Independent Statistics & Analysis
U.S. Energy Information Administration

October 2015

Short-Term Energy and Winter Fuels Outlook (STEO)

Highlights

- EIA projects average U.S. household expenditures for natural gas, heating oil, and propane during the upcoming winter heating season (October 1 through March 31) will be 10%, 25%, and 18% lower, respectively, than last winter, because of lower fuel prices and lower heating demand. Forecast lower heating demand and relatively unchanged prices contribute to electricity expenditures that are 3% lower than last winter (Winter Fuels Outlook slideshow).

- North Sea Brent crude oil prices averaged $48/barrel (b) in September, a $1/b increase from August. However, volatility remained high during September. EIA forecasts that Brent crude oil prices will average $54/b in 2015 and $59/b in 2016, unchanged from last month's STEO. Forecast West Texas Intermediate (WTI) crude oil prices average $4/b lower than the Brent price in 2015 and $5/b lower in 2016. The current values of futures and options contracts for January 2016 delivery (*Market Prices and Uncertainty Report*) suggest the market expects WTI prices to range from $32/b to $67/b (at the 95% confidence interval) in January 2016.

- U.S. regular gasoline monthly retail prices averaged $2.37/gallon (gal) in September, a decrease of 27 cents/gal from August and $1.04/gal lower than in September 2014. EIA expects monthly gasoline prices to decline to an average of $2.03/gal in December 2015. EIA forecasts U.S. regular gasoline retail prices to average $2.38/gal in 2016.

- EIA estimates that total U.S. crude oil production declined by 120,000 barrels per day (b/d) in September compared with August. Crude oil production is forecast to decrease through mid-2016 before growth resumes late in 2016. Projected U.S. crude oil production averages 9.2 million b/d in 2015 and 8.9 million b/d in 2016.

- Natural gas working inventories were 3,538 billion cubic feet (Bcf) on September 25. This level was 15% higher than a year ago and 4% higher than the previous five-year average (2010-14) for this week. EIA projects inventories will close the injection season at the end of October at 3,956 Bcf, which would be the highest end-of-October level on record.

Projected Winter Fuel Expenditures by Fuel and Region

The average household winter heating fuel expenditures discussed in this STEO provide a broad guide to changes compared with last winter. However, fuel expenditures for individual households are highly dependent on the size and energy efficiency of individual homes and their heating equipment, thermostat settings, local weather conditions, and market size (see Winter Fuels Outlook table). Expected temperatures based on the latest forecasts from the National Oceanic and Atmospheric Administration (NOAA) are much warmer than last winter east of the Rocky Mountains, with the Northeast 13% warmer, the Midwest 11% warmer, and the South 8% warmer. Given the current indicators signaling a strong El Nino/Southern Oscillation, forecast temperatures across much of the United States are projected to be warmer than the 10-year average. However, the past two winters provide a reminder that weather can be unpredictable, and the Winter Fuels Outlook includes forecasts for scenarios where heating degree days (HDD) in all regions may be 10% higher (colder) or 10% lower (warmer) than forecast.

Natural Gas. Nearly half of all U.S. households heat with natural gas, and the average household could expect a 10% decrease in natural gas expenditures this winter compared with last winter given EIA's base case for temperatures. EIA forecasts a 6% decline in residential natural gas consumption this winter as temperatures are expected to be warmer than last winter. Additionally, residential prices for natural gas this winter are forecast to be 4% lower than last winter.

Although EIA forecasts Henry Hub spot prices this winter will average 13% less than last winter, changes in spot prices do not quickly translate into lower delivered residential prices. The rates utilities charge for delivered natural gas can be set by state utility commissions a year or more in advance and reflect the cost of gas purchased over many months. Also, residential prices include a fixed component to cover utility operating costs and the cost to transport the natural gas.

Under a 10% colder scenario, EIA projects natural gas consumption to be 1% higher than last year, but expenditures would still be 4% lower than last year. Under a 10% warmer scenario, EIA expects declines of 14% in consumption and 17% in expenditures compared with last year.

