Short-Term Energy and Winter Fuels Outlook

- EIA projects average household expenditures for heating oil and natural gas will increase
 by 19 percent and 15 percent, respectively, this winter (October 1 through March 31)
 compared with last winter. Projected household expenditures are 5 percent higher for
 electricity and 13 percent higher for propane this winter. Average expenditures for
 households that heat with heating oil are forecast to be higher than any previous winter
 on record (see EIA Short-Term Energy and Winter Fuels Outlook slideshow).
- The forecast for higher household expenditures primarily reflects a return to roughly normal winter temperatures east of the Rocky Mountains compared with last winter's unusual warmth. According to the National Oceanic and Atmospheric Administration's (NOAA) most recent projection of heating degree days, the Northeast, Midwest, and South will be about 2 percent warmer than the 30-year average (1981 2010), but still 20 percent to 27 percent colder than last winter, while the West is projected to be only about 1 percent colder than last winter.
- Projected residential heating oil prices average 2 percent higher and natural gas prices 1
 percent higher this winter. Winter average electricity and propane prices average about
 2 percent and 4 percent lower than last winter, respectively.
- EIA expects U.S. total crude oil production to average 6.3 million barrels per day (bbl/d) in 2012, an increase of 0.7 million bbl/d from last year. Projected U.S. domestic crude oil production increases to 6.9 million bbl/d in 2013, the highest level of production since 1993.
- Forecast U.S. real gross domestic product (GDP) grows by 2.2 percent this year and by 1.7 percent next year. Projected world oil-consumption-weighted real GDP grows by 2.7 percent and 2.5 percent in 2012 and 2013, respectively, similar to last month's *Outlook*. EIA expects Brent crude oil prices to fall from recent highs over the rest of 2012, averaging \$111 per barrel over the fourth quarter of 2012 and \$103 per barrel in 2013. EIA expects WTI spot prices to average \$93 per barrel in 2013, with the WTI discount to Brent narrowing to \$9 per barrel by the end of 2013.
- Natural gas working inventories ended September 2012 at an estimated 3.7 trillion cubic feet (Tcf), about 8 percent above the same time last year. EIA expects the Henry Hub

natural gas spot price, which averaged \$4.00 per million British thermal units (MMBtu) in 2011, to average \$2.71 per MMBtu in 2012 and \$3.35 per MMBtu in 2013.

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 <u>Winter Fuels Outlook table</u>).

Natural Gas. About one-half of U.S. households use natural gas as their primary heating fuel. EIA expects households heating with natural gas to spend an average of \$89 (15 percent) more this winter than last winter. The increase in natural gas expenditures represents less than a 1-percent increase in the average U.S. residential price from last winter and a 14-percent increase in consumption. The expected increase in consumption is the result of the forecast of near-normal temperatures this winter, in contrast to the unusually warm winter of 2011-12. The projected changes in residential natural gas prices this winter range from a 3-percent decline in the South to a 4-percent increase in the Northeast. Price changes vary across regions because of a number of factors such as regional changes in production, 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 \$407 (19 percent) more this winter than last winter as a result of a 2-percent increase in prices and a 17-percent increase in consumption. About 6 percent of U.S. households depend on heating oil for space heating; however, the Northeast accounts for about 80 percent of these households. Low distillate stocks in the East Coast and Gulf Coast states, which provide over 60 percent of the Northeast's distillate supply, and the state of New York's switchover from higher sulfur heating oil to fuel with less than 15 parts per million sulfur, all contribute to an expected tighter market this winter.

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 both propane consumption and winter propane expenditures of 17 percent and 11 percent, respectively, with residential propane prices 5 percent lower than last winter. With consumption projected to increase by 16 percent over last winter in the Northeast, households there may see an increase in expenditures of 15 percent with prices lower by an average 1 percent.

Electricity. Households heating primarily with electricity can expect to spend an average of \$49 (5 percent) more this winter because of forecasted colder weather despite a projected 2-

percent decrease in prices. About 38 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.

Wood. Wood consumption in homes has risen over the past 10 years, reversing a trend seen in the last two decades of the 20th century. In 2009, U.S. households consumed about 0.5 quadrillion Btu (quads) of wood. Household fuel oil consumption, by comparison, was only slightly higher at 0.6 quads. In homes across the United States, wood is most commonly used as a secondary source of heat and is second only to electricity as a supplemental heating fuel. Twenty percent of New England homes (1.1 million) used wood for space heating, water heating, or cooking in 2009 (EIA, <u>Residential Energy Consumption Survey, 2009</u>). This is nearly twice the national rate. Almost half of all rural households used wood in this area of the country. In contrast, only 12 percent of urban New England households used the fuel.

Global Crude Oil and Liquid Fuels

Global Crude Oil and Liquid Fuels Overview. EIA expects the oil market to loosen in the fourth quarter of 2012, as global liquid fuels consumption falls from its seasonal peak and output from countries outside of the Organization of the Petroleum Exporting Countries (OPEC) recovers from unplanned outages and scheduled maintenance. Persistent unplanned production outages in non-OPEC countries helped keep the spot price for Brent crude oil near \$110 per barrel in the third quarter of 2012. EIA forecasts that Brent crude, a benchmark for the global oil price, will average \$111 per barrel for the fourth quarter of 2012. In 2013, EIA projects the Brent crude price to fall to an average of \$103 per barrel, although a lingering supply risk because of instability in the Middle East and North Africa could keep prices higher. EIA also expects global inventory builds in the first half of 2013 to reach higher levels relative to the same period in 2012, mostly due to an increase in non-OPEC supply.

Global Crude Oil and Liquid Fuels Consumption. World liquid fuels consumption grew by an estimated 1.1 million bbl/d in 2011. EIA expects consumption growth of about 0.8 million bbl/d in 2012 and 0.9 million bbl/d in 2013, with China, the Middle East, Central and South America, and other countries outside of the Organization for Economic Cooperation and Development (OECD) accounting for essentially all consumption growth. However, forecast consumption falls by 0.5 million bbl/d during the fourth quarters of 2012, following the end of the global seasonal demand peak in the third quarter.

Projected OECD liquid fuels consumption declines by 0.4 million bbl/d in 2012 and by an additional 0.2 million bbl/d in 2013. Although EIA forecasts U.S. liquid fuels consumption to grow by 0.1 million bbl/d in 2013, this is more than offset by declines in consumption in Europe and other OECD countries. One possible exception is Japan, where only a handful of nuclear facilities, at best, will be brought back online in 2013, which could cause its oil consumption to remain relatively resilient through the forecast period.

China has been experiencing a slowing of its economic growth rate. EIA's forecast for China's oil consumption growth remains at lower levels than the country experienced in previous years. EIA projects China's liquid fuels consumption to rise by 3.6 percent (355 thousand bbl/d) in 2012, the lowest rate of annual growth since 2001, and by 400 thousand bbl/d in 2013.

Non-OPEC Supply. EIA expects non-OPEC liquid fuels production to rise by 570 thousand bbl/d in 2012, and by a further 1.2 million bbl/d in 2013. The largest area of non-OPEC growth is North America, where production increases by 1.0 million bbl/d and 670 thousand bbl/d in 2012 and 2013, respectively, due to continued production growth from U.S. onshore shale and other tight oil formations and from Canadian oil sands.

Some large non-OPEC producers continue to undergo planned maintenance that traditionally takes place during this time of the year. Kazakhstan's crude and condensate production was down by about 160 thousand bbl/d in September 2012 because of planned maintenance at Tengiz. The field is slowly returning to normal operations. In the North Sea the Buzzard, Elgin, and Franklin fields are currently out for maintenance. Buzzard is expected to return to full production at the end of October. Total announced that Elgin and Franklin maintenance will be extended through December. Maintenance in Norway's fields reduced output by more than 20 thousand bbl/d in September 2012. This was mainly due to maintenance at the Troll field, but also includes smaller volumes from other fields, such as Gullfaks and Ekofisk.

Unplanned outages and disruptions to non-OPEC production increased in August and September, averaging around 1.1 million bbl/d. Hurricane Isaac contributed to production shutins in the Gulf of Mexico averaging about 210 thousand bbl/d in both August and September.

EIA has made slight adjustments in its forecasts for Colombia and Brazil, the two leading sources of non-OPEC supply in South America, due in part to lower output in recent months. In Colombia, anti-government rebels had intensified the frequency and severity of their attacks on the Caño Limón pipeline and other oil infrastructure, which contributed to an estimated decline in August production relative to the previous month and year-ago levels. However, security threats have abated in anticipation of peace talks and Colombian oil production is estimated to have partially recovered in September, which has led to renewed optimism that the country can resume its production gains. Brazilian liquid fuels production has also consistently failed to meet expectations in recent months due to persistent maintenance-related shutdowns, larger-than-expected field declines, the impacts of a relatively poor sugarcane harvest on ethanol production, and the continued outage at the Chevron-operated Frade field. Unless output is quickly restored, Brazilian liquids production is likely to decline on a year-to-year basis.

Sudan and South Sudan signed a series of agreements to settle their dispute and restart oil production in the South, eight months after South Sudan halted its crude oil exports via pipelines through Sudan and shut in all production. Sudan and South Sudan had already reached an understanding on oil transit fees, but the resumption of production was contingent on a broader deal on border security. The two countries have now signed an agreement on security

arrangements; however, some post-independence issues such as border demarcation, rights to the disputed Abyei region, and Sudan's claim for compensation of Sudapet's assets that went to South Sudan remain unresolved. Nonetheless, South Sudan expects to restart production and exports before the end of this year, but has previously cautioned it could take four to six months to bring output back to full volumes, possibly longer for areas damaged during military clashes.

Forecasting South Sudan's oil restart and the pace of the ramp-up remains a challenge given uncertainties include: the extent of damage to infrastructure at fields within the Greater Nile Oil Project; the ability for some mature fields that were previously declining in output to reach preshut-in levels; the extent to which the shut-in left any permanent irreversible damage that could compromise future output; how quickly export pipelines will be flushed out; and any other mechanical issues that may arise during the restart. EIA does not expect South Sudan's production to return to pre-shut-in levels in the forecast period.

OPEC Supply. EIA expects that OPEC members will continue to produce more than 30 million bbl/d of crude oil over the next two years to accommodate the projected increase in world oil consumption and to counterbalance supply disruptions. Projected OPEC crude oil production increases by about 1.2 million bbl/d in 2012 and remains mostly flat in 2013. OPEC non-crude oil liquids (condensates, natural gas liquids, and gas-to-liquids), which are not covered by OPEC's production quotas, averaged 5.3 million bbl/d in 2011 and are forecast to increase by 0.3 million bbl/d in 2012 and by 0.2 million bbl/d in 2013.

EIA estimates that Iran's crude oil production declined by 50 thousand bbl/d in September 2012, following a 100-thousand-bbl/d decline the month before. EIA expects Iran's crude oil production to fall by about 1 million bbl/d by the end of 2012, relative to an estimated output level of 3.6 million bbl/d at the end of 2011. The decline in Iran's crude oil production capacity will continue due to the country's inability to carry out investment projects that are necessary to offset the natural decline in production from existing wells.

It is difficult to differentiate between the effects of the latest round of sanctions on Iran and those enacted in previous years when assessing impacts on Iranian oil production. While countries in the European Union appear to have ceased imports of Iranian crude oil, the reinsurance ban affected Iran's ability to sell its crude to some of its largest customers in Asia, including Japan and South Korea. Most of Iran's crude oil customers have been able to replace insurance coverage, once provided by European protection and indemnity (P&I) clubs, over the last two months, although preliminary data show a very small increase in imports of Iranian crude oil by those customers in August. EIA bases this assessment on preliminary commercial data on tanker liftings from Iran, press reports, official Iranian statements, and other relevant information. This tentative interpretation of a very fluid situation could change as data are revised and more details emerge.

The attacks on American personnel in Benghazi, Libya, serve as a tragic reminder that insecurity continues to plague the country, including some areas in which oil infrastructure is

concentrated. Though Libya has continued to maintain production at relatively high levels and recently restarted its largest refinery, it poses a downside risk to the supply forecast given the possibility of future disruption.

World oil surplus production capacity is almost entirely concentrated in one country: Saudi Arabia. With Saudi Arabian oil production at or near 10 million bbl/d for much of 2012, global surplus production capacity has been in the neighborhood of 2 million bbl/d during this time.

OECD Petroleum Inventories. EIA estimates that OECD commercial oil inventories ended 2011 at 2.60 billion barrels, equivalent to just under 56 days of forward-cover. Projected OECD oil inventories increase to 2.64 billion barrels and 57 days of forward-cover by the end of 2012. Forecast days of supply are at the highest end-of-year levels since 1991 because of the decline in OECD consumption over the last 7 years.

Crude Oil Prices. EIA projects the price of Brent crude oil will average \$112 per barrel in 2012 and \$103 per barrel in 2013, both mostly unchanged from last month's *Outlook*. EIA expects the WTI price to average \$93 per barrel in the second half of 2012 and largely remain at this level throughout the forecast period. After increasing to as high as \$19 per barrel in August and September of this year, EIA expects that the WTI crude oil spot price discount to the Brent crude oil spot price will average \$17 per barrel in the fourth quarter of 2012 before falling to \$9 per barrel by the end of 2013.

Energy price forecasts are highly uncertain (*Market Prices and Uncertainty Report*). WTI futures for January 2013 delivery during the five-day period ending October 4, 2012, averaged \$92.09 per barrel. Implied volatility averaged 31 percent, establishing the lower and upper limits of the 95-percent confidence interval for the market's expectations of monthly average WTI prices in January 2013 at \$70 per barrel and \$121 per barrel, respectively. Last year at this time, WTI for January 2012 delivery averaged \$79 per barrel and implied volatility averaged 50 percent. The corresponding lower and upper limits of the 95-percent confidence interval were \$51 per barrel and \$123 per barrel.

U.S. Crude Oil and Liquid Fuels

U.S. Liquid Fuels Consumption. Total liquid fuels consumption fell 230 thousand bbl/d (1.2 percent) in 2011, driven by a 240-thousand-bbl/d drop in motor gasoline consumption. Forecast total liquid fuels consumption falls by 280 thousand bbl/d (1.5 percent) in 2012 including a decline in motor gasoline consumption of 30 thousand bbl/d. Warm weather during the first half of the year contributes to a projected 110-thousand-bbl/d decline in distillate fuel oil consumption in 2012. In 2013, total liquid fuels consumption increases by 110 thousand bbl/d (0.6 percent). Most of the recovery in consumption next year comes from distillate fuel oil and natural gas liquids consumption, which rise because of continued growth in freight shipments and industrial use as well as the assumption of near-normal weather this coming winter.

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

U.S. Liquid Fuels Supply and Imports. Domestic crude oil production increased by an estimated 180 thousand bbl/d (3.2 percent) to 5.7 million bbl/d in 2011. Forecast crude oil production increases to 6.3 million bbl/d in 2012 with lower-48 (excluding the federal Gulf of Mexico) crude oil production growing by 780 thousand bbl/d, primarily from the Bakken, Permian basin, and Eagle Ford producing areas. Hurricane Isaac in the Gulf of Mexico led to U.S. crude oil production shut-ins averaging 220 thousand bbl/d in August and 200 thousand bbl/d in September. Total crude oil output rises a further 530 thousand bbl/d in 2013. The number of onshore oil-directed drilling rigs reported by Baker Hughes has increased from 777 at the beginning of 2011 to 1,191 at the start of 2012, and to 1,398 as of October 5, 2012.

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

U.S. Petroleum Product Prices. After a sharp increase in retail gasoline prices earlier this year, the monthly average price for regular grade gasoline reached \$3.90 per gallon in April 2012. Prices then fell for three consecutive months, averaging \$3.44 per gallon in July. Rising crude prices contributed to a second run-up in regular gasoline retail prices to an average of \$3.85 per gallon in September 2012. EIA expects retail gasoline prices to begin declining in October as the gasoline market transitions from summer-grade to winter-grade gasoline specifications and forecast crude oil prices begin to fall. Projected regular gasoline retail prices average \$3.60 per gallon during the fourth quarter of 2012, up slightly from \$3.58 per gallon projected in last month's *Outlook*. Projected regular gasoline retail prices average \$3.65 per gallon in 2012 and \$3.44 per gallon in 2013.

Diesel fuel retail prices rose from a monthly average of \$3.83 per gallon to January 2012 to a high of \$4.13 in March, then fell to a low of \$3.72 in July. Tight market conditions and increasing crude oil prices drove on-highway diesel fuel prices back near monthly highs for the year average \$4.12 per gallon in September. EIA expects that on-highway diesel fuel retail prices will average \$3.98 per gallon during the fourth quarter of this year and \$3.81 per gallon in 2013. Wholesale diesel margins (the difference between the wholesale price of diesel and the refiner acquisition cost of crude oil) averaged 60 cents per gallon the first half of 2012 before climbing to an estimated 85 cents per gallon in September, the highest level since May 2008. In 2012,

EIA projects those margins will average 68 cents per gallon in 2012 and 63 cents per gallon in 2013, compared with the previous 5-year average of 52 cents per gallon.

Natural Gas

U.S. Natural Gas Consumption. EIA expects that natural gas consumption will average 69.8 billion cubic feet per day (Bcf/d) in 2012, an increase of 3.1 Bcf/d (4.7 percent) from 2011. Large gains in electric power use in 2012 more than offset declines in residential and commercial use. Projected consumption of natural gas in the electric power sector averages 25.4 Bcf/d in 2012, 22 percent higher than in 2011, primarily driven by the improved relative cost advantages of natural gas over coal for power generation in some regions. Consumption in the electric power sector during 2012 was 35.1 Bcf/d in July 2012, when electricity demand for air conditioning was highest.

Projected total natural gas consumption decreases by 0.2 Bcf/d (0.2 percent) in 2013. Expected declines in the electric power sector offset increases in residential, commercial, and industrial consumption. A forecast of near-normal weather during the upcoming winter (i.e., colder than last year's abnormally warm winter) drives 2013 increases in residential and commercial consumption of 11.5 percent and 10.3 percent, respectively. Although projected higher natural gas prices contribute to a 10.4-percent decline in forecast natural gas consumption in the electric power sector in 2013, consumption in the power sector next year is still expected to be about 1.9 Bcf/d higher than 2011 levels and high by historical standards.

U.S. Natural Gas Production and Imports. Total marketed production of natural gas grew by 4.8 Bcf/d (7.9 percent) in 2011. This strong growth was driven in large part by increases in shale gas production. So far during 2012, production has fluctuated with small ups and downs, in contrast to the strong upward growth seen between 2009 and 2011. EIA expects some small declines in production in the coming months, related to recent drops in the rig count. According to Baker Hughes, the natural gas rig count was 437 as of October 4, 2012, compared with 811 at the start of 2012. EIA forecasts that total marketed production growth will slow to 2.6 Bcf/d in 2012 and 0.4 Bcf/d in 2013, as the reduction in drilling activity is offset by growth in production from liquids-rich natural gas production areas such as the Eagle Ford and wet areas of the Marcellus Shale, and associated gas from the growth in domestic crude oil production.

EIA expects pipeline gross imports will fall by 0.2 Bcf/d (2.3 percent) in 2012, as domestic supply continues to displace Canadian sources. The warm winter in the United States early this year also added to the year-over-year decline in imports, particularly to the Northeast where imported natural gas can serve as additional supply in times of very cold weather. EIA expects little change in pipeline gross imports in 2013. Pipeline gross exports grew by 1.0 Bcf/d (33 percent) in 2011, driven by increased exports to Mexico, but are expected to remain mostly flat in 2012, and grow by 0.1 Bcf/d in 2013.

