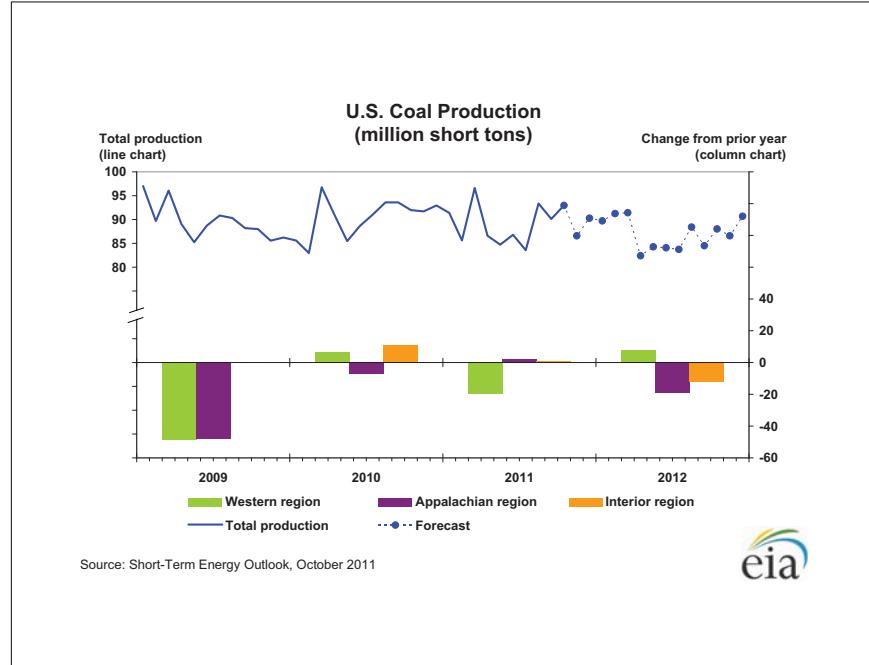
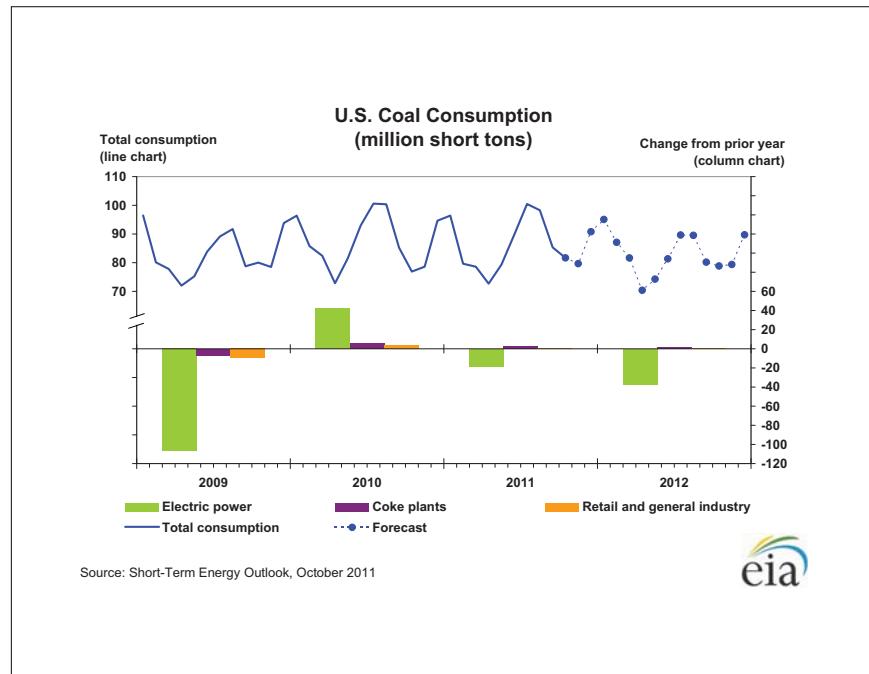
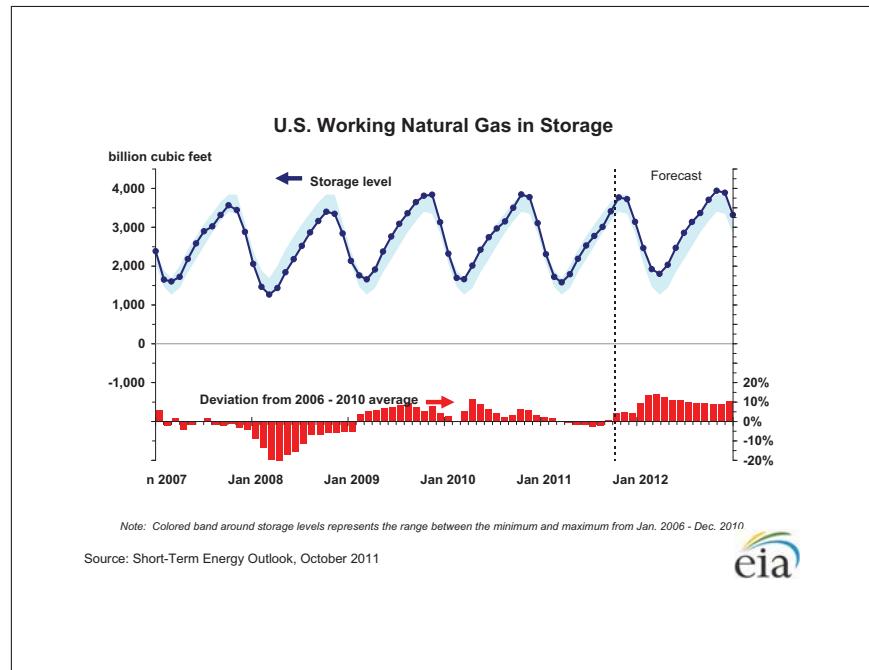