Natural gas inventories have risen consistently during the storage injection season that typically runs from April through the end of October. EIA projects inventories will total 3,956 Bcf at the end of October, which would be a record high going into the heating season. Strong storage injections this summer reflect high summer production and expanded storage capacity. If early fall heating demand is low, it is possible that inventories could top 4,000 Bcf during November. Under the base case winter forecast, EIA expects inventories to end the winter at 1,892 Bcf. Even in the event of another cold winter, EIA does not expect stocks to fall below 1,000 Bcf by the end of this heating season.

Transportation constraints continue to pose a challenge to markets in the Northeast. Over the past two winters, natural gas-fired power plants in the Northeast had to compete for an increasingly limited amount of available natural gas pipeline capacity from a system that was already constrained, particularly in New England and New York. These constraints contributed to

spikes in natural gas spot prices at regional hubs and, consequently, day-ahead power prices during periods when temperatures were extremely cold. Some pipeline capacity has been added to deliver natural gas from the Marcellus region in Pennsylvania to the New York market. However, pipeline constraints still exist in the Northeast, particularly into the New England market, and day-to-day price volatility is likely.

New England has two important marginal sources of natural gas supply for times of very high demand: liquefied natural gas (LNG) imports and pipeline imports from Canada. Although LNG imports have declined dramatically in the past several years, an LNG terminal near Boston still receives cargoes from Trinidad under long-term contracts. One of the terminal's customers is the adjacent Mystic Power Plant. LNG received at the Canaport LNG terminal in New Brunswick, Nova Scotia, also comes to New England via the Brunswick Pipeline.

Heating Oil. EIA expects households heating primarily with heating oil to spend an average of $459 (25%) less this winter than last winter, reflecting retail prices that are 47 cents/gal (15%) lower and consumption that is 11% lower. In the 10%-colder-weather scenario, projected expenditures are $288 lower than last winter, with prices that are 39 cents/gal lower than last winter.

Heating oil prices are expected to be lower than last winter because of lower forecast crude oil prices and a relatively soft global distillate market compared with recent years. The Brent crude oil price is forecast to average $52/b this winter, which would be $13/b (32 cents per gallon) lower than last winter. Brent crude oil prices are forecast to remain below levels in recent years as the global oil market continues to experience an excess of supply to consumption. However, crude oil prices are highly uncertain, and any deviation in crude oil prices from forecast levels would cause a similar deviation in retail heating oil prices and consumer expenditures.

Distillate fuel supplies are also ample heading into the winter. Slowing economic growth in emerging economies, which have been major drivers of distillate consumption in recent years, has reduced growth in global demand for distillate fuel. Additionally, relatively strong gasoline refining margins during the past summer encouraged record-high global refinery runs. This combination of high refinery runs and slowing demand growth has resulted in high inventory levels in major distillate markets including Asia, northwest Europe, and the northeast United States.

Distillate stocks in the Northeast totaled 45.1 million barrels on September 25, the highest for any week since late 2011. Reliance on heating oil is highest in the Northeast, where 23% of households use oil for space heating. Nationwide, only 5% of households use heating oil.

Propane. About 4% of all U.S. households heat primarily with propane. EIA expects these households to spend less this winter, but the projected decrease varies across regions. EIA expects that households heating with propane in the Midwest will spend an average of $320 (21%) less this winter than last winter, reflecting prices that are about 13% lower and consumption that is 9% lower than last winter. Households in the Northeast are expected to

spend an average of $342 (15%) less this winter, with average prices that are about 5% lower and consumption that is 11% lower than last winter.

Heading into the winter months, U.S. inventories of propane and propylene reached 98.7 million barrels as of September 25, the highest level since EIA began collecting weekly propane inventory statistics in 1993 and 19 million barrels higher than at the same time last year. Primary propane stocks at the end of September in the Gulf Coast (PADD 3) were 18.9 million barrels (45%) higher than at the same time last year, and Midwest (PADD 2) stocks were almost 1.0 million barrels (3%) lower.