Liquefied natural gas (LNG) imports are expected to fall by about one-half in 2012 from the year before. EIA expects that an average of about 0.5 Bcf/d will arrive in the United States (mainly at the Elba Island terminal in Georgia and the Everett terminal in New England) both in 2012 and 2013, either to fulfill long-term contract obligations or to take advantage of temporarily high local prices due to cold snaps and disruptions. Higher prices for LNG, particularly in Asian markets, have made the United States a market of last resort for LNG suppliers.

U.S. Natural Gas Inventories. Working natural gas inventories remain at historically high levels for this time of year. As of September 28, 2012, according to EIA's *Weekly Natural Gas Storage Report*, working inventories totaled 3,653 Bcf, which is 272 Bcf greater than last year's level and 281 Bcf above the five-year average. EIA expects that inventory levels at the end of October 2012 will set a record high of 3,903 Bcf. Because of very high inventories at the start of the summer injection season this year, working inventories have remained high and stock builds have been below both the five-year average and last year's level since April 2012, with a few exceptions. The projected increase of 1,426 Bcf in working gas inventory during the 2012 injection season (from the beginning of April through the end of October) would be the smallest build since 1987.

U.S. Natural Gas Prices. Natural gas spot prices averaged \$2.85 per MMBtu at the Henry Hub in September 2012, up \$0.01 per MMBtu from the August average and \$1.05 per MMBtu (27 percent) lower than the September 2011 average. While abundant supplies have kept prices relatively low, a hot summer and associated increases in demand for natural gas for power generation contributed to Henry Hub spot price increases this summer, from the monthly average low of \$1.95 per MMBtu in April 2012. EIA expects the Henry Hub natural gas price will average \$2.71 per MMBtu in 2012 and \$3.35 per MMBtu in 2013.

Natural gas futures prices for January 2013 delivery (for the five-day period ending October 4, 2012) averaged \$3.84 per MMBtu. Current options and futures prices imply that market participants place the lower and upper bounds for the 95-percent confidence interval for January 2013 contracts at \$2.77 per MMBtu and \$5.31 per MMBtu, respectively. At this time last year, the January 2012 natural gas futures contract averaged \$4.10 per MMBtu and the corresponding lower and upper limits of the 95-percent confidence interval were \$3.10 per MMBtu and \$5.40 per MMBtu.

Coal

U.S. Coal Supply. EIA forecasts that coal production will decline by 6 percent in 2012 as domestic consumption falls. EIA expects that production will total 1,027 million short tons (MMst) in 2012, 68 MMst below the 2011 total. EIA expects production to fall by 1 percent (12 MMst) in 2013 as inventory draws and lower exports offset an increase in domestic consumption in the forecast. Electric power sector stocks, which ended 2011 at 175 MMst, are forecast to total 187 MMst at the end of the 2012. Inventories are expected to decline slightly in 2013, but they will remain at elevated levels.

U.S. Coal Trade. EIA expects U.S. coal exports to remain strong in 2012 and exceed the 107 MMst exported in 2011. The United States exported 11.6 MMst of coal in July, the fifth consecutive month with exports exceeding 11 MMst. EIA projects coal exports to total a record 125 MMst in 2012. EIA expects that coal exports will decline in 2013 but remain above 100 MMst for the third straight year. Falling international coal prices and slower economic growth, particularly in China, are primary reasons for the expected decline in coal exports. U.S. exports could be higher if there are significant supply disruptions from any of the major coal-exporting countries. U.S. coal exports averaged 56 MMst in the decade preceding 2011.

U.S. Coal Prices. Delivered coal prices to the electric power industry increased steadily over the 10-year period ending in 2011, when the delivered coal price averaged \$2.40 per MMBtu (a 6-percent increase from 2010). However, EIA expects the decline in demand for coal, combined with large coal inventories, will begin to put downward pressure on coal prices and contribute to the shut-in of higher-cost production. EIA forecasts that the delivered coal price will average \$2.40 per MMBtu in 2012 and \$2.42 per MMBtu in 2013.

Electricity

U.S. Electricity Consumption. During this past winter, U.S. heating degree days during the fourth quarter of 2011 and the first quarter of 2012 totaled 18 percent below the 30-year normal. Temperatures this winter are expected to be colder than last winter. In particular, projected heating degree days in the southern states, where a majority of homes heat with electricity, are 27 percent higher than last winter. As a result of the colder weather, EIA projects retail sales of electricity to the residential sector this winter will average 6.2 percent more than retail sales last winter.

U.S. Electricity Generation. Natural gas prices have risen steadily since this past spring. In September, the Henry Hub price averaged \$2.85 per million Btu, which was 46 percent higher than the average in April. With higher natural gas prices EIA expects natural gas to lose some of its recent gains in electricity generation market share. The share of total generation fueled by natural gas in the fourth quarter of 2012 is projected to average 27.8 percent compared with 25.4 percent during the same period last year. By the beginning of 2013, higher natural gas prices should contribute to year-over-year declines in natural gas's share of total generation. EIA expects natural gas to fuel 25.8 percent of generation during the first quarter of 2013, which is 2.8 percentage points lower than during the first quarter of 2012.

U.S. Electricity Retail Prices. EIA expects the nominal U.S. residential electricity price will rise by 0.4 percent during 2012 to an average of 11.84 cents per kilowatthour. During 2013, U.S. residential retail electricity prices increase 1.3 percent over the average 2012 price. When measured in real terms, the U.S. residential electricity price declines by 1.7 percent in 2012 and by 0.3 percent in 2013.

Renewables and Carbon Dioxide Emissions

U.S. Renewables. After growing by 13.9 percent in 2011, total renewable energy consumption is projected to decline by 2.3 percent in 2012. This decrease is the result of hydropower use falling by 0.4 quadrillion Btu (13.8 percent) as it begins to return to its long-term average. The decline in hydropower from 2011 to 2012 more than offsets the projected growth in the consumption of other renewable energy forms. Renewable energy consumption increases 2.4 percent in 2013 as hydropower continues to decline (2.3 percent) but non-hydropower renewables grow by an average of 4.8 percent.

Under current law, federal production tax credits for wind-powered generation will not be available for turbines that begin operating after the end of 2012. Wind-powered generation, which grew by 26 percent in 2011, is forecast to grow an additional 16 percent in 2012. The outlook for wind capacity additions and generation in 2013 will likely depend on whatever decision is made regarding the extension of production tax credits.

As a result of drought conditions depressing corn harvests throughout the Midwest, fuel ethanol production fell from an average of 890 thousand bbl/d during the second quarter of 2012 to an average of 820 thousand bbl/d in the third quarter 2012. EIA expects ethanol production will remain near current levels through the first half of 2013 and recover in the second half of 2013, averaging 850 thousand bbl/d (13.03 billion gallons) for the year. The projected lower ethanol production is generally matched by lower ethanol exports.

Biodiesel production averaged about 63 thousand bbl/d (0.97 billion gallons) in 2011. Forecast biodiesel production averages 67 thousand bbl/d in 2012 and 83 thousand bbl/d in 2013, with biodiesel blending meeting the Renewable Fuel Standard requirements of 1.0 billion gallons and 1.28 billion gallons respectively in those years.

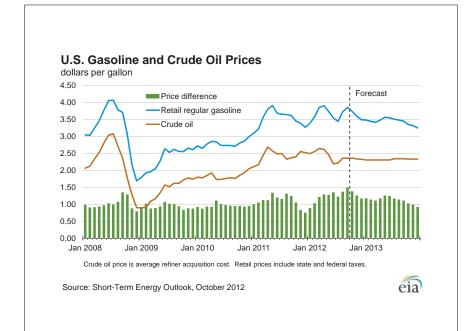
U.S. Energy-Related Carbon Dioxide Emissions. After declining by 2.3 percent in 2011, fossil fuel emissions are projected to further decline by 2.7 percent in 2012. This decline is followed by an increase of 1.9 percent in 2013. Petroleum emissions fall by 1.4 percent in 2012 and grow 0.2 percent in 2013. Natural gas emissions rise by 5.2 percent in 2012 and fall by 0.4 percent in 2013. Coal emissions decline 9.7 percent in 2012, but are projected to rise by 6.0 percent in 2013 as rising natural gas prices lead to increases in coal-fired electricity generation.

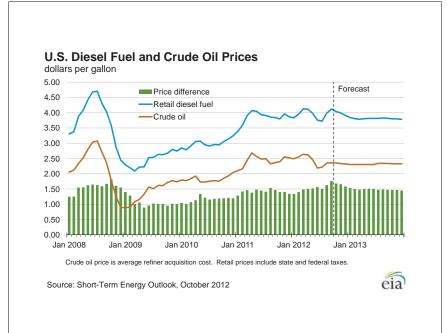


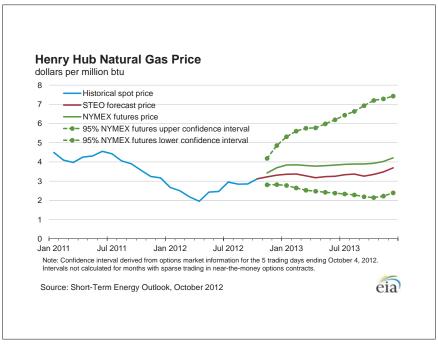


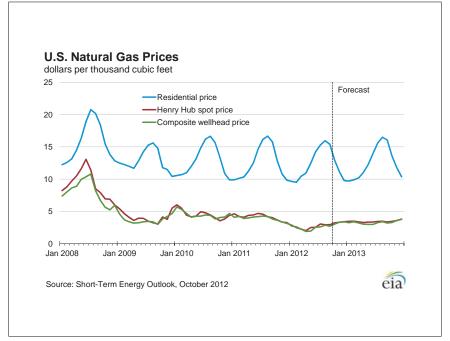
Chart Gallery for October 2012

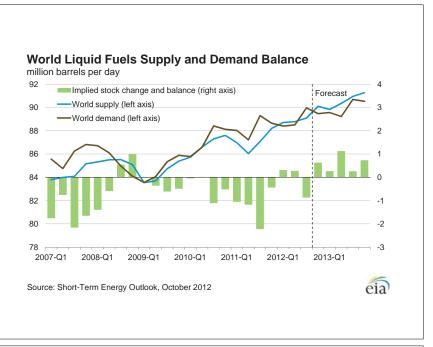
West Texas Intermediate (WTI) Crude Oil Price dollars per barrel 240 Historical spot price STEO price forecast 200 NYMEX futures price 180 - - 95% NYMEX futures upper confidence interval 160 - - 95% NYMEX futures lower confidence interval 140 120 100 80 60 40 20 0 F Jan 2011 Jul 2011 Jul 2012 Jul 2013 Jan 2012 Jan 2013 Note: Confidence interval derived from options market information for the 5 trading days ending October 4, 2012. Intervals not calculated for months with sparse trading in near-the-money options contracts eia Source: Short-Term Energy Outlook, October 2012