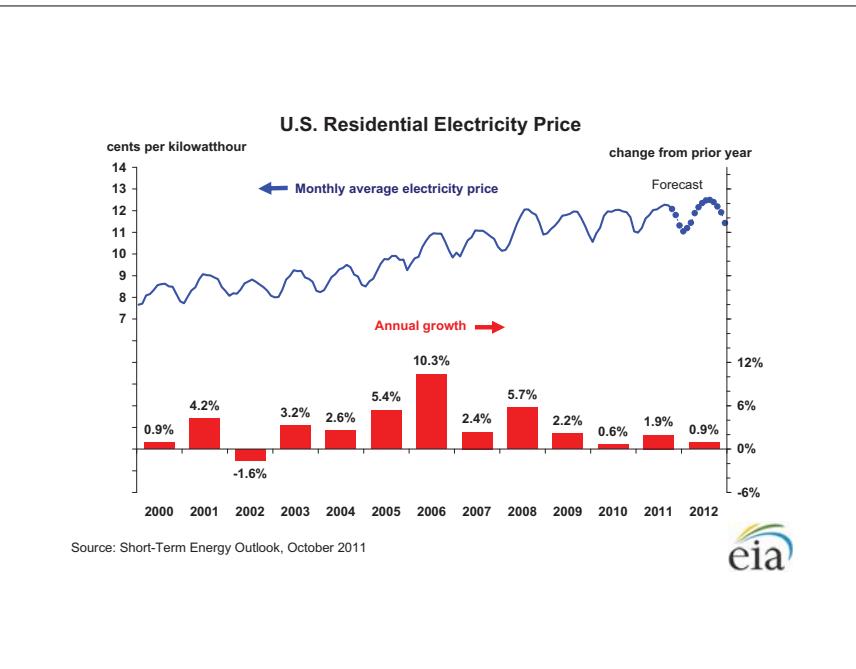
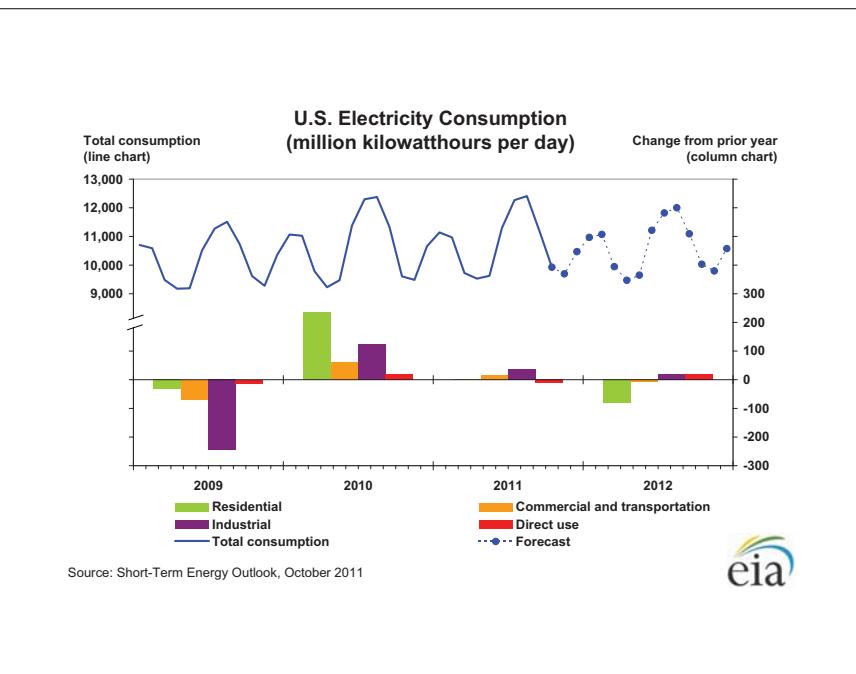
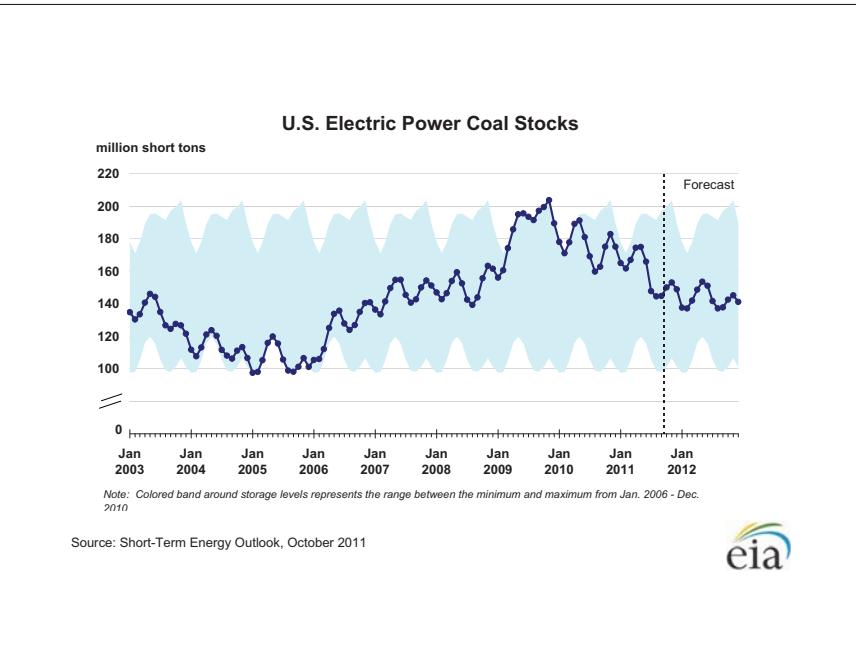
U.S. Natural Gas Consumption (billion cubic feet per day)