Inventories on the Gulf Coast have been the main contributor to the record high storage levels, with propane inventories in that region 84% above the five-year average for the week ending September 25. Much of this storage is at facilities connected to industrial users and export terminals, and transport of the propane to the Midwest and Northeast is often costly. Outside of the Gulf Coast, propane inventories in the rest of United States were 8% above the five-year average on September 25. Higher inventory levels and improved rail delivery networks for propane should contribute to more robust propane supply chains than two years ago, when the Midwest saw prices spike during extremely cold weather. However, local markets could still see tight supply conditions, particularly in cases of severely cold temperatures.

Electricity. Households heating primarily with electricity are forecast to spend an average of $30 (3%) less this winter, as a result of 1% lower residential electricity prices and 2% lower consumption than last winter. About 39% of all U.S. households rely on electricity as their primary heating source, ranging regionally from 15% in the Northeast to 63% in the South.

Under a 10% colder scenario, EIA estimates that U.S. residential electricity consumption this winter would be 1% higher than during the winter of 2014-15. Residential electricity prices would not rise immediately, but the effect of colder temperatures would pass through to retail electricity rates over the succeeding months of 2016. Expenditures in the 10% colder scenario are forecast to be flat compared with last winter. The effect of colder temperatures on electricity prices would be greatest in New England, where residential prices would be relatively flat next year if there is a cold winter, in contrast to the baseline forecast of a 0.9% decline.

Two winters ago (2013-14), a winter freeze in the Northeast and constraints on supplying natural gas to power generators led to price spikes on regional wholesale electricity markets. The power industry in New England has recently become more reliant on natural gas for electricity generation, which could put generation fuel supplies in competition with natural gas used for space heating during cold spells. Power generators have been working to secure more fuel supplies through contracts before the winter months begin, in contrast to previous years. However, New England's natural gas pipeline capacity continues to be constrained, and any significant disruption to natural gas supply during a cold period could again lead to temporary spikes in wholesale electricity prices.

Wood. The use of cord wood and wood pellets as the primary residential space heating fuel has increased by 33% since 2005, to about 2.6 million households in 2014. About 8% of households

use wood as a secondary source of heat, making wood second only to electricity as a supplemental heating fuel.

About 20% of homes in New England (1.1 million) used wood for space heating, water heating, or cooking in 2009 (EIA, Residential Energy Consumption Survey 2009), which is nearly twice the national rate. Almost half of all rural households in New England used wood, compared with only 12% of the region's urban households.

Global Petroleum and Other Liquids

Global liquids production continues to outpace consumption, leading to strong inventory builds throughout the forecast period. Global oil inventory builds in the second quarter of 2015 averaged 2.3 million b/d, compared with 1.8 million b/d in the first quarter of the year. The pace of inventory builds is expected to slow in the second half of the year, to roughly 1.5 million b/d. In 2016, inventory builds are expected to slow to an average of 0.8 million b/d.

Global Petroleum and Other Liquids Consumption. EIA estimates global consumption of petroleum and other liquids grew by 1.2 million b/d in 2014, averaging 92.4 million b/d for the year. EIA expects global consumption of petroleum and other liquids to grow by 1.3 million b/d in 2015 and by 1.4 million b/d in 2016. Projected real gross domestic product (GDP) weighted for oil consumption, which increased by 2.8% in 2014, is projected to grow by 2.4% in 2015 and by 2.8% in 2016.

Consumption of petroleum and other liquids in countries outside of the Organization for Economic Cooperation and Development (OECD) grew by 1.4 million b/d in 2014 and is projected to grow by 0.9 million b/d in 2015 and by 1.2 million b/d in 2016. China continues to be the main driver of non-OECD oil consumption growth, despite the slowdown in the country's economic growth beginning in the second half of 2014 and with continuing signs of weakening in its economy. China's consumption growth is expected to average 0.3 million b/d in 2015 and in 2016, below the 0.4 million b/d growth in 2014. Iran is expected to experience an uptick in economic activity and petroleum consumption in 2016, assuming implementation of the Joint Comprehensive Plan of Action (JCPOA) between Iran and the five permanent members of the United Nations Security Council plus Germany (P5+1) announced on July 14.