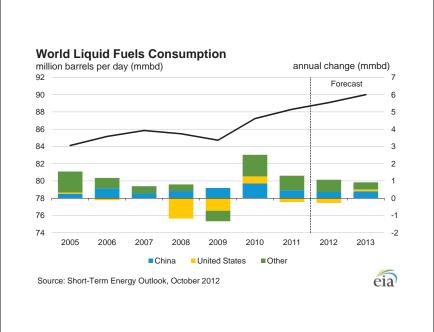


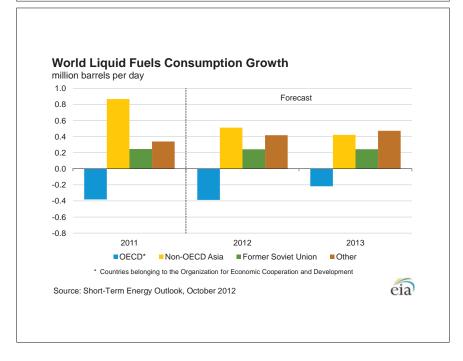


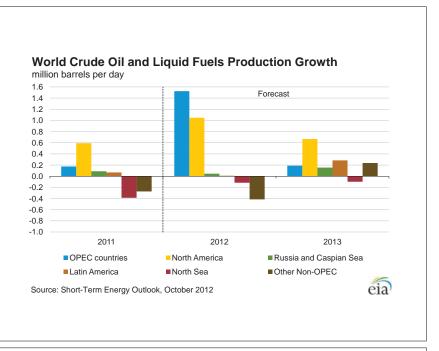


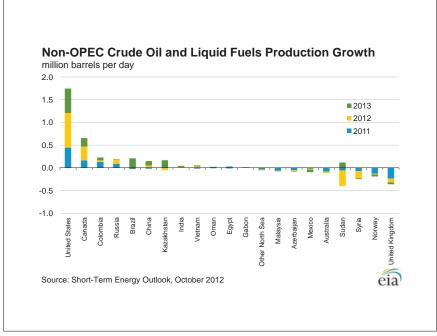


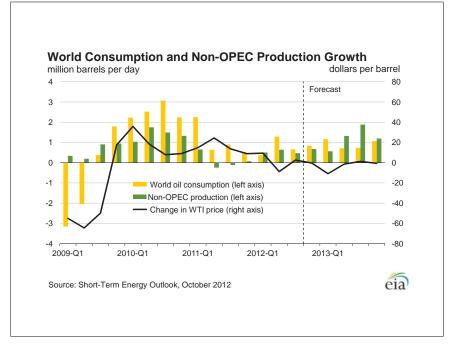


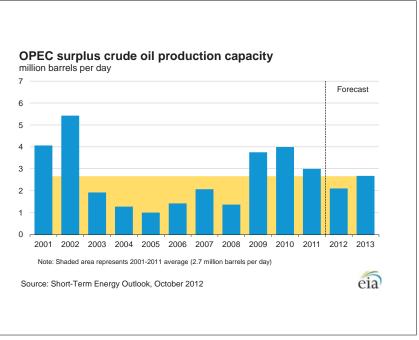


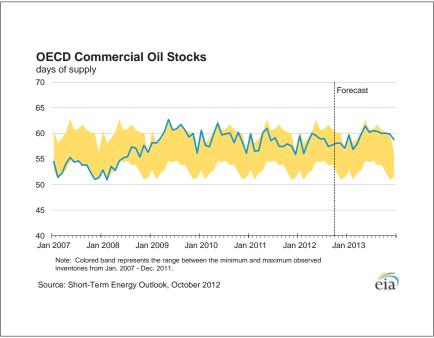


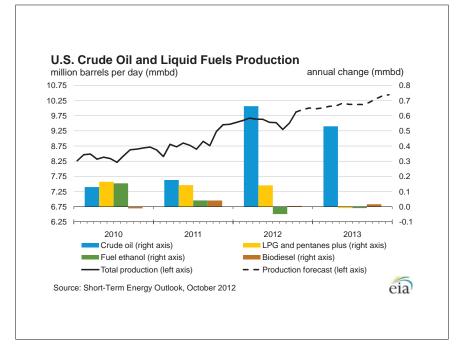


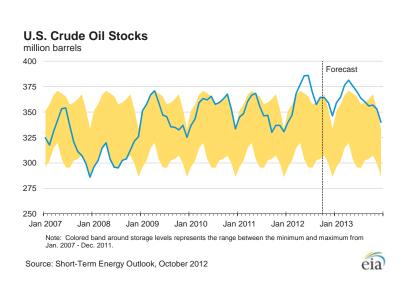


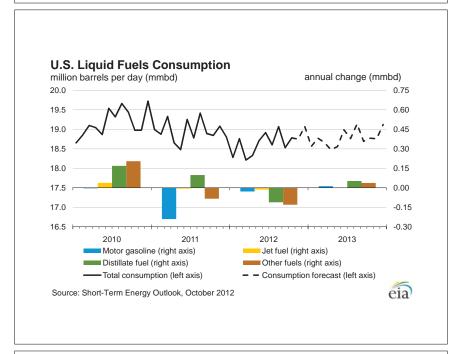


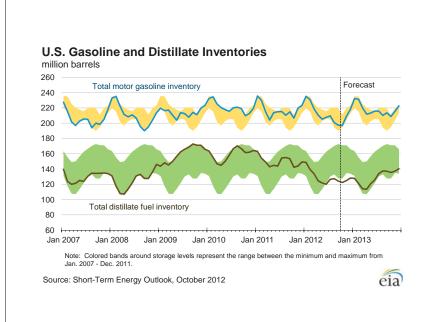


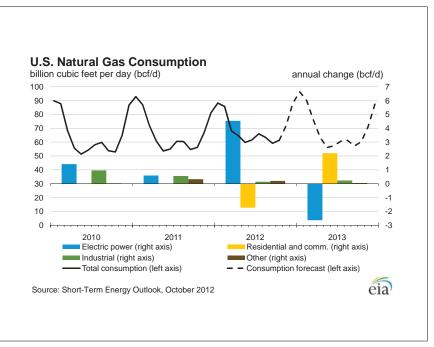


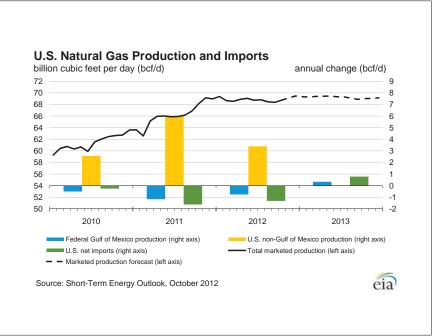


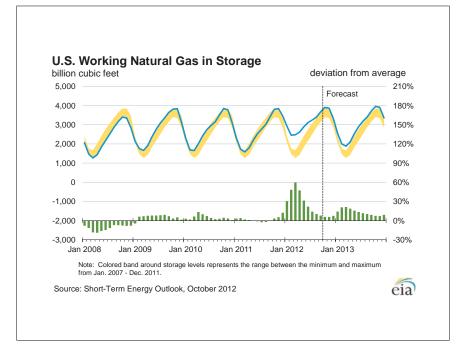


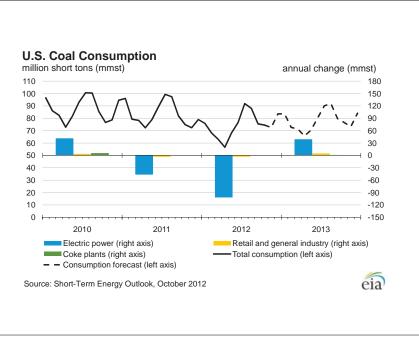


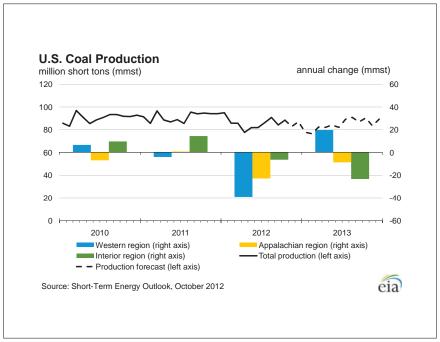


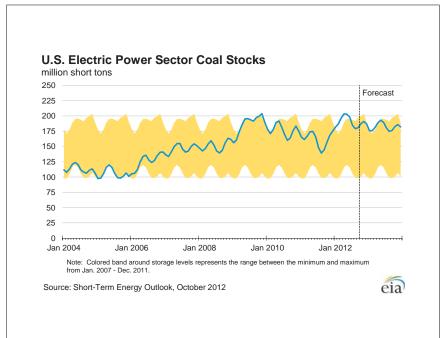


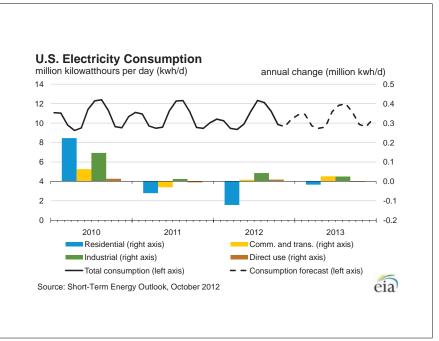


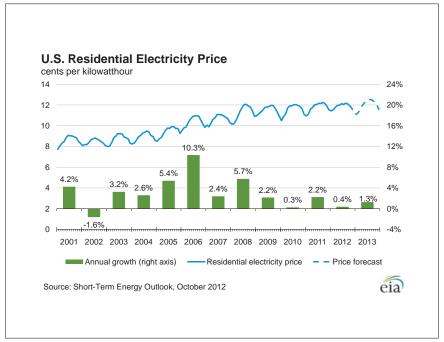


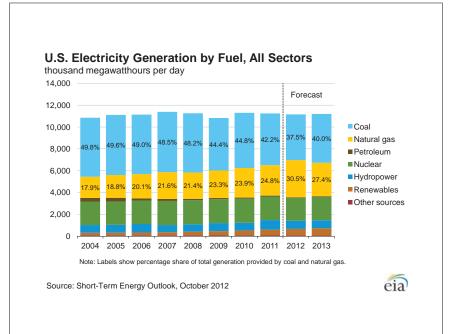


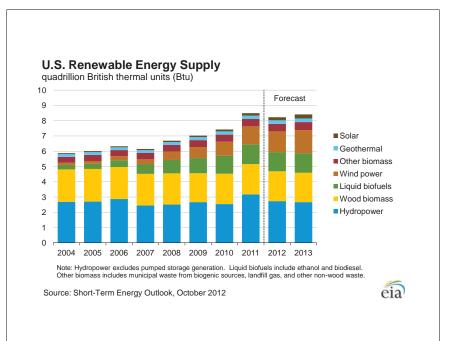


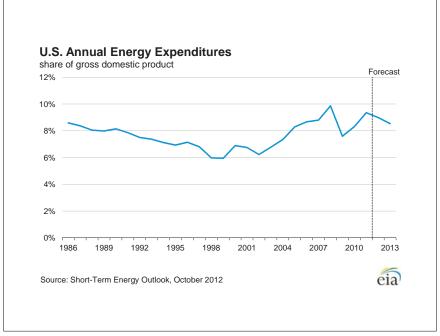


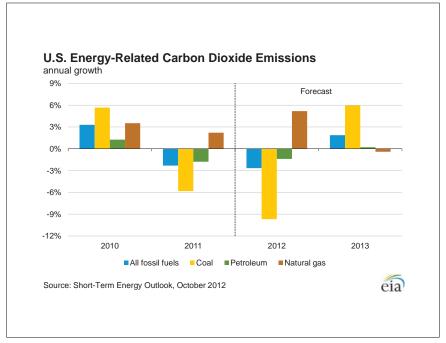












U.S. Summer Cooling Degree-Days

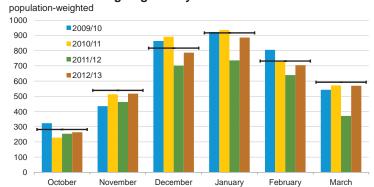
population-weighted 450 **2**010 400 2011 350 ■2012 300 **2013** 250 200 150 100 50 0 September May July April June August

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

Source: Short-Term Energy Outlook, October 2012



U.S. Winter Heating Degree-Days



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

Source: Short-Term Energy Outlook, October 2012



U.S. Census Regions and Divisions



Source: Short-Term Energy Outlook, October 2012



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

0.3. Energy information Admin	lotration	Onon rei	III LIIEIGY	Winter of		.012		Foi	recast
Fuel / Region	06-07	07-08	08-09	09-10	10-11	Avg. 06-11	11-12	12-13	% Change
No. 100									
Natural Gas									
Northeast	76.5	77.0	00 F	77.0	00.7	70.0	60.0	70.7	10.7
Consumption (mcf**)	76.5	77.0	82.5	77.8	82.7	79.3	68.3	79.7	16.7
Price (\$/mcf)	14.74	15.17	15.82	13.31	12.62	14.33	12.19 832	12.68	4.1 21.4
Expenditures (\$) Midwest	1,128	1,168	1,306	1,035	1,044	1,136		1,010	
Consumption (mcf)	79.8	83.3	86.0	83.8	85.1	83.6	69.1	81.3	17.8
Price (\$/mcf)	11.06	11.39	11.46	9.43	9.19	10.50	8.91	9.02	1.2
Expenditures (\$) South	882	949	986	790	782	878	615	734	19.2
Consumption (mcf)	51.6	50.4	53.4	60.3	55.3	54.2	45.1	54.0	19.6
Price (\$/mcf)	13.57	14.16	14.05	11.50	11.02	12.80	11.50	11.16	-3.0
Expenditures (\$) West	700	714	751	694	609	694	519	602	16.0
Consumption (mcf)	50.8	52.9	50.5	52.2	51.7	51.6	51.7	52.2	0.9
Price (\$/mcf)	11.20	11.31	10.86	9.91	9.64	10.58	9.41	9.17	-2.5
Expenditures (\$)	569	598	549	518	499	546	486	479	-1.6
U.S. Average									
Consumption (mcf)	65.4	67.0	69.0	69.2	69.4	68.0	59.3	67.5	13.8
Price (\$/mcf)	12.35	12.71	12.86	10.82	10.42	11.82	10.24	10.32	8.0
Expenditures (\$)	807	852	887	749	724	804	608	697	14.7
Heating Oil									
U.S. Average									
Consumption (gallons)	623.4	633.2	678.0	642.6	679.4	651.3	559.5	656.5	17.3
Price (\$/gallon)	2.42	3.33	2.65	2.85	3.38	2.93	3.73	3.80	1.8
Expenditures (\$)	1,511	2,106	1,800	1,830	2,298	1,909	2,087	2,494	19.5
Electricity									
Northeast									
Consumption (kwh***)	8,681	8,723	9,113	8,762	9,116	8,879	8,082	8,895	10.1
Price (\$/kwh)	0.139	0.144	0.151	0.152	0.155	0.148	0.155	0.150	-3.4
Expenditures (\$) Midwest	1,206	1,258	1,379	1,328	1,410	1,316	1,252	1,331	6.4
Consumption (kwh)	10,155	10,462	10,642	10,510	10,587		9,327	10,296	10.4
Price (\$/kwh)	0.085	0.089	0.098	0.099	0.104	0.095	0.110	0.110	-0.6
Expenditures (\$) South	866	934	1,038	1,036	1,106	996	1,030	1,129	9.7
Consumption (kwh)	8,392	8,304	8,636	9,155	8,786	8,655	7,835	8,629	10.1
Price (\$/kwh)	0.096	0.098	0.109	0.103	0.104	0.102	0.108	0.105	-2.8
Expenditures (\$)	807	817	939	942	916	884	844	903	7.1
West									
Consumption (kwh)	7,641	7,825	7,617	7,757	7,725	7,713	7,735	7,788	0.7
Price (\$/kwh)	0.102	0.104	0.106	0.111	0.113	0.107	0.116	0.115	-0.4
Expenditures (\$)	782	811	811	859	874	828	897	899	0.3
U.S. Average									
Consumption (kwh)	8,135	8,172	8,350	8,604	8,457	8,343	7,722	8,332	7.9
Price (\$/kwh)	0.101	0.104	0.112	0.110	0.113	0.108	0.117	0.114	-2.3
Expenditures (\$)	822	850	936	946	956	902	902	951	5.5

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

0.5. Energy Information Admin	istration	Short-Ter	III LII c igy	Winter of		.012		For	ecast
Fuel / Region	06-07	07-08	08-09	09-10	10-11	Avg. 06-11	11-12	12-13	% Change
		<u> </u>							
Propane									
Northeast									
Consumption (gallons)	786.2	793.8	846.7	796.6	847.4	814.1	705.9	817.8	15.8
Price (\$/gallon)	2.35	2.93	2.84	2.98	3.23	2.87	3.38	2.95	-12.7
Expenditures (\$)	1,849	2,324	2,406	2,376	2,737	2,338	2,386	2,412	1.1
Midwest									
Consumption (gallons)	803.5	842.8	864.4	848.6	857.7	843.4	699.3	821.2	17.4
Price (\$/gallon)	1.79	2.23	2.08	1.97	2.12	2.04	2.20	2.02	-8.2
Expenditures (\$)	1,440	1,883	1,795	1,674	1,817	1,722	1,538	1,659	7.8
									_
Number of households by pri	mary spac	e heating	fuel (thou	sands)					
Northeast									
Natural gas	10,612	10,774	10,955	11,077	11,206	10,925	11,330	11,464	1.2
Heating oil	6,690	6,557	6,318	6,062	5,893	6,304	5,770	5,639	-2.3
Propane	731	708	717	739	750	729	764	783	2.5
Electricity	2,525	2,565	2,579	2,665	2,806	2,628	2,861	2,907	1.6
Wood	375	416	477	505	516	458	545	586	7.7
Midwest									
Natural gas	18,428	18,469	18,399	18,190	18,118	18,321	18,114	18,194	0.4
Heating oil	591	537	494	454	421	499	402	379	-5.7
Propane	2,256	2,193	2,144	2,114	2,090	2,160	2,056	2,027	-1.4
Electricity	4,343	4,494	4,598	4,752	4,965	4,630	5,134	5,262	2.5
Wood	502	531	587	621	624	573	628	651	3.6
South									
Natural gas	14,082	14,140	14,042	13,838	13,722	13,965	13,700	13,746	0.3
Heating oil	1,124	1,057	962	913	857	983	796	752	-5.5
Propane	2,540	2,370	2,233	2,182	2,113	2,287	2,006	1,911	-4.7
Electricity	24,087	24,800	25,411	25,992	26,695	25,397	27,352	28,057	2.6
Wood	544	561	596	590	601	579	617	628	1.7
West									
Natural gas	15,071	15,169	15,118	15,055	15,131	15,109	15,140	15,253	0.7
Heating oil	341	318	296	292	280	305	268	261	-2.6
Propane	1,003	948	941	947	919	952	905	906	0.1
Electricity	7,492	7,694	7,815	7,938	8,190	7,826	8,482	8,738	3.0
Wood	682	683	707	727	731	706	736	738	0.2
U.S. Totals									
Natural gas	58,192	58,552	58,514	58,161	58,177	58,319	58,284	58,657	0.6
Heating oil	8,746	8,469	8,069	7,722	7,452	8,092	7,236	7,031	-2.8
Propane	6,530	6,218	6,036	5,982	5,873	6,128	5,732	5,628	-1.8
Electricity	38,447	39,552	40,402	41,347	42,657	40,481	43,829	44,964	2.6
Wood	2,104	2,191	2,367	2,443	2,472	2,315	2,527	2,602	3.0
Heating degree days									
Heating degree-days Northeast	4,805	4,850	5,252	4,889	5,257	5,011	4,193	5,034	20.1
							-		
Midwest	5,336	5,624	5,829	5,662	5,760	5,642	4,495	5,464	21.6
South	2,378	2,313	2,523	2,902	2,629	2,549	1,991	2,531	27.1
West	2,956	3,122 3,685	2,938	3,061 3,894	3,031	3,022	3,037 3,165	3,074	1.2
U.S. Average	3,605	3,685	3,831	3,894	3,868	3,777	,	3,728	17.8

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

U.S. Energy Information Administra	tion	Short-Te	erm Ene	rgy Outlo	ook - Oc	tober 20	12								
<u> </u>	4. 1	201		4.1	4.4	201		4.1	4.4	201		441	2011	Year	2010
Energy Supply	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil Production (a) (million barrels per day)	5.52	5.58	5.56	5.97	6.21	6.23	6.18	6.66	6.77	6.82	6.82	6.99	5.66	6.32	6.85
Dry Natural Gas Production (billion cubic feet per day)	60.83	62.75	63.10	65.32	65.35	65.42	65.07	65.62	65.84	65.89	65.60	65.57	63.01	65.36	65.72
Coal Production (million short tons)	273	264	275	283	266	241	261	258	237	248	267	263	1,096	1,027	1,015
Energy Consumption															
Liquid Fuels															
(million barrels per day)	19.07	18.79	19.03	18.91	18.41	18.65	18.74	18.87	18.66	18.67	18.87	18.89	18.95	18.67	18.77
Natural Gas (billion cubic feet per day)	83.73	56.39	58.57	68.05	80.51	61.97	62.86	73.73	87.27	58.88	59.69	72.83	66.62	69.76	69.60
Coal (b) (million short tons)	254	241	279	226	207	201	255	231	228	216	262	234	999	894	939
Electricity (billion kilowatt hours per day)	10.56	10.09	11.92	9.68	10.03	10.14	11.89	9.96	10.47	10.07	11.65	9.96	10.57	10.51	10.54
Renewables (c) (quadrillion Btu)	2.07	2.29	2.02	2.00	2.07	2.19	1.98	1.96	2.08	2.26	2.03	2.03	8.39	8.20	8.40
Total Energy Consumption (d) (quadrillion Btu)	25.83	23.09	24.42	24.01	24.43	22.72	24.18	24.48	25.40	22.96	24.09	24.58	97.35	95.81	97.04
Energy Prices															
Crude Oil (e) (dollars per barrel)	94.01	108.13	100.61	104.55	107.62	101.45	96.86	98.16	96.75	96.75	98.25	97.75	101.91	100.95	97.39
Natural Gas Wellhead (dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.72	3.24	3.27	2.99	3.28	3.54	3.90	2.66	3.27
Coal															
(dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.42	2.41	2.37	2.45	2.43	2.42	2.40	2.40	2.40	2.42
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2005 dollars - SAAR) Percent change from prior year	13,184 1.8	13,265 1.9	13,307 1.6	13,441 2.0	13,506 2.4	13,565 2.3	13,618 2.3	13,661 1.6	13,719 1.6	13,783 1.6	13,844 1.7	13,926 1.9	13,299 1.8	13,588 2.2	13,818 1.7
GDP Implicit Price Deflator															
(Index, 2005=100) Percent change from prior year	112.4 2.0	113.1 2.2	113.9 2.4	114.0 2.0	114.6 2.0	115.1 1.7	115.7 1.5	116.3 2.0	116.7 1.9	117.0 1.7	117.5 1.6	117.9 1.4	113.4 2.1	115.4 1.8	117.3 1.6
Real Disposable Personal Income															
(billion chained 2005 dollars - SAAR) Percent change from prior year	10,196 3.2	10,158 1.2	10,126 0.6	10,122 0.3	10,214 0.2	10,292 1.3	10,344 2.2	10,383 2.6	10,422 2.0	10,483 1.9	10,544 1.9	10,616 2.3	10,150 1.3	10,308 1.6	10,516 2.0
Manufacturing Production Index									e- ·						
(Index, 2007=100) Percent change from prior year	90.4 6.8	90.6 4.0	91.7 3.9	92.9 4.5	95.2 5.3	95.6 5.5	96.2 4.9	96.7 4.1	97.1 2.0	97.7 2.2	98.4 2.3	99.1 2.4	91.4 4.8	95.9 4.9	98.1 2.2
Weather															
U.S. Heating Degree-Days	2,235	508	77	1,419	1,747	412	80	1,568	2,160	515	95	1,577	4,238	3,807	4,347
U.S. Cooling Degree-Days	39	450	961	80	59	451	919	90	39	379	813	91	1,529	1,519	1,322

^{- =} no data available

Prices are not adjusted for inflation.

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

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

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

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

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

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

Weather projections from National Oceanic and Atmospheric Administration.

⁽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.

Table 2. U.S. Energy Prices

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

		201	1			201	12			20	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	93.50	102.22	89.72	93.99	102.88	93.42	92.24	93.67	92.00	92.00	93.50	93.00	94.86	95.55	92.63
Brent Spot Average	104.96	117.36	113.34	109.40	118.49	108.42	109.61	110.67	105.00	103.00	103.50	102.00	111.26	111.80	103.38
Imported Average	94.23	108.74	102.06	105.36	108.13	101.19	97.31	98.67	97.00	97.00	98.50	98.00	102.65	101.37	97.63
Refiner Average Acquisition Cost	94.01	108.13	100.61	104.55	107.62	101.45	96.86	98.16	96.75	96.75	98.25	97.75	101.91	100.95	97.39
Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	267	312	297	271	297	299	301	290	277	284	277	261	287	297	275
Diesel Fuel	286	316	307	304	317	302	307	310	295	295	297	292	303	309	295
Heating Oil	275	305	295	296	312	292	298	302	290	286	286	280	291	303	286
Refiner Prices to End Users															
Jet Fuel	287	322	308	302	321	304	306	312	299	296	297	294	305	311	296
No. 6 Residual Fuel Oil (a)	217	246	249	250	270	266	245	247	245	241	243	244	239	257	243
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	330	380	363	337	361	372	367	360	344	353	348	330	353	365	344
Gasoline All Grades (b)	335	385	369	342	367	378	373	366	350	358	354	336	358	371	350
On-highway Diesel Fuel	363	401	387	387	397	395	394	398	381	381	382	379	384	396	381
Heating Oil	359	390	367	366	379	370	366	383	378	366	364	362	368	376	369
Natural Gas															
Average Wellhead (dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.72	3.24	3.27	2.99	3.28	3.54	3.90	2.66	3.27
Henry Hub Spot (dollars per thousand cubic feet)	4.31	4.50	4.25	3.42	2.52	2.35	2.97	3.31	3.43	3.32	3.42	3.61	4.12	2.79	3. 4 5
Henry Hub Spot (dollars per Million Btu)	4.18	4.37	4.12	3.32	2.45	2.28	2.88	3.22	3.33	3.22	3.32	3.51	4.00	2.71	3.35
End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	5.52	5.24	5.03	4.62	4.18	3.15	3.81	4.50	4.85	4.22	4.42	4.83	5.11	3.94	4.59
Commercial Sector	8.85	9.24	9.64	8.56	8.16	8.06	8.58	8.71	8.65	8.80	9.45	9.36	8.92	8.39	8.98
Residential Sector	10.08	12.29	16.18	10.65	9.77	12.10	15.54	10.72	9.88	11.93	16.04	11.34	11.01	10.87	11.09
Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.34	2.42	2.46	2.37	2.41	2.42	2.41	2.37	2.45	2.43	2.42	2.40	2.40	2.40	2.42
Natural Gas	5.02	4.92	4.76	4.13	3.31	2.92	3.45	4.02	4.12	3.87	3.95	4.33	4.71	3.40	4.05
Residual Fuel Oil (c)	15.88	18.29	20.10	20.05	21.27	22.62	19.18	17.69	17.45	17.28	17.23	17.34	18.49	20.22	17.32
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	23.12	23.76	24.39	23.62	23.68	23.70	23.57	22.40	23.75	23.64
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.66	7.07	6.55	6.53	6.78	7.20	6.67	6.89	6.70	6.80
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.12	10.46	9.90	9.88	10.31	10.76	10.13	10.32	10.12	10.29
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.02	12.11	11.58	11.29	12.19	12.50	11.94	11.79	11.84	11.99

^{- =} 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.