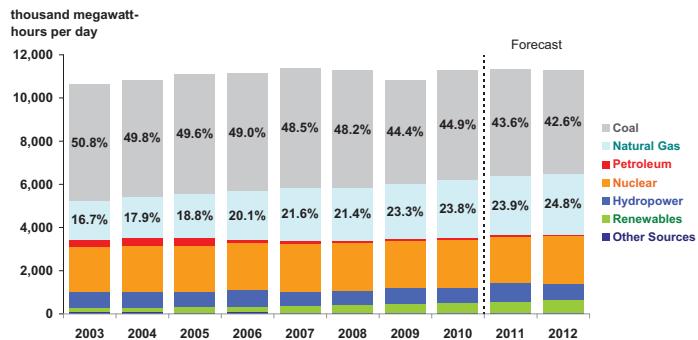
Source: Short-Term Energy Outlook, October 2011







U.S. Electricity Generation by Fuel, All Sectors

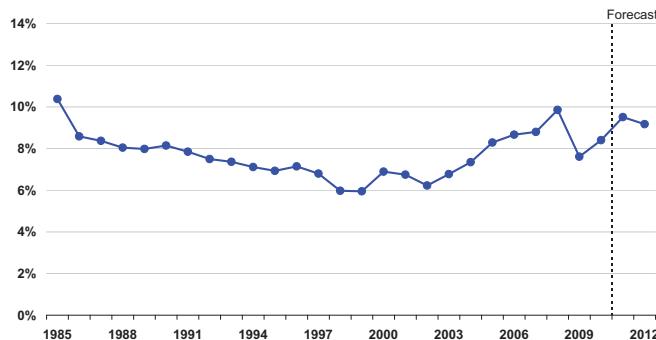


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, October 2011



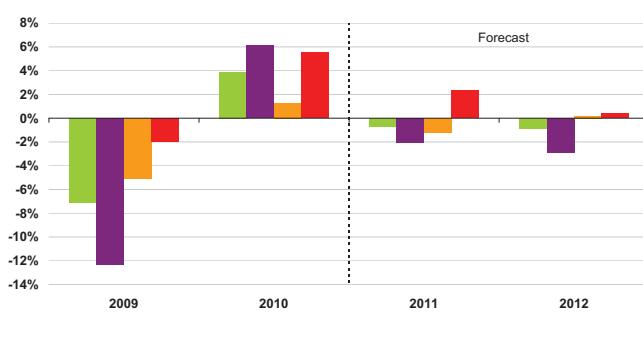
U.S. Annual Energy Expenditures Share of Gross Domestic Product



Source: Short-Term Energy Outlook, October 2011



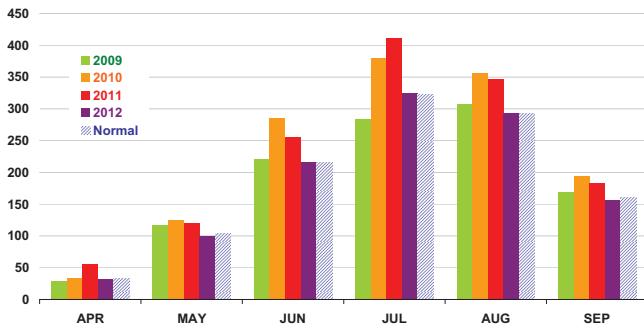
U.S. Carbon Dioxide Emissions Growth (change from previous year)



Source: Short-Term Energy Outlook, October 2011



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

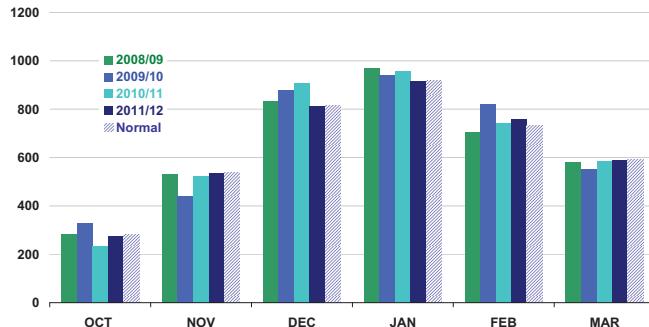


Data source: National Oceanic and Atmospheric Administration, National Weather Service

Source: Short-Term Energy Outlook, October 2011



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

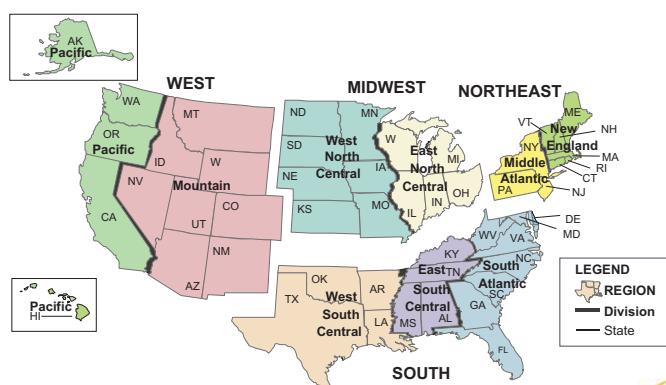


Data source: National Oceanic and Atmospheric Administration, National Weather Service

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	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	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	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	0.25	0.24	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	0.20	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	0.35	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	-	-
Ecuador	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	-	-
Ecuador	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	-	-
Ecuador	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				2010	2011	2012
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
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	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	1.0	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" 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.

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	17.57	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 coal 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	6.14	5.83	6.01	6.04	6.01	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								
Natural Gas	0.011	0.011	0.014	0.012	0.011	0.013	0.012	0.012	0.011	0.013	0.012	0.012	0.012	0.012	0.012
Petroleum	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														
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														
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	0.004	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	0.001	0.001	0.001											
Geothermal	0.005	0.019	0.018	0.018											
Wood and Wood Waste	0.017	0.018	0.018	0.018	0.017	0.018	0.070	0.070	0.071						
Other Renewables (c)	0.008	0.009	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	0.037	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	0.097	0.096	0.096											
Subtotal	0.136	0.138	0.140	0.140	0.136	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 CO₂ 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 (CO₂) 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	748	753	755	757	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	24.9	25.0	25.0	25.1	25.2	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.