After falling by 0.3 million b/d in 2014, OECD petroleum and other liquids consumption is expected to rise by 0.5 million b/d in 2015 and by 0.2 million b/d in 2016, reaching an average of 46.4 million b/d, the highest annual average level of OECD consumption since 2010. The increase in 2015 stems from both economic and weather factors, with the United States contributing most of the annual consumption growth. U.S. consumption is expected to grow by an average of 0.3 million b/d in 2015 and by 0.1 million b/d in 2016. Several other OECD countries saw economic conditions improve as they emerged from recessions, particularly countries in Asia and, to a lesser extent, in Europe. In addition, colder-than-normal weather early in 2015 across OECD Europe contributed to a projected 0.1 million b/d increase in consumption in 2015.

Non-OPEC Petroleum and Other Liquids Supply. EIA estimates that petroleum and other liquids production in countries outside of the Organization of the Petroleum Exporting Countries (OPEC) grew by 2.3 million b/d in 2014, which mainly reflects production growth in the United States. EIA expects non-OPEC production to grow by 1.3 million b/d in 2015, but to remain roughly flat in 2016. Non-OPEC production growth in 2015 is largely attributable to investments made when oil prices were higher. For example, the decisions to invest in the Golden Eagle, Peregrine, and Kinnoull fields in the United Kingdom's (U.K.) sector of the North Sea were made in the second half of 2011 when Brent crude prices were more than $100/b. The three fields started producing at the end of 2014 and the beginning of 2015, contributing about 90,000 b/d to U.K. production in May 2015. Redirection of investment is also helping to maintain or grow production levels in non-OPEC producing countries. Companies have reduced exploration investment, and are directing a greater share of investment toward currently producing fields. This redirection of investment helps maintain production levels in the short term, but could result in lower future production.

Production growth in Canada is expected to average 0.1 million b/d in 2015 and 0.3 million in 2016. Canadian production growth in 2015 is about 0.2 million b/d lower than forecast last month, which reflects significant revisions to historical data from the second quarter of 2015, along with delays in some previously announced oil sands projects. Although some oil sands projects have been put on hold, most continue as planned, including Imperial Oil and Cenovus oil sands projects scheduled to come online by the end of 2016.

Unplanned supply disruptions among non-OPEC producers averaged 0.9 million b/d in September, an increase of almost 0.2 million b/d from the previous month.

OPEC Petroleum and Other Liquids Supply. EIA estimates that OPEC crude oil production averaged 30.1 million b/d in 2014, relatively unchanged from the previous year. Crude oil production declines in Libya, Angola, Algeria, and Kuwait offset production growth in Iraq and Iran. EIA forecasts OPEC crude oil production to increase by 0.8 million b/d in 2015 and to remain relatively flat in 2016. Iraq is expected to be the largest contributor to OPEC production growth in 2015. In 2016, additional OPEC crude oil supply is expected to come from Iran, which is forecast to increase production if international sanctions targeting its oil sector are suspended.

Under the JCPOA between the P5+1 and Iran that was announced on July 14, sanctions relief is contingent on verification by the International Atomic Energy Agency (IAEA) that Iran has complied with key nuclear-related steps.

While much uncertainty remains as to the timing of sanctions relief, EIA assumes implementation occurs in the second quarter of 2016, clearing the way to easing the sanctions at that time. As a result, EIA forecasts Iranian crude oil supplies will increase by more than 0.2 million b/d on average in 2016, reaching roughly 0.5 million b/d by the end of the year.

Saudi Arabia and other OPEC member countries are not expected to reduce production to accommodate additional Iranian volumes, although some producers will see production declines

in the near term. For example, Saudi Arabia's production is expected to respond to lower direct crude burn for electric power generation as seasonal power demand abates. However, there is considerable uncertainty regarding Iraq's ability to sustain its higher production and export levels, particularly in light of budgetary constraints that has prompted the Iraqi government to request international oil companies operating in the south to reduce spending plans next year.