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

U.S. Energy information Admin	ionanon	201		licigy C	atiook - (201				201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million barrels per day) (a)	l .	I.		Į.		1	<u> </u>	<u>, , , , , , , , , , , , , , , , , , , </u>		L.	·			J.	
OECD	21.52	21.24	21.33	22.30	22.53	22.38	22.16	22.90	22.94	22.89	22.93	23.39	21.60	22.49	23.04
U.S. (50 States)	9.79	10.02	10.07	10.68	10.83	10.86	10.72	11.21	11.26	11.38	11.45	11.67	10.14	10.90	11.44
Canada	3.61	3.36	3.66	3.77	3.89	3.85	3.86	4.01	4.03	4.00	4.08	4.24	3.60	3.90	4.09
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.96	2.92	2.91	2.89	2.88	2.86	2.96	2.94	2.89
North Sea (b)	3.61	3.34	3.10	3.34	3.36	3.20	3.10	3.26	3.26	3.12	3.01	3.14	3.35	3.23	3.13
Other OECD		1.54	1.57	1.57	1.52	1.53	1.53	1.50	1.49	1.49	1.51	1.49	1.55	1.52	1.49
Non-OECD	65.46	64.80	65.74	65.90	66.18	66.39	66.93	67.19	66.89	67.46	68.02	67.87	65.48	66.68	67.56
OPEC		34.44	35.22	35.69	36.35	36.54	36.77	36.92	36.90	36.79	36.75	36.89	35.12	36.64	36.83
Crude Oil Portion	29.78	29.20	29.99	30.35	30.87	31.01	31.04	31.18	31.12	30.99	30.93	31.03	29.83	31.03	31.02
Other Liquids		5.24	5.23	5.34	5.48	5.53	5.73	5.73	5.79	5.79	5.81	5.87	5.29	5.62	5.82
Former Soviet Union	13.35	13.35	13.25	13.30	13.41	13.35	13.26	13.47	13.40	13.57	13.56	13.56	13.31	13.37	13.52
China	4.42	4.31	4.21	4.20	4.31	4.30	4.33	4.41	4.36	4.43	4.47	4.48	4.29	4.34	4.44
Other Non-OECD	12.57	12.70	13.07	12.71	12.11	12.20	12.58	12.41	12.22	12.68	13.26	12.93	12.76	12.33	12.77
Total World Supply	86.97	86.03	87.08	88.20	88.71	88.78	89.09	90.10	89.83	90.35	90.95	91.26	87.08	89.17	90.60
Non-OPEC Supply	51.86	51.60	51.86	52.51	52.36	52.24	52.33	53.18	52.92	53.56	54.21	54.37	51.96	52.53	53.77
Consumption (million barrels per da	y) (c)														
OECD	46.36	44.68	46.23	46.03	45.52	44.81	45.70	45.72	45.57	44.42	45.14	45.77	45.83	45.44	45.22
U.S. (50 States)	19.07	18.79	19.03	18.91	18.41	18.65	18.74	18.87	18.66	18.67	18.87	18.89	18.95	18.67	18.77
U.S. Territories	0.30	0.30	0.30	0.30	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.30	0.32	0.33
Canada	2.32	2.22	2.36	2.26	2.21	2.28	2.29	2.25	2.24	2.17	2.29	2.26	2.29	2.26	2.24
Europe	14.22	14.12	14.70	14.09	13.69	13.74	14.28	14.00	13.59	13.49	13.93	13.90	14.28	13.93	13.73
Japan	4.83	3.91	4.31	4.81	5.28	4.30	4.53	4.70	5.10	4.30	4.34	4.75	4.46	4.70	4.62
Other OECD	5.62	5.33	5.53	5.66	5.60	5.53	5.55	5.59	5.64	5.46	5.39	5.65	5.53	5.57	5.53
Non-OECD		42.54	43.07	42.61	42.88	43.69	44.26	43.75	44.00	44.80	45.55	44.76	42.47	43.65	44.78
Former Soviet Union	4.58	4.51	4.77	4.76	4.79	4.81	4.99	4.98	5.05	4.96	5.25	5.25	4.66	4.89	5.13
Europe	0.74	0.74	0.77	0.77	0.74	0.75	0.77	0.77	0.75	0.75	0.78	0.78	0.75	0.76	0.76
China	9.99	9.78	9.82	9.82	10.12	10.09	10.33	10.29	10.57	10.53	10.81	10.52	9.85	10.21	10.61
Other Asia	10.20	10.39	10.00	10.28	10.35	10.59	10.15	10.41	10.39	10.58	10.17	10.45	10.22	10.38	10.40
Other Non-OECD		17.11	17.71	16.98	16.88	17.44	18.03	17.29	17.23	17.98	18.54	17.76	16.99	17.41	17.88
Total World Consumption	88.03	87.21	89.30	88.64	88.40	88.50	89.96	89.47	89.56	89.22	90.69	90.53	88.30	89.09	90.01
Inventory Net Withdrawals (million b	arrels per o	day)													
U.S. (50 States)	0.20	-0.36	0.30	0.34	-0.31	-0.34	0.14	0.45	-0.05	-0.42	-0.13	0.52	0.12	-0.01	-0.02
Other OECD	0.23	-0.10	0.20	0.33	-0.06	-0.15	0.28	-0.41	-0.08	-0.26	-0.05	-0.47	0.17	-0.09	-0.21
Other Stock Draws and Balance	0.63	1.63	1.73	-0.23	0.05	0.21	0.46	-0.67	-0.14	-0.45	-0.08	-0.78	0.94	0.01	-0.36
Total Stock Draw	1.06	1.18	2.23	0.44	-0.31	-0.27	0.87	-0.63	-0.26	-1.13	-0.26	-0.73	1.23	-0.08	-0.60
End-of-period Inventories (million ba	rrels)														
U.S. Commercial Inventory	1,050	1,082	1,085	1,054	1,082	1,112	1,101	1,059	1,064	1,102	1,113	1,066	1,054	1,059	1,066
OECD Commercial Inventory	2,634	2,676	2,660	2,599	2,632	2,676	2,639	2,635	2,647	2,708	2,724	2,720	2,599	2,635	2,720

^{- =} no data available

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U.S. Energy Information Admini	stration			nergy C	outlook -	October									
		20				201				20				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
North America	16.38	16.36	16.67	17.39	17.65	17.66	17.53	18.14	18.20	18.28	18.41	18.77	16.70	17.75	18.42
Canada	3.61	3.36	3.66	3.77	3.89	3.85	3.86	4.01	4.03	4.00	4.08	4.24	3.60	3.90	4.09
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.96	2.92	2.91	2.89	2.88	2.86	2.96	2.94	2.89
United States	9.79	10.02	10.07	10.68	10.83	10.86	10.72	11.21	11.26	11.38	11.45	11.67	10.14	10.90	11.44
Central and South America	4.47	4.90	5.17	4.87	4.57	4.73	5.18	4.97	4.72	5.09	5.61	5.17	4.85	4.86	5.15
Argentina	0.78	0.72	0.78	0.79	0.78	0.77	0.76	0.77	0.77	0.76	0.77	0.76	0.77	0.77	0.76
Brazil	2.33	2.77	2.98	2.66	2.40	2.56	3.01	2.75	2.48	2.84	3.34	2.89	2.69	2.68	2.89
Colombia	0.89	0.95	0.95	0.97	0.96	0.97	0.96	1.00	1.01	1.02	1.04	1.06	0.94	0.97	1.04
Other Central and S. America	0.47	0.46	0.46	0.45	0.44	0.44	0.45	0.45	0.46	0.46	0.46	0.46	0.46	0.44	0.46
Europe	4.54	4.27	4.07	4.30	4.32	4.16	4.05	4.20	4.18	4.04	3.93	4.06	4.29	4.18	4.05
Norway	2.11	1.95	1.95	2.03	2.07	1.98	1.91	2.00	1.95	1.95	1.89	1.98	2.01	1.99	1.94
United Kingdom (offshore)	1.23	1.13	0.91	1.07	1.05	0.98	0.94	1.03	1.07	0.94	0.89	0.94	1.08	1.00	0.96
Other North Sea	0.26	0.27	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.22	0.22	0.25	0.24	0.23
Former Soviet Union (FSU)	13.35	13.35	13.25	13.30	13.41	13.35	13.26	13.47	13.40	13.57	13.56	13.56	13.31	13.37	13.52
Azerbaijan	1.00	1.00	0.97	0.98	0.96	0.95	0.91	1.06	0.97	0.97	0.96	0.94	0.99	0.97	0.96
Kazakhstan	1.67	1.65	1.63	1.61	1.63	1.59	1.54	1.60	1.69	1.71	1.75	1.76	1.64	1.59	1.73
Russia	10.22	10.24	10.19	10.25	10.35	10.33	10.31	10.31	10.24	10.38	10.34	10.36	10.23	10.32	10.33
Turkmenistan	0.22	0.22	0.22	0.23	0.24	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.22	0.24	0.27
Other FSU	0.45	0.45	0.45	0.46	0.47	0.47	0.50	0.51	0.50	0.51	0.51	0.51	0.45	0.49	0.51
Middle East	1.56	1.40	1.44	1.34	1.25	1.33	1.25	1.25	1.25	1.26	1.27	1.28	1.43	1.27	1.27
Oman	0.89	0.87	0.90	0.89	0.89	0.92	0.88	0.88	0.88	0.88	0.88	0.89	0.89	0.89	0.88
Syria	0.38	0.38	0.34	0.23	0.18	0.20	0.15	0.15	0.15	0.16	0.15	0.16	0.33	0.17	0.15
Yemen	0.24	0.10	0.15	0.16	0.13	0.16	0.17	0.17	0.17	0.17	0.18	0.19	0.16	0.16	0.18
Asia and Oceania	8.93	8.70	8.63	8.65	8.74	8.70	8.72	8.78	8.77	8.85	8.94	8.94	8.73	8.73	8.88
Australia	0.51	0.52	0.51	0.53	0.46	0.49	0.49	0.47	0.48	0.48	0.49	0.47	0.52	0.48	0.48
China	4.42	4.31	4.21	4.20	4.31	4.30	4.33	4.41	4.36	4.43	4.47	4.48	4.29	4.34	4.44
India	0.95	0.94	0.94	0.92	0.93	0.94	0.95	0.96	0.97	0.97	0.97	0.97	0.94	0.95	0.97
Indonesia	1.00	0.99	1.00	0.99	0.96	0.94	0.95	0.97	0.97	0.97	0.97	0.97	0.99	0.95	0.97
Malaysia	0.66	0.58	0.61	0.63	0.65	0.62	0.60	0.57	0.58	0.58	0.60	0.60	0.62	0.61	0.59
Vietnam	0.32	0.30	0.30	0.35	0.35	0.35	0.35	0.35	0.36	0.37	0.38	0.38	0.32	0.35	0.37
Africa	2.63	2.61	2.63	2.66	2.41	2.32	2.33	2.36	2.40	2.47	2.50	2.59	2.63	2.36	2.49
Egypt	0.73	0.73	0.73	0.72	0.72	0.72	0.72	0.72	0.72	0.71	0.71	0.70	0.73	0.72	0.71
Equatorial Guinea	0.29	0.29	0.29	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.37	0.30	0.33	0.34
Gabon	0.25	0.23	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.24	0.25	0.26
Sudan	0.48	0.45	0.45	0.45	0.20	0.08	0.10	0.10	0.16	0.22	0.25	0.31	0.46	0.12	0.24
Total non-OPEC liquids	51.86	51.60	51.86	52.51	52.36	52.24	52.33	53.18	52.92	53.56	54.21	54.37	51.96	52.53	53.77
OPEC non-crude liquids	5.34	5.24	5.23	5.34	5.48	5.53	5.73	5.73	5.79	5.79	5.81	5.87	5.29	5.62	5.82
Non-OPEC + OPEC non-crude	57.20	56.84	57.09	57.85	57.84	57.77	58.05	58.91	58.71	59.35	60.02	60.24	57.24	58.15	59.59

^{- =} no data available

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

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

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

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

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

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

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

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

U.S. Energy Information Adm	inistratio	- '		i Energy	Outlook										
		201)12			201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil															
Algeria	1.27	1.27	1.27	1.27	1.27	1.27	1.27	-	-	-	-	-	1.27	-	-
Angola	1.70	1.60	1.70	1.78	1.78	1.75	1.68	-	-	-	-	-	1.70	-	-
Ecudaor	0.50	0.50	0.49	0.50	0.50	0.50	0.50	-	-	-	-	-	0.50	-	-
Iran	3.70	3.70	3.65	3.58	3.40	3.09	2.72	-	-	-	-	-	3.66	-	-
Iraq	2.53	2.53	2.63	2.70	2.64	2.93	3.12	-	-	-	-	-	2.60	-	-
Kuwait	2.33	2.50	2.53	2.55	2.60	2.60	2.60	-	-	-	-	-	2.48	-	-
Libya	1.09	0.17	0.07	0.55	1.18	1.40	1.43	-	-	-	-	-	0.47	-	-
Nigeria	2.13	2.15	2.19	2.03	2.12	2.17	2.15	-	-	-	-	-	2.13	-	-
Qatar	0.85	0.85	0.85	0.85	0.82	0.73	0.73	-	-	-	-	-	0.85	-	-
Saudi Arabia	9.03	9.13	9.80	9.70	9.87	9.87	9.93	-	-	-	-	-	9.42	-	-
United Arab Emirates	2.43	2.60	2.60	2.63	2.50	2.50	2.70	-	-	-	-	-	2.57	-	-
Venezuela	2.20	2.20	2.20	2.20	2.20	2.20	2.20	-	-	-	-	-	2.20	-	-
OPEC Total	29.78	29.20	29.99	30.35	30.87	31.01	31.04	31.18	31.12	30.99	30.93	31.03	29.83	31.03	31.02
Other Liquids	5.34	5.24	5.23	5.34	5.48	5.53	5.73	5.73	5.79	5.79	5.81	5.87	5.29	5.62	5.82
Total OPEC Supply	35.12	34.44	35.22	35.69	36.35	36.54	36.77	36.92	36.90	36.79	36.75	36.89	35.12	36.64	36.83
Crude Oil Production Capacity															
Africa	6.18	5.18	5.22	5.64	6.34	6.59	6.54	6.85	7.04	7.14	7.30	7.32	5.55	6.58	7.20
South America	2.70	2.70	2.69	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Middle East	24.54	24.56	24.61	24.60	24.11	23.96	23.70	23.63	23.68	23.76	23.83	23.91	24.58	23.85	23.79
OPEC Total	33.42	32.44	32.52	32.94	33.15	33.24	32.94	33.18	33.42	33.59	33.83	33.93	32.83	33.13	33.69
Surplus Crude Oil Production Capa	city														
Africa	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	3.64	3.24	2.54	2.57	2.28	2.23	1.90	2.00	2.30	2.60	2.90	2.90	2.99	2.10	2.68
OPEC Total	3.64	3.24	2.54	2.58	2.28	2.23	1.90	2.00	2.30	2.60	2.90	2.90	3.00	2.10	2.68

^{- =} no data available

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

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

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

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

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

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

c.e. Energy information / terminotration	Onore 10	201				20	12			20	13				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011	2012	2013
North America	23.51	23.14	23.55	23.34	22.75	23.08	23.12	23.23	23.00	22.96	23.25	23.24	23.38	23.05	23.12
Canada	2.32	2.22	2.36	2.26	2.21	2.28	2.29	2.25	2.24	2.17	2.29	2.26	2.29	2.26	2.24
Mexico	2.11	2.12	2.14	2.16	2.11	2.14	2.09	2.10	2.09	2.11	2.08	2.09	2.13	2.11	2.10
United States	19.07	18.79	19.03	18.91	18.41	18.65	18.74	18.87	18.66	18.67	18.87	18.89	18.95	18.67	18.77
Central and South America	6.26	6.49	6.51	6.49	6.40	6.63	6.66	6.64	6.59	6.83	6.86	6.84	6.44	6.58	6.78
Brazil	2.50	2.59	2.65	2.64	2.57	2.67	2.72	2.71	2.69	2.79	2.85	2.84	2.59	2.67	2.79
Europe	14.95	14.87	15.47	14.86	14.43	14.49	15.05	14.77	14.34	14.24	14.71	14.68	15.04	14.69	14.49
Former Soviet Union	4.58	4.51	4.77	4.76	4.79	4.81	4.99	4.98	5.05	4.96	5.25	5.25	4.66	4.89	5.13
Russia	3.09	3.05	3.22	3.22	3.26	3.31	3.40	3.39	3.46	3.41	3.61	3.60	3.15	3.34	3.52
Middle East	6.81	7.56	8.17	7.42	7.30	7.65	8.23	7.48	7.34	7.88	8.44	7.64	7.49	7.67	7.83
Asia and Oceania	28.56	27.31	27.53	28.42	29.25	28.39	28.48	28.91	29.63	28.76	28.63	29.29	27.95	28.76	29.08
China	9.99	9.78	9.82	9.82	10.12	10.09	10.33	10.29	10.57	10.53	10.81	10.52	9.85	10.21	10.61
Japan	4.83	3.91	4.31	4.81	5.28	4.30	4.53	4.70	5.10	4.30	4.34	4.75	4.46	4.70	4.62
India	3.36	3.35	3.07	3.32	3.43	3.46	3.13	3.39	3.53	3.51	3.22	3.48	3.27	3.35	3.43
Africa	3.36	3.34	3.32	3.35	3.48	3.45	3.43	3.46	3.61	3.58	3.56	3.59	3.34	3.45	3.58
Total OECD Liquid Fuels Consumption	46.36	44.68	46.23	46.03	45.52	44.81	45.70	45.72	45.57	44.42	45.14	45.77	45.83	45.44	45.22
Total non-OECD Liquid Fuels Consumption	41.67	42.54	43.07	42.61	42.88	43.69	44.26	43.75	44.00	44.80	45.55	44.76	42.47	43.65	44.78
Total World Liquid Fuels Consumption	88.03	87.21	89.30	88.64	88.40	88.50	89.96	89.47	89.56	89.22	90.69	90.53	88.30	89.09	90.01
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2007 Q1 = 100	109.6	110.2	111.1	111.8	112.7	113.3	114.0	114.7	115.4	116.1	116.9	117.8	110.7	113.7	116.5
Percent change from prior year	3.6	2.9	2.9	2.5	2.8	2.8	2.6	2.6	2.4	2.4	2.5	2.7	3.0	2.7	2.5
OECD Index, 2007 Q1 = 100	101.4	101.8	102.3	102.8	103.3	103.5	103.7	104.0	104.3	104.7	105.0	105.5	102.1	103.6	104.9
Percent change from prior year	2.1	1.6	1.6	1.5	1.9	1.7	1.4	1.2	1.1	1.2	1.2	1.4	1.7	1.5	1.2
Non-OECD Index, 2007 Q1 = 100	122.2	123.2	124.6	125.7	127.3	128.7	130.2	131.5	132.8	134.1	135.7	137.4	123.9	129.4	135.0
Percent change from prior year	5.7	4.8	4.7	4.0	4.2	4.4	4.5	4.7	4.3	4.2	4.3	4.5	4.8	4.4	4.3
Real U.S. Dollar Exchange Rate (a)															
Index, January 2007 = 100	96.29	94.63	95.09	97.72	97.97	99.38	100.16	100.24	100.95	101.92	103.58	103.66	95.93	99.44	102.53
Percent change from prior year	-1.9	-5.2	-3.9	0.9	1.7	5.0	5.3	2.6	3.0	2.5	3.4	3.4	-2.6	3.7	3.1

^{- =} no data available

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

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

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

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

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

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

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

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

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

U.S. Energy Information Administration S	Short-Terr			k - Octor	per 2012										
	1ot	201		44h	104	201		44b	104	201		4th	2011	Year	2012
Supply (million barrels per day)	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil Supply															
Domestic Production (a)	5.52	5.58	5.56	5.97	6.21	6.23	6.18	6.66	6.77	6.82	6.82	6.99	5.66	6.32	6.85
Alaska		0.59	0.53	0.60	0.59	0.53	0.44	0.55	0.77	0.53	0.47	0.53	0.57	0.53	0.52
Federal Gulf of Mexico (b)		1.35	1.19	1.27	1.34	1.20	1.11	1.34	1.36	1.38	1.36	1.39	1.32	1.25	1.38
Lower 48 States (excl GOM)		3.64	3.83	4.10	4.28	4.49	4.64	4.77	4.85	4.91	4.99	5.06	3.77	4.55	4.95
Crude Oil Net Imports (c)		9.01	9.00	8.73	8.58	8.82	8.54	7.81	7.92	8.28	8.31	7.47	8.89	8.43	7.99
SPR Net Withdrawals		0.00	0.33	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Commercial Inventory Net Withdrawals		0.05	0.28	-0.01	-0.41	-0.20	0.23	0.20	-0.33	0.07	0.16	0.17	0.01	-0.04	0.02
Crude Oil Adjustment (d)		0.11	0.31	0.10	0.16	0.29	0.27	0.03	0.09	0.14	0.08	0.03	0.17	0.19	0.09
Total Crude Oil Input to Refineries		14.75	15.48	14.79	14.54	15.14	15.23	14.70	14.44	15.31	15.37	14.67	14.81	14.90	14.95
Other Supply															
Refinery Processing Gain	1.00	1.07	1.13	1.11	1.05	1.08	1.09	1.08	1.06	1.07	1.10	1.08	1.08	1.07	1.07
Natural Gas Liquids Production	2.11	2.20	2.20	2.35	2.38	2.36	2.32	2.36	2.31	2.35	2.35	2.37	2.22	2.36	2.35
Renewables and Oxygenate Production (e)	0.99	1.00	1.01	1.06	1.01	1.01	0.93	0.92	0.94	0.95	0.97	1.01	1.02	0.97	0.97
Fuel Ethanol Production	0.91	0.90	0.89	0.94	0.92	0.89	0.82	0.82	0.83	0.83	0.85	0.90	0.91	0.86	0.85
Petroleum Products Adjustment (f)	0.17	0.17	0.17	0.19	0.19	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.18	0.19	0.20
Product Net Imports (c)	0.11	0.00	-0.65	-0.93	-0.86	-0.70	-0.91	-0.63	-0.56	-0.72	-0.85	-0.80	-0.37	-0.78	-0.73
Pentanes Plus	-0.04	-0.06	-0.07	-0.05	-0.07	-0.08	-0.06	-0.04	-0.05	-0.04	-0.05	-0.05	-0.05	-0.06	-0.05
Liquefied Petroleum Gas		-0.01	0.02	0.09	-0.03	-0.02	-0.07	-0.13	-0.02	-0.07	-0.06	-0.03	0.05	-0.06	-0.04
Unfinished Oils		0.69	0.69	0.65	0.53	0.61	0.62	0.62	0.54	0.62	0.64	0.59	0.69	0.60	0.60
Other HC/Oxygenates		-0.12	-0.11	-0.14	-0.11	-0.10	-0.06	-0.05	-0.04	-0.04	-0.05	-0.09	-0.12	-0.08	-0.05
Motor Gasoline Blend Comp		0.86	0.60	0.59	0.58	0.64	0.51	0.61	0.58	0.59	0.57	0.55	0.67	0.59	0.57
Finished Motor Gasoline		-0.31	-0.37	-0.52	-0.33	-0.31	-0.26	-0.40	-0.29	-0.20	-0.24	-0.38	-0.37	-0.32	-0.28
Jet Fuel		0.01	-0.03	-0.05	-0.10	-0.07	-0.04	-0.05	-0.07	-0.07	-0.07	-0.07	-0.03	-0.07	-0.07
Distillate Fuel Oil		-0.61	-0.74	-0.90	-0.76	-0.97	-0.95	-0.68	-0.65	-0.84	-0.88	-0.73	-0.68	-0.84	-0.77
Residual Fuel Oil		-0.07 -0.38	-0.21 -0.44	-0.07 -0.52	-0.10 -0.47	-0.16 -0.50	-0.09 -0.52	-0.06 -0.45	-0.13 -0.45	-0.16 -0.51	-0.18 -0.53	-0.08 -0.51	-0.10 -0.43	-0.11 -0.49	-0.14 -0.50
Other Oils (g) Product Inventory Net Withdrawals		-0.36	-0.44	0.34	0.11	-0.50	-0.52	0.26	0.29	-0.31 -0.48	-0.33	0.34	0.03	0.03	-0.04
Total Supply		18.79	19.03	18.91	18.41	-0.14 18.70	18.74	18.87	18.66	-0.46 18.67	-0.26 18.87	18.89	18.95	18.68	-0.0 4 18.77
Natural Gas Liquids and Other Liquids Pentanes Plus Liquefied Petroleum Gas Unfinished Oils Finished Liquid Fuels Motor Gasoline Jet Fuel Distillate Fuel Oil Residual Fuel Oil	2.57 0.07 8.59 1.36 3.97	0.03 2.05 -0.05 8.89 1.47 3.80 0.47	0.04 2.06 0.05 8.90 1.48 3.84 0.39	0.06 2.41 0.04 8.62 1.38 3.99 0.45	0.04 2.37 0.09 8.48 1.35 3.83 0.41	0.05 2.10 0.00 8.95 1.44 3.73 0.36	0.09 2.10 0.00 8.88 1.45 3.66 0.38	0.10 2.38 0.00 8.59 1.41 3.93 0.47	0.08 2.55 0.00 8.48 1.35 3.90 0.43	0.07 2.08 0.00 8.92 1.43 3.74 0.36	0.09 2.13 0.00 8.91 1.48 3.75 0.34	0.10 2.41 0.00 8.64 1.39 3.97 0.45	0.03 2.27 0.03 8.75 1.43 3.90 0.46	0.07 2.24 0.02 8.72 1.41 3.79 0.40	0.09 2.29 0.00 8.74 1.41 3.84 0.39
Other Oils (f)		2.12	2.27	1.95	1.84	2.04	2.18	1.98	1.86	2.07	2.17	1.93	2.08	2.01	2.01
Total Consumption	19.07	18.79	19.03	18.91	18.41	18.65	18.74	18.87	18.66	18.67	18.87	18.89	18.95	18.67	18.77
Total Liquid Fuels Net Imports	8.93	9.01	8.34	7.80	7.72	8.03	7.62	7.17	7.36	7.56	7.46	6.67	8.52	7.63	7.26
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	360.2	355.8	330.2	330.7	368.1	386.0	364.5	346.3	376.5	370.4	356.0	340.0	330.7	346.3	340.0
Pentanes Plus		15.8	17.2	17.6	15.9	16.5	16.9	14.7	14.4	16.1	16.8	14.5	17.6	14.7	14.5
Liquefied Petroleum Gas		107.0	135.2	111.8	102.0	146.8	171.3	129.7	95.5	134.1	159.1	123.7	111.8	129.7	123.7
Unfinished Oils		91.9	88.6	78.8	90.8	86.5	83.4	78.9	89.8	87.6	85.4	79.4	78.8	78.9	79.4
Other HC/Oxygenates		21.9	21.2	21.4	26.8	24.8	21.9	21.3	22.5	22.3	23.0	23.2	21.4	21.3	23.2
Total Motor Gasoline		215.0	214.8	223.1	218.8	207.7	197.4	218.2	220.0	215.8	213.6	222.7	223.1	218.2	222.7
Finished Motor Gasoline		55.5	56.3	60.6	54.4	52.3	49.8	56.5	57.1	60.0	59.7	61.3	60.6	56.5	61.3
Motor Gasoline Blend Comp.		159.5	158.5	162.5	164.4	155.4	147.6	161.7	162.9	155.8	153.8	161.4	162.5	161.7	161.4
Jet Fuel		42.3	45.9	41.5	39.1	38.5	44.4	42.4	42.4	43.5	44.3	41.8	41.5	42.4	41.8
Distillate Fuel Oil		143.9	153.4	149.2	133.8	120.0	124.1	128.2	114.1 26.1	125.6	137.2	140.4 26.5	149.2	128.2 26.4	140.4 26.5
Residual Fuel Oil		37.9 50.5	34.7 43.8	34.2 45.9	36.3 50.4	36.9 48.6	35.2 41.7	36.4 43.0	36.1 52.4	35.8 50.3	35.2 42.6	36.5 43.6	34.2 45.9	36.4 43.0	36.5 43.6
Other Oils (f) Total Commercial Inventory		1,082	43.8 1,085	45.9 1,054	1,082	46.6 1,112	41.7 1,101	43.0 1,059	52. 4 1,064	50.3 1,102	42.0 1,113	1,066	1,054	43.0 1,059	43.6 1,066
Crude Oil in SPR	•	727	696	696	696	696	695	695	695	695	695	695	696	695	695
Heating Oil Reserve		0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

^{- =} no data available

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

 $\label{thm:model} \mbox{Minor discrepancies with published historical data are due to independent rounding.}$

⁽a) Includes lease condensate.

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

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

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

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

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

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

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

		201	11			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Refinery and Blender Net Inputs						•									
Crude OII	14.20	14.75	15.48	14.79	14.54	15.14	15.23	14.70	14.44	15.31	15.37	14.67	14.81	14.90	14.95
Pentanes Plus	0.17	0.18	0.17	0.17	0.17	0.16	0.17	0.18	0.16	0.17	0.17	0.18	0.17	0.17	0.17
Liquefied Petroleum Gas	0.34	0.26	0.27	0.39	0.33	0.28	0.30	0.41	0.35	0.28	0.30	0.41	0.32	0.33	0.34
Other Hydrocarbons/Oxygenates	0.97	1.02	1.04	1.04	1.00	1.06	1.05	1.02	1.02	1.05	1.05	1.06	1.02	1.03	1.05
Unfinished Oils	0.56	0.70	0.68	0.72	0.31	0.66	0.66	0.67	0.42	0.65	0.66	0.65	0.67	0.57	0.60
Motor Gasoline Blend Components	0.66	0.84	0.54	0.44	0.45	0.50	0.39	0.44	0.54	0.64	0.59	0.46	0.62	0.44	0.56
Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs	16.89	17.74	18.19	17.55	16.79	17.80	17.79	17.41	16.93	18.10	18.14	17.43	17.60	17.45	17.66
Refinery Processing Gain	1.00	1.07	1.13	1.11	1.05	1.08	1.09	1.08	1.06	1.07	1.10	1.08	1.08	1.07	1.07
Refinery and Blender Net Production															
Liquefied Petroleum Gas	0.51	0.81	0.74	0.41	0.53	0.84	0.74	0.42	0.52	0.84	0.75	0.41	0.62	0.63	0.63
Finished Motor Gasoline	8.83	9.14	9.19	9.07	8.61	8.97	8.89	9.02	8.72	9.10	9.12	9.00	9.06	8.87	8.98
Jet Fuel	1.37	1.49	1.55	1.39	1.42	1.50	1.56	1.44	1.42	1.51	1.56	1.44	1.45	1.48	1.48
Distillate Fuel	4.23	4.31	4.63	4.79	4.39	4.50	4.61	4.62	4.35	4.65	4.70	4.68	4.49	4.53	4.59
Residual Fuel	0.54	0.54	0.56	0.51	0.54	0.52	0.46	0.54	0.55	0.52	0.51	0.54	0.54	0.52	0.53
Other Oils (a)	2.42	2.51	2.64	2.50	2.35	2.54	2.63	2.45	2.42	2.56	2.62	2.45	2.52	2.49	2.51
Total Refinery and Blender Net Production	17.89	18.81	19.31	18.66	17.84	18.88	18.89	18.49	17.99	19.17	19.25	18.51	18.67	18.52	18.73
Refinery Distillation Inputs	14.75	15.20	15.92	15.27	14.89	15.53	15.55	15.06	14.77	15.62	15.71	15.03	15.29	15.25	15.29
Refinery Operable Distillation Capacity	17.72	17.72	17.74	17.74	17.29	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.73	17.24	17.23
Refinery Distillation Utilization Factor	0.83	0.86	0.90	0.86	0.86	0.90	0.90	0.87	0.86	0.91	0.91	0.87	0.86	0.88	0.89

^{- =} no data available

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

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

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

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

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

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

o.ee.g,ea.e		201		•		201	2			20	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Prices (cents per gallon)						•	•								
Refiner Wholesale Price	267	312	297	271	297	299	301	290	277	284	277	261	287	297	275
Gasoline Regular Grade Retail Prices In	cluding Ta	axes													
PADD 1	329	377	364	337	363	366	364	362	345	351	346	331	352	364	343
PADD 2	326	380	364	329	355	366	369	352	338	349	342	323	350	361	338
PADD 3	315	365	349	317	346	353	345	341	328	338	331	312	337	346	327
PADD 4	311	365	355	337	322	374	358	354	332	343	345	326	342	352	337
PADD 5	353	400	377	368	390	413	390	391	370	377	375	358	375	396	370
U.S. Average	330	380	363	337	361	372	367	360	344	353	348	330	353	365	344
Gasoline All Grades Including Taxes	335	385	369	342	367	378	373	366	350	358	354	336	358	371	350
End-of-period Inventories (million barrels)														
Total Gasoline Inventories	,														
PADD 1	55.0	55.2	56.3	59.2	57.1	51.2	46.3	55.9	56.4	56.2	54.6	58.4	59.2	55.9	58.4
PADD 2	50.5	49.9	49.9	52.2	52.5	49.3	49.1	50.2	50.7	50.2	49.8	50.3	52.2	50.2	50.3
PADD 3	70.4	72.9	73.8	74.5	71.4	72.9	68.5	75.6	76.7	74.7	74.5	77.3	74.5	75.6	77.3
PADD 4	6.5	6.6	5.9	7.6	6.5	6.4	6.8	7.1	6.8	6.3	6.3	6.8	7.6	7.1	6.8
PADD 5	32.7	30.5	29.0	29.6	31.3	27.9	26.7	29.4	29.5	28.4	28.3	29.8	29.6	29.4	29.8
U.S. Total	215.0	215.0	214.8	223.1	218.8	207.7	197.4	218.2	220.0	215.8	213.6	222.7	223.1	218.2	222.7
Finished Gasoline Inventories															
U.S. Total	61.2	55.5	56.3	60.6	54.4	52.3	49.8	56.5	57.1	60.0	59.7	61.3	60.6	56.5	61.3
Gasoline Blending Components Invento	ries														
U.S. Total	153.8	159.5	158.5	162.5	164.4	155.4	147.6	161.7	162.9	155.8	153.8	161.4	162.5	161.7	161.4

^{- =} 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.

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

U.S. Energy Information Admi	nistratio	n Sh	ort-Term	n Energy	Outlook	: - Octobe	er 2012								
		20	11			201	12			201	3			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (billion cubic feet per day)	•	-	-	•	•	•	•	•	•	•	•		•	•	
Total Marketed Production	63.83	65.96	66.30	68.74	68.86	68.89	68.54	69.11	69.34	69.39	69.09	69.06	66.22	68.85	69.22
Alaska	1.12	1.00	0.86	1.02	1.07	0.94	0.76	0.96	1.00	0.87	0.78	0.93	1.00	0.93	0.89
Federal GOM (a)	5.60	5.23	4.54	4.58	4.57	4.24	3.78	4.31	4.62	4.66	4.50	4.46	4.98	4.22	4.56
Lower 48 States (excl GOM)	57.10	59.73	60.90	63.14	63.22	63.71	64.00	63.84	63.72	63.87	63.81	63.68	60.24	63.69	63.77
Total Dry Gas Production	60.83	62.75	63.10	65.32	65.35	65.42	65.07	65.62	65.84	65.89	65.60	65.57	63.01	65.36	65.72
Gross Imports	11.04	8.95	8.97	8.95	8.96	8.33	8.79	9.02	9.48	8.24	8.54	9.19	9.47	8.78	8.86
Pipeline	9.80	7.89	8.20	8.17	8.35	7.98	8.34	8.57	9.04	7.77	8.15	8.72	8.51	8.31	8.42
LNG	1.23	1.05	0.77	0.78	0.61	0.35	0.45	0.45	0.44	0.47	0.39	0.48	0.96	0.46	0.45
Gross Exports	4.51	4.16	3.82	4.04	4.42	4.20	3.85	4.16	4.63	4.21	4.04	4.27	4.13	4.15	4.29
Net Imports	6.53	4.79	5.15	4.91	4.54	4.14	4.94	4.86	4.85	4.02	4.50	4.93	5.34	4.62	4.57
Supplemental Gaseous Fuels	0.19	0.14	0.16	0.18	0.19	0.16	0.17	0.19	0.19	0.16	0.17	0.19	0.17	0.17	0.18
Net Inventory Withdrawals	16.98	-10.45	-9.63	-0.51	10.61	-7.19	-6.09	3.95	15.91	-11.22	-8.81	3.85	-0.97	0.31	-0.13
Total Supply	84.53	57.23	58.78	69.91	80.69	62.52	64.09	74.62	86.79	58.85	61.45	74.53	67.55	70.47	70.35
Balancing Item (b)	-0.81	-0.84	-0.21	-1.85	-0.18	-0.55	-1.22	-0.89	0.48	0.02	-1.76	-1.70	-0.93	-0.71	-0.75
Total Primary Supply	83.73	56.39	58.57	68.05	80.51	61.97	62.86	73.73	87.27	58.88	59.69	72.83	66.62	69.76	69.60
Consumption (billion cubic feet per	r day)														
Residential	26.13	7.58	3.73	14.61	20.64	6.29	3.73	16.65	25.02	7.16	3.87	16.87	12.96	11.82	13.18
Commercial	14.75	5.89	4.41	9.73	12.10	5.42	4.36	10.43	14.65	5.95	4.46	10.65	8.67	8.07	8.91
Industrial	20.01	17.60	17.16	18.92	19.71	17.82	17.60	19.09	20.38	17.92	17.65	19.23	18.41	18.55	18.79
Electric Power (c)	16.75	19.88	27.74	18.85	21.76	26.67	31.42	21.56	20.64	22.14	27.99	20.09	20.83	25.36	22.73
Lease and Plant Fuel	3.65	3.78	3.79	3.93	3.94	3.94	3.92	3.96	3.97	3.97	3.95	3.95	3.79	3.94	3.96
Pipeline and Distribution Use	2.36	1.59	1.65	1.91	2.26	1.74	1.74	1.95	2.52	1.64	1.68	1.95	1.87	1.92	1.94
Vehicle Use	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total Consumption	83.73	56.39	58.57	68.05	80.51	61.97	62.86	73.73	87.27	58.88	59.69	72.83	66.62	69.76	69.60
End-of-period Inventories (billion c	ubic feet)														
Working Gas Inventory	1,581	2,530	3,416	3,462	2,477	3,118	3,677	3,314	1,882	2,903	3,713	3,359	3,462	3,314	3,359
Producing Region (d)	738	992	1,070	1,193	1,034	1,128	1,189	1,166	837	1,093	1,187	1,155	1,193	1,166	1,155
East Consuming Region (d)	618	1,188	1,879	1,822	1,090	1,514	1,976	1,701	765	1,380	2,015	1,751	1,822	1,701	1,751
West Consuming Region (d)	225	350	468	447	353	476	512	447	280	430	511	453	447	447	453

^{- =} no data available

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

LNG: liquefied natural gas.

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

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

⁽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).