OPEC noncrude liquids production, which averaged 6.3 million b/d in 2014, is expected to increase by 0.2 million b/d in 2015 and by 0.3 million b/d in 2016, led by production increases in Iran, Qatar, and Kuwait.

In September, unplanned crude oil supply disruptions among OPEC producers averaged 2.9 million b/d, 0.1 million b/d less than the previous month because of fewer outages in Iraq and Nigeria. Kuwait and Saudi Arabia continue to have a total of 0.5 million b/d disrupted at the Wafra and Khafji fields in the Neutral Zone that straddles the two countries.

EIA revised higher its historical estimates of unplanned OPEC crude oil supply disruptions in 2015. Iran's crude oil supply disruption increased from 0.6 million b/d to 0.8 million b/d. The revision to Iran's disruption reflects an increase to Iran's crude oil production capacity (the level of supply that could be available within one year under a normal operating environment) based on information that Iran's oil fields have gone through workovers in anticipation of a deal with the P5+1 on oil sanctions relief.

EIA expects OPEC surplus crude oil production capacity to average 1.5 million b/d in 2015 and 2.2 million b/d in 2016, after averaging 2.0 million b/d in 2014. Forecast surplus capacity in 2016 was revised upward by 0.2 million b/d from last month's STEO. EIA estimates that Iran's crude oil production capacity is 3.6 million b/d, which is 0.8 million b/d higher than its current estimated production level. EIA currently categorizes that 0.8 million b/d as a disruption because Iran's production is restricted by sanctions that affect the country's ability to sell its oil. However, if sanctions are lifted next year, any difference between its crude oil production capacity and its crude oil production level would henceforth be considered surplus capacity.

Surplus capacity is typically an indicator of market conditions, and surplus capacity below 2.5 million b/d indicates a relatively tight oil market, but the current and forecast levels of global inventory builds make the projected low surplus capacity level in 2015 less significant.

OECD Petroleum Inventories. EIA estimates that OECD commercial crude oil and other liquids inventories totaled 2.70 billion barrels at the end of 2014, equivalent to roughly 59 days of consumption. Forecast OECD inventories rise to 2.95 billion barrels at the end of 2015 and then to 3.04 billion barrels at the end of 2016.

Crude Oil Prices. Brent crude oil spot prices increased by $1/b in September to a monthly average of $48/b. Along with increasing volatility in global equity prices and exchange rates, crude oil price volatility increased significantly in August, reflecting uncertainty about potential lower economic and oil demand growth in emerging market countries. Volatility remained high

in September, with Brent spot prices increasing from $42/b on August 24 to $50/b on September 3, before falling back into the range of $45/b to $50/b for the rest of the month.

Continuing increases in global liquids inventories have put significant downward pressure on prices. Inventories rose by an estimated 2.0 million b/d through the first three quarters of 2015, compared with an average build of 0.5 million b/d over the same period in 2014. However, global liquid fuels inventory builds fell to an estimated 1.2 million b/d in September. Inventory builds are projected to slow in the coming months, but they are expected to remain high compared with previous years.

The monthly average WTI crude oil spot price increased to an average of $46/b in September, up $3/b from August, driven by falling U.S. crude oil output and five consecutive weeks of oil inventory draws at the Cushing, Oklahoma, storage hub. Crude oil inventories at Cushing fell to 53 million barrels on September 25, the lowest level since March 6 of this year, but they remain 32 million barrels higher than at the same time last year. Total U.S. crude oil inventories were relatively flat in September, despite a decrease in U.S. refinery runs, as refinery maintenance season began.