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

U.S. Energy Information	Adminis	tration	Snort-	rerm ⊨r	iergy Ot	itiook - C	october 2	2012							
		201				201				20				Year	
=	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Wholesale/Spot															
U.S. Average Wellhead		4.10	4.10	3.37	2.54	2.12	2.72	3.24	3.27	2.99	3.28	3.54	3.90	2.66	3.27
Henry Hub Spot Price	4.31	4.50	4.25	3.42	2.52	2.35	2.97	3.31	3.43	3.32	3.42	3.61	4.12	2.79	3.45
Residential															
New England	13.99	14.31	17.28	13.09	13.08	14.86	16.83	13.54	13.34	14.90	17.83	14.54	14.06	13.82	14.29
Middle Atlantic	11.83	14.09	18.13	12.65	11.31	13.43	17.12	13.19	11.87	13.75	18.12	14.00	12.82	12.65	13.18
E. N. Central	8.88	10.97	16.27	9.33	8.34	10.70	16.11	9.40	8.61	10.94	16.42	9.78	9.78	9.51	9.76
W. N. Central	8.84	11.17	16.78	9.52	8.45	12.02	16.70	9.22	8.48	10.76	16.94	9.60	9.81	9.65	9.58
S. Atlantic	11.93	17.38	22.74	13.49	12.37	17.65	22.53	12.94	11.95	17.61	23.90	14.13	13.72	13.95	14.02
E. S. Central	9.99	13.80	18.56	11.20	10.31	14.76	17.87	11.18	10.48	14.46	19.10	11.80	11.22	11.56	11.76
W. S. Central	8.62	14.35	19.09	10.19	9.25	13.97	17.15	10.22	8.48	13.82	18.96	10.83	10.50	10.79	10.55
Mountain	8.97	9.93	13.63	8.92	8.86	10.56	13.14	8.63	8.43	9.09	12.66	9.20	9.46	9.35	9.08
Pacific	9.98	10.92	11.65	9.93	9.45	9.71	10.72	9.61	9.45	9.70	10.73	10.05	10.35	9.70	9.83
U.S. Average	10.08	12.29	16.18	10.65	9.77	12.10	15.54	10.72	9.88	11.93	16.04	11.34	11.01	10.87	11.09
Commercial															
New England	11.23	10.70	10.46	10.50	10.35	10.64	10.64	11.04	11.04	11.20	11.36	11.76	10.88	10.64	11.29
Middle Atlantic	9.81	9.59	8.91	9.23	8.75	7.72	7.45	9.61	9.74	9.61	9.49	10.54	9.52	8.66	9.91
E. N. Central	8.36	9.00	9.90	7.90	7.46	7.70	8.89	8.16	8.15	8.73	9.31	8.61	8.47	7.87	8.46
W. N. Central	7.94	8.47	9.51	7.63	7.23	7.26	8.63	7.31	7.55	7.61	9.05	7.65	8.07	7.39	7.70
S. Atlantic	9.91	10.92	11.16	9.85	9.39	9.76	10.12	10.04	9.88	10.51	11.05	11.09	10.22	9.81	10.52
E. S. Central	8.98	9.77	10.59	9.42	8.96	9.26	9.84	9.89	9.39	9.95	10.60	10.41	9.39	9.41	9.89
W. S. Central	7.22	8.47	8.86	7.35	7.23	6.93	7.47	7.48	7.31	7.81	8.54	8.07	7.70	7.29	7.77
Mountain	8.06	8.09	9.03	7.78	7.56	7.88	8.31	7.44	7.27	7.25	8.57	8.18	8.09	7.65	7.66
Pacific	9.15	9.21	9.77	8.89	8.53	8.02	8.42	8.37	8.49	7.86	8.51	8.96	9.18	8.36	8.49
U.S. Average	8.85	9.24	9.64	8.56	8.16	8.06	8.58	8.71	8.65	8.80	9.45	9.36	8.92	8.39	8.98
Industrial															
New England	10.63	9.79	9.18	9.18	9.44	8.05	8.19	9.37	10.19	9.20	8.91	9.85	9.81	8.92	9.68
Middle Atlantic	8.72	8.34	7.99	8.48	8.06	6.83	6.91	9.12	9.14	7.97	8.14	9.63	8.51	8.04	8.93
E. N. Central	7.30	7.21	7.34	6.62	6.55	5.72	5.95	6.39	6.82	6.38	6.55	6.89	7.11	6.30	6.73
W. N. Central	6.28	5.83	5.63	5.56	5.38	4.10	4.32	4.90	5.41	4.34	4.55	5.30	5.85	4.73	4.97
S. Atlantic	6.52	6.25	6.14	5.73	5.11	4.19	4.84	5.55	5.80	5.32	5.56	6.01	6.17	4.94	5.69
E. S. Central	5.91	5.77	5.58	5.22	4.68	3.77	4.58	5.33	5.57	5.06	5.44	5.67	5.63	4.62	<i>5.4</i> 5
W. S. Central	4.30	4.52	4.40	3.65	2.97	2.37	3.16	3.47	3.59	3.53	3.81	3.79	4.21	3.00	3.68
Mountain	6.83	6.41	6.77	6.28	6.05	5.25	5.67	6.28	6.33	5.84	6.39	6.89	6.57	5.89	6.39
Pacific	7.51	7.33	7.37	6.93	6.60	5.72	6.12	6.85	7.05	6.34	6.68	7.42	7.28	6.36	6.92
U.S. Average	5.52	5.24	5.03	4.62	4.18	3.15	3.81	4.50	4.85	4.22	4.42	4.83	5.11	3.94	4.59

^{- =} no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

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

		201	11			201	2			201	13			Year	
<u></u>	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million short tons)				•	•	•	•	•	•	•	•		•		
Production	273.5	264.3	275.0	282.9	266.4	241.4	261.2	258.3	236.7	248.3	266.9	263.1	1095.6	1027.2	1015.0
Appalachia	87.5	85.5	81.9	82.3	80.6	76.1	77.8	79.8	73.1	77.5	78.2	76.8	337.2	314.4	305.7
Interior	41.4	41.3	45.3	42.8	44.3	44.1	40.5	35.5	33.0	35.3	37.0	35.8	170.8	164.4	141.1
Western	144.6	137.5	147.8	157.8	141.5	121.1	143.0	143.0	130.5	135.6	151.7	150.5	587.6	548.5	568.3
Primary Inventory Withdrawals	1.7	-2.3	0.6	-2.0	0.4	0.5	3.8	-0.2	5.5	-1.1	1.6	-2.6	-2.1	4.5	3.5
Imports	3.4	3.4	3.6	2.7	2.0	2.3	2.6	3.3	2.4	2.5	3.3	2.9	13.1	10.2	11.1
Exports	26.6	27.0	26.0	27.7	28.6	37.5	32.2	27.1	26.8	27.4	26.2	26.4	107.3	125.4	106.8
Metallurgical Coal	17.2	17.8	16.5	18.0	17.5	20.2	19.0	18.1	17.2	17.6	16.4	16.3	69.5	74.7	67.5
Steam Coal	9.5	9.1	9.5	9.6	11.1	17.4	13.2	9.0	9.6	9.8	9.8	10.2	37.6	50.7	39.4
Total Primary Supply	251.9	238.4	253.2	255.9	240.2	206.6	235.4	234.2	217.8	222.3	245.6	237.0	999.4	916.5	922.7
Secondary Inventory Withdrawals	8.9	0.7	20.7	-31.2	-20.3	-2.4	17.2	-6.6	6.6	-8.7	12.7	-6.1	-0.8	-12.1	4.5
Waste Coal (a)	3.3	2.9	3.4	3.0	2.8	2.5	3.2	3.0	3.2	2.8	3.2	3.0	12.5	11.4	12.1
Total Supply	264.0	242.0	277.4	227.7	222.7	206.6	255.9	230.6	227.6	216.4	261.5	233.9	1011.1	915.8	939.4
Consumption (million short tons)															
Coke Plants	5.2	5.4	5.4	5.4	5.3	5.2	5.4	5.3	5.4	5.6	5.9	5.5	21.4	21.3	22.5
Electric Power Sector (b)	234.8	223.5	261.5	208.6	189.9	185.7	238.7	212.4	209.3	197.9	243.3	215.4	928.6	826.7	865.9
Retail and Other Industry	13.5	11.7	11.7	12.1	11.7	10.4	11.2	12.8	12.8	12.9	12.3	13.0	49.0	46.1	51.0
Residential and Commercial	1.0	0.6	0.5	0.6	0.7	0.4	0.6	1.1	1.1	0.8	0.8	1.1	2.8	2.8	3.9
Other Industrial	12.5	11.0	11.2	11.5	11.1	9.9	10.5	11.7	11.7	12.1	11.5	11.8	46.2	43.3	47.1
Total Consumption	253.5	240.6	278.6	226.2	206.9	201.3	255.3	230.6	227.6	216.4	261.5	233.9	999.0	894.1	939.4
Discrepancy (c)	10.5	1.4	-1.3	1.5	15.8	5.3	0.6	0.0	0.0	0.0	0.0	0.0	12.0	21.7	0.0
End-of-period Inventories (million sho	ort tons)														
Primary Inventories (d)	48.2	50.5	49.9	51.9	51.5	51.0	47.2	47.4	41.9	43.0	41.4	44.0	51.9	47.4	44.0
Secondary Inventories	173.1	172.4	151.6	182.8	203.1	205.5	188.2	194.9	188.3	197.0	184.3	190.4	182.8	194.9	190.4
Electric Power Sector	166.7	165.7	144.4	175.1	196.4	198.4	180.6	186.9	181.3	189.4	176.2	182.0	175.1	186.9	182.0
Retail and General Industry	3.9	4.2	4.2	4.5	3.8	4.1	4.8	5.2	4.4	4.7	5.3	5.6	4.5	5.2	5.6
Coke Plants	2.0	2.0	2.4	2.6	2.3	2.3	2.2	2.2	1.9	2.3	2.2	2.2	2.6	2.2	2.2
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.22	5.22	5.22	5.22	5.12	5.12	5.12	5.12	4.97	4.97	4.97	4.97	5.22	5.12	4.97
Total Raw Steel Production															
(Million short tons per day)	0.257	0.261	0.266	0.264	0.274	0.278	0.264	0.268	0.286	0.295	0.277	0.271	0.262	0.271	0.282
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.42	2.41	2.37	2.45	2.43	2.42	2.40	2.40	2.40	2.42

^{- =} no data available

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

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

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

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

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

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

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

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

Table 7a. U.S. Electricity Industry Overview

0.5. Energy information Adminis	stration			rgy Out	100K - OC										
	4-4	201		441-	4-4	201		441-	4-4	201		441-	2044	Year	2042
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electricity Supply (billion kilowatthou	,														
Electricity Generation	11.07	10.94	12.65	10.33	10.56	10.94	12.51	10.61	10.98	10.87	12.32	10.62	11.25	11.16	11.20
Electric Power Sector (a)	10.66	10.54	12.22	9.92	10.14	10.53	12.08	10.18	10.55	10.46	11.88	10.21	10.84	10.73	10.78
End-use Sector (b)	0.41	0.41	0.43	0.41	0.42	0.41	0.44	0.43	0.43	0.41	0.44	0.41	0.41	0.42	0.42
Net Imports	0.08	0.10	0.13	0.09	0.10	0.13	0.16	0.10	0.09	0.08	0.11	0.07	0.10	0.12	0.09
Total Supply	11.15	11.04	12.78	10.42	10.66	11.08	12.67	10.71	11.06	10.96	12.43	10.69	11.35	11.28	11.29
Losses and Unaccounted for (c)	0.59	0.95	0.86	0.74	0.63	0.94	0.79	0.74	0.59	0.89	0.78	0.72	0.79	0.77	0.75
Electricity Consumption (billion kilowa	atthours p	er day)													
Retail Sales	10.21	9.74	11.55	9.33	9.66	9.79	11.51	9.59	10.10	9.71	11.27	9.61	10.21	10.14	10.17
Residential Sector	4.12	3.49	4.69	3.30	3.67	3.43	4.58	3.43	3.97	3.34	4.33	3.41	3.90	3.78	3.76
Commercial Sector	3.45	3.56	4.05	3.39	3.36	3.61	4.08	3.44	3.44	3.62	4.05	3.47	3.61	3.62	3.65
Industrial Sector	2.61	2.67	2.79	2.62	2.61	2.72	2.83	2.70	2.66	2.73	2.87	2.71	2.67	2.72	2.74
Transportation Sector	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Direct Use (d)	0.35	0.35	0.37	0.35	0.36	0.35	0.38	0.37	0.37	0.35	0.38	0.35	0.36	0.37	0.36
Total Consumption	10.56	10.09	11.92	9.68	10.03	10.14	11.89	9.96	10.47	10.07	11.65	9.96	10.57	10.51	10.54
Prices															
Power Generation Fuel Costs (dollar	s per milli	on Btu)													
Coal	2.34	2.42	2.46	2.37	2.41	2.42	2.41	2.37	2.45	2.43	2.42	2.40	2.40	2.40	2.42
Natural Gas	5.02	4.92	4.76	4.13	3.31	2.92	3.45	4.02	4.12	3.87	3.95	4.33	4.71	3.40	4.05
Residual Fuel Oil	15.88	18.29	20.10	20.05	21.27	22.62	19.18	17.69	17.45	17.28	17.23	17.34	18.49	20.22	17.32
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	23.12	23.76	24.39	23.62	23.68	23.70	23.57	22.40	23.75	23.64
End-Use Prices (cents per kilowatthe	our)														
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.02	12.11	11.58	11.29	12.19	12.50	11.94	11.79	11.84	11.99
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.12	10.46	9.90	9.88	10.31	10.76	10.13	10.32	10.12	10.29
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.66	7.07	6.55	6.53	6.78	7.20	6.67	6.89	6.70	6.80

^{- =} no data available

Prices are not adjusted for inflation.

for which revenue information is not available. See Table 7.6 of the EIAMonthly 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-0249

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

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

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

 $[\]hbox{(c) Includes transmission and distribution losses, data collection time-frame differences, and estimation error. } \\$

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

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

U.S. Energy Informati	OH AUHIII	201	_	711-161111	Lifelda	201	· October	2012		201	13			Year	
-	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Residential Sector															
New England	144	115	143	116	133	112	147	123	138	112	140	123	130	129	128
Middle Atlantic	402	328	437	318	363	314	437	322	381	303	390	316	371	359	347
E. N. Central	575	455	608	457	516	460	608	477	551	442	560	471	524	515	506
W. N. Central	332	251	334	251	292	251	338	265	316	243	316	262	292	286	284
S. Atlantic	1,033	907	1,192	803	890	855	1,145	857	1,023	852	1,112	849	984	937	959
E. S. Central	372	296	408	261	312	288	401	280	362	285	386	279	334	320	328
W. S. Central	558	550	820	467	485	544	744	473	528	505	700	473	599	562	552
Mountain	248	228	334	229	237	247	335	235	246	239	331	236	260	263	263
Pacific contiguous	438	350	401	385	428	351	410	387	413	351	383	383	393	394	382
AK and HI	15	13	13	14	15	12	13	14	14	12	12	14	14	13	13
Total	4,118	3,493	4,689	3,302	3,670	3,433	4,577	3,433	3.973	3.344	4.330	3,405	3,901	3,779	3,763
Commercial Sector	•	•	•	•	•	•	•	,	,	*		ŕ	•	*	,
New England	123	119	133	115	118	117	135	119	122	121	136	120	123	123	125
Middle Atlantic	435	421	482	406	416	417	486	409	427	418	475	409	436	432	432
E. N. Central	496	484	551	473	476	495	554	483	486	498	549	484	501	502	504
W. N. Central	269	262	297	258	257	270	304	263	267	269	299	266	272	274	275
S. Atlantic	784	856	942	773	761	845	936	790	784	853	944	800	839	833	846
E. S. Central	217	227	265	206	207	228	266	212	215	228	266	214	229	228	231
W. S. Central	443	500	595	456	447	519	603	462	456	503	586	470	499	508	504
Mountain	238	249	287	243	233	260	288	246	239	263	290	251	254	257	261
Pacific contiguous	430	429	482	438	430	442	486	439	431	448	484	443	445	449	451
AK and HI	18	17	17	17	17	16	17	17	18	17	17	18	17	17	17
Total	3,453	3,564	4,052	3,386	3,364	3,609	4,076	3,440	3,444	3,620	4,046	3,475	3,614	3,623	3,647
Industrial Sector	-,	-,	.,	-,	-,	-,	.,	-,	-,	-,	.,	-,	-,	-,	-,
New England	75	76	81	73	73	75	81	73	72	74	81	72	76	75	75
Middle Atlantic	199	192	196	187	186	193	200	191	194	194	201	193	194	193	195
E. N. Central	540	541	567	536	546	562	565	548	550	561	576	550	546	556	559
W. N. Central	232	236	253	237	234	248	263	251	240	249	268	252	240	249	252
S. Atlantic	370	394	401	373	372	397	404	384	375	399	411	385	384	389	393
E. S. Central	342	320	336	336	345	344	347	352	361	339	353	356	334	347	352
W. S. Central	415	441	456	422	410	427	464	430	420	433	466	424	434	433	436
Mountain	204	219	239	215	206	230	243	221	209	230	249	224	219	225	228
Pacific contiguous	221	233	247	228	220	236	249	235	226	235	252	234	232	235	237
AK and HI	14	13	14	14	14	13	14	14	13	14	14	14	14	14	14
Total	2,612	2,666	2,791	2,620	2,607	2,725	2,832	2,699	2,660	2,727	2,870	2,705	2,673	2,716	2,741
Total All Sectors (a)	_,	_,	_,	_,	_,	_,	_,	_,	_,	_,	_,-,-	_,	_,	_,	_,
New England	344	311	359	307	326	305	365	317	334	308	358	317	330	328	329
Middle Atlantic	1,048	952	1,126	921	977	935	1,135	933	1,015	928	1,079	932	1,012	995	988
E. N. Central	1,613	1,482	1,728	1,468	1,541	1,519	1,729	1,510	1,590	1,501	1,686	1,507	1,573	1.575	1,571
W. N. Central	834	749	884	746	783	768	906	779	823	761	883	780	803	809	812
S. Atlantic	2,191	2,161	2,539	1,952	2,027	2,100	2,489	2,034	2,186	2,108	2,470	2,038	2,211	2,163	2,201
E. S. Central	931	844	1,009	803	864	860	1,013	844	938	853	1,005	848	897	896	911
W. S. Central	1,417	1,491	1,871	1,346	1,342	1,490	1,812	1,365	1,404	1,442	1,752	1,367	1,532	1,503	1,492
Mountain	691	696	860	687	676	737	866	703	694	733	870	712	734	746	753
Pacific contiguous	1,090	1,015	1,132	1,054	1,081	1,031	1,148	1,064	1.072	1.036	1,122	1,062	1,073	1.081	1.073
AK and HI	46	43	44	45	45	42	43	45	46	43	44	46	45	44	45
Total	10,206	9,743	11,553	9,328	9,663	9,786	11,506	9,594	10,100	9.713	11,269	9,608	10,209	10.139	10,174
	.0,200	0,1 70	,	0,020	5,555	5,. 50	,000	0,007	10,100	0,7 10	11,200	0,000	.0,200	10,100	10,117