EIA projects the Brent crude oil price will average $54/b in 2015 and $59/b in 2016, unchanged from September's STEO. WTI crude oil prices average $4/b lower than the Brent price in 2015 and $5/b lower in 2016. EIA's crude oil price forecast remains subject to significant uncertainties as the oil market moves toward balance. During this period of price discovery, oil prices could continue to experience periods of heightened volatility. The oil market faces many uncertainties heading into 2016, including the pace and volume at which Iranian oil reenters the market, the strength of oil consumption growth, and the responsiveness of non-OPEC production to low oil prices. In the more immediate future, there is potential downward price pressure heading into the fourth quarter of 2015 if refinery runs drop by more than expected during the fall maintenance season.

The current values of futures and options contracts continue to suggest high uncertainty in the price outlook (*Market Prices and Uncertainty Report*). WTI futures contracts for January 2016 delivery, traded during the five-day period ending October 1, averaged $46/b, while implied volatility averaged 43%. These levels established the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in January 2016 at $32/b and $67/b, respectively. The 95% confidence interval for market expectations widens over time, with lower and upper limits of $26/b and $98/b for prices in December 2016. Last year at this time, WTI for January 2015 delivery averaged $91/b, and implied volatility averaged 19%. The corresponding lower and upper limits of the 95% confidence interval were $76/b and $107/b.

U.S. Petroleum and Other Liquids

The most recent data from the U.S. Federal Highway Administration show Americans drove a record 1.82 trillion miles during the first seven months of 2015, compared with the previous

high of 1.77 trillion miles driven in the first seven months of 2007, contributing to higher gasoline consumption in the United States.

Monthly data show gasoline consumption in the United States increased by 3% during the first seven months of 2015 compared with same period during 2014. U.S. gasoline consumption growth reflects strong growth in employment and lower gasoline prices. Growing domestic consumption and strong gasoline consumption growth globally contributed to high refinery wholesale gasoline margins (the difference between the wholesale price of gasoline and the price of Brent crude oil) for most of 2015. Margins returned to more typical seasonal levels in September. U.S. average wholesale gasoline margins averaged 40 cents/gal in September, down 24 cents/gal from the level in August and close to the September 2014 level.

Regular gasoline retail prices fell across all regions in September, after refinery outages in the Midwest eased and imports of gasoline into the West Coast increased supplies in that region. U.S. average regular gasoline retail prices fell from $2.64/gal in August to $2.37/gal in September. Monthly average regional gasoline retail prices ranged from a low of $2.07/gal in PADD 3 (Gulf Coast) to a high of $2.96/gal in PADD 5 (West Coast). EIA expects gasoline prices to fall from current levels, with the U.S. regular gasoline price averaging $2.03/gal in December 2015.

Liquid Fuels Consumption. Total U.S. liquid fuels consumption is projected to increase by 340,000 b/d (1.8%) in 2015, up from an increase of 140,000 b/d (0.8%) last year. U.S. consumption has been stimulated by continuing employment and economic growth and lower petroleum product prices.

Consumption growth in 2015 is led by motor gasoline, which increases by 190,000 b/d (2.1%) following growth of 80,000 b/d (0.9%) in 2014. Forecast gasoline consumption averages 9.1 million b/d in 2015, the highest level since the peak of 9.3 million b/d in 2007. Although total nonfarm employment and total highway travel have increased by 2.9% and 3.4%, respectively, over the past eight years, improving vehicle fuel economy has steadily contributed to lower gasoline consumption. Gasoline consumption is forecast to remain flat in 2016, as a long-term trend toward vehicles that are more fuel efficient offsets the effect of continued economic growth on highway travel.

Jet fuel consumption, which grew by 40,000 b/d in 2014, is forecast to rise by 60,000 b/d (3.8%) in 2015. Forecast jet fuel consumption is roughly flat in 2016, with improvement in average airline fleet fuel economy offsetting continuing growth in freight and passenger travel.

Consumption of distillate fuel, which includes diesel fuel and heating oil, is forecast to fall by 30,000 b/d (0.7%) in 2015 and then increase by 50,000 b/d (1.3%) in 2016. The 2016 growth is driven by increasing manufacturing output, foreign trade, and marine fuel use.