 ^{- =} no data available

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

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

U.S. Energy Informat	tion Admi	nistratior	n Sho	ort-Term	Energy	Outlook -	 Octobe 	r 2012							
		201	1			201	2			201	3			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Residential Sector															
New England	15.94	16.10	15.94	15.94	16.01	15.84	15.54	15.42	15.58	15.63	15.61	15.72	15.98	15.70	15.63
Middle Atlantic	15.16	15.98	16.48	15.76	14.94	15.40	15.98	14.77	14.79	16.09	16.92	15.50	15.86	15.32	15.84
E. N. Central	10.98	12.04	12.20	11.93	11.69	12.34	12.24	11.93	11.49	12.74	12.80	12.36	11.78	12.05	12.33
W. N. Central	9.01	10.52	11.16	9.80	9.61	10.99	11.31	9.97	9.48	11.16	11.71	10.30	10.13	10.50	10.65
S. Atlantic	10.73	11.43	11.62	11.23	11.13	11.57	11.55	11.09	10.69	11.45	11.76	11.33	11.26	11.35	11.31
E. S. Central	9.60	10.21	10.23	10.51	9.91	10.30	10.20	10.25	9.69	10.55	10.60	10.63	10.11	10.16	10.35
W. S. Central	10.01	10.76	10.79	10.53	10.31	10.46	10.40	10.04	10.17	10.90	10.93	10.47	10.55	10.32	10.65
Mountain	9.75	10.83	11.23	10.21	10.11	11.15	11.47	10.43	10.25	11.43	11.89	10.81	10.57	10.86	11.16
Pacific	12.18	12.53	13.70	12.56	12.30	13.02	13.66	12.41	12.16	12.67	13.95	12.59	12.74	12.84	12.84
U.S. Average	11.19	11.95	12.18	11.82	11.57	12.02	12.11	11.58	11.29	12.19	12.50	11.94	11.79	11.84	11.99
Commercial Sector															
New England	14.38	14.37	14.49	14.05	13.98	13.67	14.05	13.81	13.95	14.01	14.16	13.77	14.33	13.89	13.98
Middle Atlantic	13.23	13.76	14.52	13.00	12.57	12.95	13.87	12.60	12.70	13.46	14.39	12.92	13.66	13.04	13.40
E. N. Central	9.30	9.62	9.63	9.34	9.51	9.55	9.60	9.38	9.37	9.67	9.80	9.56	9.48	9.52	9.61
W. N. Central	7.60	8.47	8.96	7.77	7.89	8.59	8.92	7.77	7.72	8.60	9.18	7.99	8.23	8.32	8.40
S. Atlantic	9.40	9.51	9.62	9.53	9.48	9.44	9.58	9.51	9.44	9.57	9.78	9.69	9.52	9.50	9.63
E. S. Central	9.54	9.73	9.81	9.79	9.67	9.74	9.68	9.67	9.60	9.88	10.06	10.12	9.72	9.69	9.92
W. S. Central	8.55	8.65	8.90	8.43	8.29	8.02	8.10	7.84	8.31	8.43	8.53	8.16	8.65	8.06	8.37
Mountain	8.25	9.01	9.29	8.66	8.40	9.10	9.35	8.72	8.48	9.26	9.54	8.91	8.83	8.92	9.08
Pacific	10.89	12.29	13.71	11.46	10.83	12.06	13.22	11.25	10.67	11.99	13.51	11.45	12.14	11.89	11.96
U.S. Average	9.97	10.38	10.76	10.07	9.93	10.12	10.46	9.90	9.88	10.31	10.76	10.13	10.32	10.12	10.29
Industrial Sector															
New England	12.67	12.61	12.99	12.41	12.09	12.13	12.37	11.93	12.31	12.05	12.39	12.01	12.68	12.13	12.20
Middle Atlantic	8.46	8.21	8.34	7.67	7.53	7.48	7.73	7.35	7.64	7.77	7.95	7.44	8.17	7.53	7.70
E. N. Central	6.45	6.56	6.78	6.54	6.49	6.53	6.80	6.54	6.41	6.55	6.78	6.51	6.59	6.59	6.57
W. N. Central	5.77	6.13	6.64	5.78	5.92	6.23	6.64	5.77	5.80	6.18	6.78	5.90	6.09	6.15	6.18
S. Atlantic	6.52	6.76	7.11	6.57	6.41	6.54	6.91	6.52	6.41	6.59	7.04	6.67	6.75	6.60	6.69
E. S. Central	5.81	6.16	6.82	5.94	5.79	6.07	6.54	6.03	5.84	6.27	6.70	6.24	6.18	6.11	6.26
W. S. Central	5.78	6.03	6.63	5.77	5.47	5.34	5.67	5.29	5.71	5.80	5.95	5.51	6.07	5.45	5.75
Mountain	5.59	6.08	6.87	5.80	5.66	6.16	6.91	5.90	5.90	6.36	7.09	6.05	6.11	6.19	6.38
Pacific	7.34	7.73	8.70	7.82	7.30	7.69	8.48	7.55	7.10	7.66	8.59	7.66	7.92	7.77	7.78
U.S. Average	6.63	6.86	7.36	6.68	6.51	6.66	7.07	6.55	6.53	6.78	7.20	6.67	6.89	6.70	6.80
All Sectors (a)															
New England	14.63	14.55	14.70	14.34	14.35	14.05	14.25	13.96	14.23	14.09	14.31	14.10	14.56	14.16	14.19
Middle Atlantic	13.05	13.39	14.19	12.86	12.48	12.63	13.59	12.26	12.50	13.10	14.07	12.63	13.41	12.78	13.10
E. N. Central	8.94	9.24	9.60	9.12	9.16	9.27	9.61	9.16	9.08	9.40	9.76	9.32	9.24	9.31	9.40
W. N. Central	7.65	8.42	9.13	7.82	7.94	8.61	9.15	7.87	7.84	8.63	9.36	8.09	8.28	8.42	8.50
S. Atlantic	9.54	9.81	10.17	9.66	9.64	9.76	10.05	9.61	9.50	9.77	10.22	9.80	9.81	9.78	9.84
E. S. Central	8.19	8.54	8.99	8.42	8.20	8.46	8.81	8.35	8.19	8.67	9.09	8.66	8.55	8.47	8.66
W. S. Central	8.31	8.65	9.18	8.32	8.16	8.14	8.42	7.80	8.23	8.51	8.80	8.14	8.66	8.15	8.45
Mountain	8.00	8.68	9.37	8.28	8.17	8.87	9.48	8.40	8.33	9.06	9.73	8.64	8.63	8.78	8.99
Pacific	10.68	11.32	12.61	11.06	10.68	11.37	12.34	10.84	10.48	11.23	12.54	11.01	11.44	11.33	11.34
U.S. Average	9.61	9.98	10.52	9.74	9.63	9.82	10.28	9.56	9.55	9.97	10.52	9.80	9.98	9.85	9.98
-															

^{- =} no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

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

	iistration	20		Litergy	Odilook	201				201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
United States															
Coal	4,933	4,616	5,320	4,139	3,834	3,782	4,833	4,290	4,430	4,112	4,970	4,383	4,751	4,187	4,475
Natural Gas	2,294	2,609	3,602	2,623	3,024	3,516	4,109	2,954	2,832	2,951	3,710	2,764	2,785	3,402	3,066
Petroleum (a)	,	76	83	61	61	56	64	55	69	61	66	57	77	59	63
Other Gases	29	30	33	31	36	34	33	33	38	35	34	33	31	34	35
Nuclear	2,258	1,943	2,288	2,170	2,175	2,012	2,211	2,008	2,162	2.092	2,225	2,064	2,165	2,102	2,136
Renewable Energy Sources:	2,230	1,343	2,200	2,170	2,173	2,012	2,211	2,000	2,102	2,032	2,220	2,004	2,103	2,102	2,130
Conventional Hydropower	917	1,066	863	719	781	910	740	630	762	888	702	647	891	765	749
	330	•							702 448						429
Wind		384	235	364	422	404	290	405		485	355	429	328	380	
Wood Biomass	102	97	106	100	101	93	106	107	105	98	110	107	101	102	105
Waste Biomass	51	55	55	56	53	55	55	59	59	63	63	61	54	55	62
Geothermal		45	44	46	47	46	47	48	49	48	49	49	46	47	48
Solar	2	7	7	4	4	14	14	7	9	25	25	10	5	10	18
Pumped Storage Hydropower	-11	-16	-21	-16	-9	-12	-20	-17	-16	-14	-20	-17	-16	-14	-17
Other Nonrenewable Fuels (b)	28	31	31	30	29	30	32	31	29	32	32	31	30	30	31
Total Generation	11,070	10,944	12,647	10,326	10,558	10,941	12,514	10,610	10,977	10,874	12,320	10,617	11,249	11,158	11,199
Northeast Census Region															
Coal	372	329	373	264	262	230	323	288	337	224	290	301	334	276	288
Natural Gas	424	477	605	483	503	548	687	527	507	521	622	495	498	567	537
Petroleum (a)	11	5	8	2	2	3	6	3	5	3	5	3	6	4	4
Other Gases	2	2	2	2	3	2	2	3	3	2	2	2	2	2	2
Nuclear	545	447	539	516	544	482	526	477	514	497	529	490	512	507	507
Hydropower (c)	98	112	91	110	116	91	74	94	113	97	78	95	103	94	96
Other Renewables (d)	52	48	46	53	58	51	50	65	67	60	57	67	50	56	63
Other Nonrenewable Fuels (b)	10	12	12	11	11	12	12	12	11	12	11	12	11	12	11
Total Generation	1,515	1,431	1,676	1,442	1,499	1,419	1,680	1,469	1,557	1,416	1,595	1,465	1,516	1,517	1,508
South Census Region													-		
Coal	2,177	2,180	2,408	1,688	1,567	1,709	2,169	1,758	1,899	1,934	2,229	1,802	2,113	1,802	1,967
Natural Gas	1,311	1,645	2,139	1,473	1,685	2,095	2,310	1,614	1,533	1,744	2,146	1,537	1,644	1,926	1,741
Petroleum (a)	41	35	38	24	25	22	25	18	28	25	25	19	34	23	24
Other Gases	14	14	15	14	14	14	14	15	15	15	15	15	14	14	15
Nuclear	940	831	977	920	898	870	961	872	938	907	965	895	917	900	926
Hydropower (c)	120	126	79	112	140	72	61	97	137	79	64	98	109	92	94
Other Renewables (d)	171	198	151	180	195	190	162	197	206	213	180	201	175	186	200
Other Nonrenewable Fuels (b)	11	13	12	12	11	12	12	12	12	13	13	12	12	12	12
Total Generation	4,787	5,042	5,819	4,423	4,533	4,986	5,713	4,583	4,767	4.930	5,635	4,579	5,019	4,955	4,979
Midwest Census Region	4,101	0,042	0,010	-1,-120	4,000	4,000	0,110	1,000	1,101	1,000	0,000	1,070	0,010	1,000	1,010
Coal	1,804	1,628	1,896	1,573	1,468	1,395	1,771	1,633	1,622	1,504	1,849	1,649	1,725	1,568	1,657
Natural Gas	141	132	239	141	260	331	353	166	187	156	203	118	164	277	166
Petroleum (a)	9	9	8	7	7	6	8	7	8	7	8	7	8	7	8
Other Gases	7	8	9	8	12	11	10	8	13	11	10	8	8	10	10
Nuclear	561	485	577	524	553	516	551	<i>508</i>	550	532	566	525	537	532	543
	49		56					38	330 44	61	52 52	39	53	47	49
Hydropower (c)		61		45	46	55 467	47								
Other Renewables (d) Other Nonrenewable Fuels (b)	144	151	91	167	183	167	114	182	194	188	133	193	138	161	177 3
	0.747	0.477	3	3	3	3	3	3	3	0.400	0.004	0.540	0.000	3	-
Total Generation	2,717	2,477	2,880	2,469	2,532	2,484	2,857	2,545	2,621	2,462	2,824	2,542	2,636	2,605	2,613
West Census Region															
Coal	580	480	642	614	538	448	570	611	571	449	601	631	579	542	564
Natural Gas	418	355	619	526	576	542	759	647	605	530	740	614	480	632	623
Petroleum (a)	28	28	29	28	26	24	27	27	27	26	28	28	28	26	27
Other Gases	6	6	6	7	7	6	7	7	8	7	7	7	6	7	7
Nuclear	212	180	196	210	181	144	173	150	161	156	166	154	199	162	159
Hydropower (c)	639	750	616	436	470	680	537	385	452	637	488	398	610	518	494
Other Renewables (d)	165	192	159	168	191	203	186	181	204	257	233	194	171	190	222
Other Nonrenewable Fuels (b)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total Generation	2,052	1,995	2,271	1,991	1,993	2,052	2,264	2,012	2,032	2,066	2,267	2,031	2,078	2,081	2,099

⁽a) Residual fuel oil, distillate fuel oil, petroleum coke, and other petroleum liquids.

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

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

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

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

⁽c) Conventional hydroelectric and pumped storage generation.

⁽d) Wind, biomass, geothermal, and solar generation.

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

C.C. Energy Information Admin		201	11		Juliook	20				20	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Fuel Consumption for Electricity G	eneration,	All Sector	s	•				•							
United States															
Coal (thousand st/d)	2,622	2,467	2,859	2,277	2,098	2,046	2,604	2,319	2,337	2,182	2,657	2,352	2,556	2,268	2,383
Natural Gas (million cf/d)	17,454	20,657	28,512	19,639	22,549	27,455	32,318	22,166	21,148	22,777	28,774	20,624	21,590	26,128	23,345
Petroleum (thousand b/d)	157	133	146	107	108	100	114	96	122	107	116	99	136	105	111
Residual Fuel Oil	43	42	42	30	29	32	39	26	28	30	34	28	39	32	30
Distillate Fuel Oil	33	31	30	25	22	27	25	24	29	24	25	24	30	24	26
Petroleum Coke (a)	77	55	70	48	54	36	45	40	57	48	50	41	62	44	49
Other Petroleum Liquids (b)	5	4	5	4	4	4	6	5	8	5	6	5	5	5	6
Northeast Census Region															
Coal (thousand st/d)	171	151	174	123	122	107	148	132	153	103	134	140	154	127	132
Natural Gas (million cf/d)	3,203	3,652	4,724	3,605	3,756	4,201	5,344	3,900	3,760	3,951	4,761	3,628	3,800	4,302	4,027
Petroleum (thousand b/d)	20	9	15	5	5	7	11	6	10	6	11	6	12	7	8
South Census Region															
Coal (thousand st/d)	1,114	1,134	1,258	913	837	907	1,138	925	965	993	1,153	940	1,105	952	1,013
Natural Gas (million cf/d)	10,019	13,155	17,007	11,095	12,670	16,551	18,324	12,291	11,582	13,641	16,856	11,622	12,833	14,961	13,435
Petroleum (thousand b/d)	75	62	69	45	48	43	46	33	52	46	45	34	63	42	44
Midwest Census Region															
Coal (thousand st/d)	1,014	918	1,073	899	840	784	1,003	921	902	840	1,038	922	976	887	926
Natural Gas (million cf/d)	1,082	1,092	2,040	1,064	1,908	2,575	2,901	1,234	1,407	1,214	1,577	875	1,321	2,154	1,268
Petroleum (thousand b/d)	16	16	16	13	12	11	14	14	14	14	15	14	15	13	14
West Census Region															
Coal (thousand st/d)	322	263	355	343	300	249	315	341	317	246	330	350	321	301	311
Natural Gas (million cf/d)	3,149	2,757	4,742	3,876	4,214	4,128	5,749	4,741	4,399	3,971	5,581	4,499	3,636	4,711	4,616
Petroleum (thousand b/d)	46	46	47	44	43	38	42	44	45	41	44	45	46	42	44
End-of-period U.S. Fuel Inventories	Held by E	lectric Po	wer Secto	r											
Coal (million short tons)	166.7	165.7	144.4	175.1	196.4	198.4	180.6	186.9	181.3	189.4	176.2	182.0	175.1	186.9	182.0
Residual Fuel Oil (mmb)	15.4	16.4	15.7	15.5	15.3	14.6	13.6	13.5	13.1	14.4	13.5	13.1	15.5	13.5	13.1
Distillate Fuel Oil (mmb)	16.5	16.8	16.7	17.1	16.9	16.7	17.2	17.2	17.0	16.9	16.9	16.9	17.1	17.2	16.9
Petroleum Coke (mmb)	2.4	2.5	1.9	2.3	2.0	1.7	2.3	2.4	2.6	2.6	2.7	2.6	2.3	2.4	2.6

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

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

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

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

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

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

⁽b) Other petroleum liquids include jet fuel, kerosene, and waste oil.

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

0.3. Energy information Auri		20	11	Lilorgy	Outlook	201				201	3			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electric Power Sector														-	
Hydroelectric Power (a)	0.801	0.941	0.771	0.641	0.688	0.803	0.661	0.561	0.664	0.783	0.627	0.576	3.154	2.713	2.651
Wood Biomass (b)	0.046	0.040	0.047	0.042	0.045	0.038	0.049	0.048	0.050	0.046	0.056	0.053	0.175	0.180	0.205
Waste Biomass (c)	0.064	0.067	0.069	0.069	0.066	0.065	0.071	0.074	0.073	0.077	0.080	0.077	0.269	0.275	0.307
Wind		0.341	0.211	0.326	0.375	0.358	0.260	0.363	0.393	0.430	0.318	0.385	1.168	1.357	1.526
Geothermal	0.042	0.040	0.040	0.041	0.041	0.041	0.042	0.043	0.043	0.042	0.044	0.044	0.163	0.167	0.172
Solar	. 0.002	0.006	0.006	0.003	0.004	0.012	0.013	0.006	0.008	0.022	0.023	0.009	0.018	0.035	0.062
Subtotal	. 1.245	1.435	1.145	1.122	1.219	1.318	1.109	1.095	1.232	1.400	1.147	1.144	4.947	4.740	4.923
Industrial Sector															
Hydroelectric Power (a)	0.005	0.005	0.003	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.005	0.005	0.018	0.020	0.019
Wood Biomass (b)	0.325	0.322	0.331	0.334	0.325	0.316	0.318	0.316	0.302	0.297	0.312	0.318	1.311	1.275	1.229
Waste Biomass (c)	0.043	0.042	0.043	0.044	0.043	0.043	0.047	0.045	0.044	0.042	0.046	0.043	0.172	0.177	0.175
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004
Subtotal	0.378	0.375	0.383	0.388	0.378	0.370	0.375	0.371	0.356	0.350	0.369	0.371	1.524	1.494	1.445
Commercial Sector															
Wood Biomass (b)	0.017	0.018	0.018	0.018	0.018	0.018	0.019	0.018	0.018	0.017	0.018	0.017	0.071	0.072	0.070
Waste Biomass (c)	0.009	0.008	0.009	0.010	0.009	0.011	0.011	0.010	0.010	0.010	0.011	0.010	0.036	0.041	0.042
Geothermal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.020	0.020	0.020
Subtotal	0.032	0.032	0.033	0.034	0.032	0.035	0.035	0.034	0.034	0.033	0.035	0.033	0.131	0.137	0.136
Residential Sector															
Wood Biomass (b)	0.106	0.107	0.108	0.108	0.107	0.107	0.107	0.107	0.103	0.104	0.105	0.105	0.430	0.427	0.417
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.040	0.039	0.039
Solar (d)	0.035	0.035	0.035	0.035	0.042	0.042	0.043	0.043	0.050	0.051	0.052	0.052	0.140	0.170	0.205
Subtotal	0.150	0.152	0.154	0.154	0.159	0.159	0.159	0.159	0.163	0.165	0.167	0.167	0.610	0.637	0.661
Transportation Sector															
Ethanol (e)		0.271	0.271	0.272	0.257	0.276	0.272	0.265	0.258	0.268	0.271	0.274	1.071	1.069	1.071
Biodiesel (e)	0.012	0.027	0.035	0.035	0.023	0.036	0.031	0.033	0.036	0.042	0.042	0.042	0.108	0.123	0.162
Subtotal	. 0.268	0.298	0.306	0.307	0.280	0.312	0.304	0.297	0.295	0.309	0.313	0.316	1.179	1.193	1.233
All Sectors Total															
Hydroelectric Power (a)		0.946	0.775	0.645	0.693	0.808	0.666	0.566	0.669	0.788	0.632	0.581	3.171	2.733	2.670
Wood Biomass (b)	0.495	0.486	0.504	0.502	0.494	0.479	0.493	0.489	0.472	0.464	0.492	0.493	1.987	1.955	1.922
Waste Biomass (c)	0.116	0.118	0.121	0.123	0.117	0.120	0.128	0.129	0.127	0.130	0.136	0.130	0.477	0.493	0.524
Wind	0.290	0.341	0.211	0.326	0.375	0.358	0.260	0.363	0.393	0.430	0.318	0.385	1.168	1.357	1.526
Geothermal	0.057	0.056	0.056	0.057	0.057	0.057	0.058	0.059	0.059	0.058	0.059	0.059	0.226	0.231	0.236
Solar	0.037	0.041	0.042	0.039	0.046	0.054	0.056	0.049	0.059	0.073	0.074	0.061	0.158	0.205	0.266
Ethanol (e)		0.277	0.277	0.278	0.262	0.281	0.275	0.270	0.264	0.273	0.277	0.279	1.093	1.088	1.093
Biodiesel (e)	0.012	0.027	0.035	0.035	0.023	0.036	0.031	0.033	0.036	0.042	0.042	0.042	0.108	0.123	0.162
Total Consumption	2.074	2.292	2.020	2.004	2.067	2.193	1.982	1.957	2.079	2.257	2.031	2.031	8.390	8.200	8.399

^{- =} no data available

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

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

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

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

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

⁽b) Wood and wood-derived fuels.

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

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

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

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

0.5. Energy information Administration		201		I		201 201				201	3			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2005 dollars - SAAR)	13,184	13,265	13,307	13,441	13,506	13,565	13,618	13,661	13,719	13,783	13,844	13,926	13,299	13,588	13,818
Real Disposable Personal Income															
(billion chained 2005 Dollars - SAAR)	10,196	10,158	10,126	10,122	10,214	10,292	10,344	10,383	10,422	10,483	10,544	10,616	10,150	10,308	10,516
Real Fixed Investment															
(billion chained 2005 dollars-SAAR)	1,627	1,675	1,737	1,779	1,821	1,843	1,858	1,878	1,905	1,939	1,971	2,016	1,704	1,850	1,958
Business Inventory Change															
(billion chained 2005 dollars-SAAR)	21.39	16.37	2.40	35.48	11.86	-1.46	16.89	10.49	8.86	6.99	4.14	6.10	18.91	9.44	6.52
Housing Stock															
(millions)	123.5	123.5	123.5	123.5	123.6	123.6	123.6	123.6	123.7	123.8	123.8	123.9	123.5	123.6	123.9
Non-Farm Employment															
(millions)	130.7	131.2	131.5	132.0	132.7	133.0	133.4	133.8	134.2	134.8	135.3	135.8	131.4	133.2	135.0
Commercial Employment															
(millions)	88.7	89.2	89.5	90.0	90.5	90.8	91.2	91.6	92.0	92.5	92.9	93.3	89.4	91.0	92.7
Industrial Production Indices (Index, 2007=	•											,			
Total Industrial Production	92.6	92.9	94.2	95.3	96.7	97.3	97.7	98.4	98.6	99.2	99.9	100.4	93.7	97.5	99.5
Manufacturing	90.4	90.6	91.7	92.9	95.2	95.6	96.2	96.7	97.1	97.7	98.4	99.1	91.4	95.9	98.1
Food	99.5	100.3	100.4	101.2	102.3	102.3	102.8	103.2	103.4	103.7	104.1	104.4	100.3	102.6	103.9
Paper	87.5	86.0	85.0	85.3	85.3	84.2	83.1	83.1	82.9	83.1	83.6	84.1	86.0	83.9	83.4
Chemicals	87.2	86.2	86.6	86.8	87.5	86.6	86.8	87.0	87.1	87.5	88.1	88.5	86.7	87.0	87.8
Petroleum	94.7	96.6	100.8	102.0	102.1	100.1	99.5	99.8	100.1	100.4	100.6	100.7	98.5	100.4	100.5
Stone, Clay, Glass	69.1	71.3	72.3	71.1	72.3	71.7	71.4	71.9	72.5	73.4	74.7	76.3	71.0	71.8	74.2
Primary Metals	95.7	95.3	95.9	100.2	102.4	99.7	99.4	99.5	98.9	99.8	101.4	102.8	96.8	100.2	100.7
Resins and Synthetic Products	87.1	80.7	80.7	80.8	84.5	79.0	80.6	80.9	80.8	80.9	81.7	82.3	82.3	81.3	81.4
Agricultural Chemicals	93.6 89.9	91.4 88.7	92.8 89.8	94.6	94.4	88.4	87.2 90.1	87.4 90.3	87.8 90.3	88.7 90.8	89.8 91.6	90.4 92.2	93.1 89.8	89.3	89.2 91.2
Natural Gas-weighted (a)	09.9	00.7	09.0	90.8	92.1	90.1	90.1	90.3	90.3	90.6	91.0	92.2	09.0	90.6	91.2
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	2.22	2.25	2.26	2.27	2.28	2.29	2.30	2.32	2.32	2.32	2.34	2.35	2.25	2.30	2.33
Producer Price Index: All Commodities															
(index, 1982=1.00)	1.98	2.02	2.02	2.03	2.04	2.00	2.02	2.05	2.05	2.03	2.03	2.04	2.01	2.03	2.04
Producer Price Index: Petroleum															
(index, 1982=1.00)	2.74	3.22	3.07	2.94	3.09	3.12	3.05	3.04	2.92	2.95	2.92	2.84	2.99	3.08	2.91
GDP Implicit Price Deflator															
(index, 2005=100)	112.4	113.1	113.9	114.0	114.6	115.1	115.7	116.3	116.7	117.0	117.5	117.9	113.4	115.4	117.3
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	7,585	8,324	8,251	7,951	7,610	8,387	8,265	7,951	7,650	8,425	8,361	8,012	8,029	8,054	8,114
Air Travel Capacity															
(Available ton-miles/day, thousands)	519	549	554	527	515	547	558	530	513	553	558	528	537	538	538
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	307	339	344	320	307	340	347	314	308	350	346	311	328	327	329
Airline Ticket Price Index															
(index, 1982-1984=100)	298.2	308.1	307.8	302.0	299.2	314.6	298.8	283.4	298.7	327.2	318.8	292.3	304.0	299.0	309.2
Raw Steel Production															
(million short tons per day)	0.257	0.261	0.266	0.264	0.274	0.278	0.264	0.268	0.286	0.295	0.277	0.271	0.262	0.271	0.282
0.1															
Carbon Dioxide (CO ₂) Emissions (million n		•	50 5			5 0-	F=c			500				0.07:	0.0==
Petroleum	569	577	583	578	556	567	572	578	556	568	576	579	2,307	2,274	2,279
Natural Gas	402	272	286	333	391	300	308	362	419	285	293	357	1,293	1,360	1,354
Coal	474	450	520	423	387	378	482	438	433	412	496	445	1,866	1,686	1,786
Total Fossil Fuels	1,445	1,299	1,389	1,333	1,334	1,245	1,362	1,378	1,408	1,266	1,365	1,380	5,466	5,320	5,419

^{- =} no data available

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

Historical data: Latest data available from 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.

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

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

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Informat	tion Admi			ort-Term	Energy	Outlook		er 2012				1			
		201				201				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Real Gross State Produc	•	•	700	724	724	720	740	740	7.15	7.17	740	750	700	700	740
New England	715	720	723	731	734	736	740	742	745	747	749	753	722	738	748
Middle Atlantic	1,943	1,952	1,956	1,968	1,982	1,988	1,995	2,002	2,009	2,015	2,022	2,032	1,955	1,992	2,019
E. N. Central	1,801 852	1,810	1,812	1,824	1,834	1,840	1,846	1,849	1,854	1,861	1,868	1,877	1,812	1,842	1,865
W. N. Central		856	857	862	868	873	877	879	883	886	889	894	857	874	888
S. Atlantic	2,393	2,408	2,415	2,440	2,450	2,457	2,464	2,471	2,483	2,494	2,506	2,522	2,414	2,461	2,501
E. S. Central	611	612	613	617	620	623	625	627	629	632	634	638	613	624	633
W. S. Central	1,570 864	1,585 869	1,595 874	1,611 883	1,615 884	1,628 890	1,641 894	1,650 898	1,660	1,670	1,680	1,694	1,590 873	1,633 891	1,676
Mountain			2,347	2,388	2,402				902	906	911	917 2,479			909
Pacific Industrial Output, Manuf	2,321	2,336	•		2,402	2,411	2,419	2, 4 25	2,436	2,452	2,465	2,479	2,348	2,414	2,458
	92.1		92.9	0) 93.7	95.5	95.1	95.7	96.2	96.4	96.7	97.2	97.8	92.6	95.6	07.0
New England	89.9	91.8		91.2	93.5	93.1	93.8				97.2 95.4	97.8 95.9			97.0 95.2
Middle Atlantic		89.8	90.4					94.2	94.4	94.9			90.3	93.7	
E. N. Central	89.4	89.9	91.2	92.6	95.6	96.4	97.1	97.8	98.2	99.0	99.9	100.7	90.8	96.7	99.5
W. N. Central	92.9	93.3	94.7	96.2	99.1	99.5	100.1	100.7	101.1	101.7	102.6	103.3	94.3	99.8	102.2
S. Atlantic	87.2	87.1	88.2	89.4	91.2	91.1	91.6	92.1	92.5	93.0	93.6	94.2	88.0	91.5	93.3
E. S. Central	86.1	86.0	87.0	88.6	90.5	91.4	92.1	93.0	93.7	94.5	95.4	96.2	86.9	91.7	94.9
W. S. Central	93.5	93.9	95.3	96.9	99.3	99.8	100.5	101.1	101.5	102.2	102.9	103.6	94.9	100.2	102.6
Mountain	90.1	90.2	91.6	92.9	95.4	96.0	96.7	97.3	97.7	98.3	99.1	99.9	91.2	96.4	98.8
Pacific	91.8	91.9	93.1	94.1	95.9	96.1	96.6	97.1	97.3	97.8	98.4	99.0	92.7	96.4	98.1
Real Personal Income (E		•	CAE	644	CE4	CEC	660	660	667	670	675	670	648	650	670
New England	650	652	645	644	651	656		663	667	672	675	679		658	673
Middle Atlantic	1,755	1,747	1,741	1,741	1,760	1,774	1,784	1,794	1,805	1,818	1,828	1,839	1,746	1,778	1,822
E. N. Central	1,607	1,599	1,596	1,599	1,615	1,624	1,631	1,636	1,645	1,658	1,667	1,675	1,600	1,627	1,661
W. N. Central	748	747	745	747	754	757	760	760	765	773	780	785	746	758	776
S. Atlantic	2,136	2,131	2,123	2,120	2,140	2,158	2,170	2,183	2,199	2,218	2,233	2,249	2,127	2,163	2,225
E. S. Central	565	564	562	563	568	572	574	577	581	585	589	592	564	573	587
W. S. Central	1,253	1,254	1,255	1,259	1,268	1,283	1,292	1,300	1,310	1,323	1,333	1,344	1,255	1,286	1,327
Mountain	741	741	739	742	748	754	759	764	770	777	783	789	741	756	779
Pacific	1,950	1,941	1,939	1,937	1,959	1,980	1,992	2,002	2,015	2,033	2,048	2,062	1,942	1,983	2,039
Households (Thousands	•	F 740	F 740	F 750	F 704	F 770	F 770	F 700	<i>5</i> 7 00	5.000	5.045	5 005	F 750	<i>5</i> 700	E 00.E
New England	5,742	5,746	5,749	5,753	5,761	5,770	5,778	5,786	5,796	5,806	5,815	5,825	5,753	5,786	5,825
Middle Atlantic	15,789	15,808	15,824	15,839	15,861	15,882	15,908	15,925	15,951	15,974	15,996	16,017	15,839	15,925	16,017
E. N. Central	18,296	18,302	18,304	18,312	18,335	18,361	18,388	18,415	18,447	18,479	18,506	18,534	18,312	18,415	18,534
W. N. Central	8,254	8,267	8,281	8,297	8,320	8,343	8,362	8,381	8,402	8,424	8,443	8,463	8,297	8,381	8,463
S. Atlantic	23,562 7,323	23,614	23,668	23,731	23,809	23,892	23,974	24,059	24,155	24,252	24,345	24,442 7,508	23,731	24,059	24,442
E. S. Central W. S. Central	13,537	7,334	7,346	7,358	7,374 13,727	7,392 13,787	7,410 13,844	7,426 13,903	7,447	7,468	7,488	,	7,358	7,426	7,508
	8,414	13,577 8,431	13,620 8,451	13,667 8,477	8,513	8,550	8,585	8,621	13,967 8,662	14,032 8,702	14,093 8,740	14,155 8,779	13,667 8,477	13,903 8,621	14,155
Mountain	17,764	17,801	17,839	-	-	18,004	18,063	18,119	18,186	6,702 18,254	18,313		-	6,02 i 18,119	8,779
Pacific Total Non-farm Employn	-	-	17,039	17,882	17,942	10,004	10,003	10,119	10,100	10,234	10,313	18,376	17,882	10,119	18,376
	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	7.0	6.8	6.9	6.9
New England Middle Atlantic	18.1	18.2	18.2	18.3	18.4	18.4	18.5	18.5	18.6	18.7	18.7	18.8	18.2	18.5	18.7
E. N. Central	20.2	20.2	20.2	20.3	20.4	20.4	20.5	20.6	20.6	20.7	20.7	20.8	20.2	20.5	20.7
	20.2 9.8	20.2 9.9	20.2 9.9	20.3 9.9	20.4 10.0	20.4 10.0	20.5 10.0	20.6 10.0	20.6 10.1	20.7 10.1		20.8 10.2	9.9		20.7 10.1
W. N. Central S. Atlantic	9.8 24.9	9.9 25.0	9.9 25.0	9.9 25.1	10.0 25.2	10.0 25.3	10.0 25.3	10.0 25.4	10.1 25.5	10.1 25.6	10.1 25.7	10.2 25.8	9.9 25.0	10.0 25.3	10.1 25.7
	7.4	25.0 7.4	25.0 7.4	25.1 7.4	25.2 7.5	25.3 7.5					25.7 7.6		25.0 7.4		25.7 7.6
E. S. Central					7.5 15.4		7.5	7.5	7.5	7.6		7.6		7.5	
W. S. Central	15.0	15.1	15.2	15.3		15.5	15.5	15.6	15.6	15.7	15.8	15.8	15.2	15.5	15.7
Mountain	9.0	9.1	9.1	9.2	9.2	9.2	9.3	9.3	9.3	9.4	9.4	9.5	9.1	9.3	9.4
Pacific	19.3	19.4	19.4	19.5	19.6	19.7	19.8	19.8	19.9	20.0	20.1	20.1	19.4	19.7	20.0

^{- =} 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.

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

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

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

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Informat	ion Admir			rt- I erm	Energy (Jutlook -		2012							
		201			_	201			_	201	-			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Heating Degree-days															
New England	3,315	846	106	1,871	2,659	779	148	2,209	3,190	918	172	2,214	6,138	5,796	6,493
Middle Atlantic	3,022	609	67	1,715	2,359	594	95	1,990	2,914	731	113	2,010	5,413	5,038	5,769
E. N. Central	3,306	754	183	1,944	2,467	629	132	2,234	3,134	766	155	2,282	6,187	5,462	6,337
W. N. Central	3,519	769	200	2,157	2,528	534	146	2,424	3,255	716	182	2,480	6,645	5,633	6,632
South Atlantic	1,477	175	18	885	1,100	183	21	1,033	1,501	230	22	1,033	2,555	2,337	2,786
E. S. Central	1,870	248	44	1,234	1,326	203	32	1,373	1,889	286	33	1,376	3,397	2,934	3,584
W. S. Central	1,263	98	9	833	883	53	8	886	1,278	107	9	887	2,204	1,829	2,281
Mountain	2,312	759	68	1,915	2,076	514	129	1,905	2,279	707	160	1,881	5,054	4,624	5,028
Pacific	1,486	676	65	1,183	1,431	485	95	1,158	1,422	557	112	1,154	3,411	3,169	3,245
U.S. Average	2,235	508	77	1,419	1,747	412	80	1,568	2,160	515	95	1,577	4,238	3,807	4,347
Heating Degree-days, 30-	-year Norma	al (a)													
New England	3,219	930	190	2,272	3,219	930	190	2,272	3,219	930	190	2,272	6,611	6,611	6,611
Middle Atlantic	2,968	752	127	2,064	2,968	752	127	2,064	2,968	752	127	2,064	5,911	5,911	5,911
E. N. Central	3,227	798	156	2,316	3,227	798	156	2,316	3,227	798	156	2,316	6,497	6,497	6,497
W. N. Central	3,326	729	183	2,512	3,326	729	183	2,512	3,326	729	183	2,512	6,750	6,750	6,750
South Atlantic	1,523	247	25	1,058	1,523	247	25	1,058	1,523	247	25	1,058	2,853	2,853	2,853
E. S. Central	1,895	299	33	1,377	1,895	299	33	1,377	1,895	299	33	1,377	3,604	3,604	3,604
W. S. Central	1,270	112	9	896	1,270	112	9	896	1,270	112	9	896	2,287	2,287	2,287
Mountain	2,321	741	183	1,964	2,321	741	183	1,964	2,321	741	183	1,964	5,209	5,209	5,209
Pacific	1,419	556	108	1,145	1,419	556	108	1,145	1,419	556	108	1,145	3,228	3,228	3,228
U.S. Average	2,242	543	101	1,638	2,242	543	101	1,638	2,242	543	101	1,638	4,524	4,524	4,524
Cooling Degree-days															
New England	0	111	495	1	0	119	483	2	0	82	381	1	607	604	465
Middle Atlantic	0	216	670	1	0	211	670	8	0	155	526	7	887	889	688
E. N. Central	0	227	669	2	17	294	689	11	1	218	518	10	898	1,011	746
W. N. Central	1	293	809	13	13	380	832	17	3	276	663	15	1,116	1,241	957
South Atlantic	101	797	1,272	186	157	685	1,183	215	110	599	1,116	219	2,357	2,240	2,043
E. S. Central	10	650	1,131	20	52	610	1,088	66	28	484	1,020	67	1,811	1,817	1,599
W. S. Central	114	1,098	1,777	205	146	1,019	1,528	188	77	807	1,443	189	3,194	2,881	2,515
Mountain	11	323	990	72	9	482	959	72	18	414	905	83	1,396	1,522	1,420
Pacific	25	97	616	71	22	144	647	76	31	195	545	77	809	890	849
U.S. Average	39	450	961	80	59	451	919	90	39	379	813	91	1,529	1,519	1,322
Cooling Degree-days, 30	-year Norma	al (a)													
New England	0	81	361	1	0	81	361	1	0	81	361	1	443	443	443
Middle Atlantic	0	151	508	7	0	151	508	7	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

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

Regions refer to U.S. Census divisions.

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

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

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

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

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