Hydrocarbon gas liquids (HGL) consumption, which fell by 50,000 b/d (1.9%) in 2014, is projected to increase by 70,000 b/d in 2015 and by 80,000 b/d in 2016, as new petrochemical plant capacity increases the use of HGL as a feedstock. New HGL export terminal capacity

contributes to an increase in HGL net exports from an average of 560,000 b/d in 2014 to 1.2 million b/d in 2016.

Liquid Fuels Supply. U.S. crude oil production is projected to increase from an average of 8.7 million b/d in 2014 to 9.2 million b/d in 2015 and then decrease to 8.9 million b/d in 2016. The crude oil production forecast continues to reflect an oil price outlook that will weigh on oil-directed rig counts and drilling and well completion activities throughout the forecast period.

Based on the latest survey-based reporting of monthly crude oil production estimates, U.S. production averaged 9.4 million b/d in the first half of 2015. This level is 0.2 million b/d higher than the average production during the fourth quarter of 2014, despite a more than 60% decline in the total U.S. oil-directed rig count since October 2014. However, crude oil production started to decrease in the second quarter of 2015, beginning with Lower 48 onshore production in April. Although the Lower 48 onshore decline was offset by production gains in the Gulf of Mexico that kept total production growth positive in April, total U.S. production began declining in May.

EIA expects U.S. crude oil production declines generally to continue through August 2016, when total production is forecast to average 8.7 million b/d. Forecast production begins rising in late 2016, returning to an average of 9.0 million b/d in the fourth quarter. A total of 12 projects are scheduled to come online in the Gulf of Mexico in 2015 and 2016, pushing up production from an average of 1.4 million b/d in the fourth quarter of 2014 to more than 1.6 million b/d in the fourth quarter of 2016.

Expected crude oil production declines from May 2015 through mid-2016 are largely attributable to unattractive economic returns in some areas of both emerging and mature onshore oil production regions, as well as seasonal factors such as anticipated hurricane-related production disruptions in the Gulf of Mexico. Reductions in 2015 cash flows and capital expenditures have prompted companies to defer or redirect investment away from marginal exploration and research drilling to focus on core areas of major tight oil plays. Reduced investment has resulted in the lowest count of oil-directed rigs in about five years and in well completions that are significantly behind 2014 levels.

Oil prices, particularly in the second quarter of 2015, remained high enough to support continued development drilling in the core areas within the Bakken, Eagle Ford, Niobrara, and Permian formations, with July and August showing the first consecutive month-to-month increases in the oil-directed rig count since September and October 2014. However, WTI prices below $60/b through the forecast period are anticipated to limit onshore drilling activity and well completion totals, despite continued increases in rig and well productivity and falling drilling and completion costs. The forecast remains sensitive to actual wellhead prices and rapidly changing drilling economics that vary across regions and operators.

While projected oil production in the Gulf of Mexico rises during the forecast period, oil production in Alaska falls. Production in these areas is less sensitive to short-term price

movements than onshore production in the Lower 48 states and reflects anticipated growth from new projects in the Gulf of Mexico and declines from legacy fields in Alaska.

HGL production at natural gas processing plants reached a record high of 3.31 million b/d in April 2015, and it is projected to average 3.27 million b/d in 2015 and 3.61 million b/d in 2016. EIA expects higher ethane recovery rates in 2016 following planned increases in petrochemical plant feedstock demand in the United States and abroad. Waterborne ethane exports are expected to begin by the end of 2015 as new terminals and expansions allow for higher quantities of domestically produced ethane, propane, and butanes to reach the international market.

U.S. petroleum product gross exports continue to grow, up almost 0.5 million b/d (12%) through July 2015 compared with the same period in 2014. More than half of the growth in liquid fuel exports came from HGL. The increase in refined product exports, combined with the growth in domestic liquid fuels consumption, contributed to U.S. refinery utilization averaging 91.2% during the first seven months of the year, up from 89.4% last year, and the highest rate for this period since 2005. Gross inputs to U.S. refineries exceeded 17 million b/d for six consecutive weeks in July and August, a level not previously reached or exceeded in any week since EIA began publishing the data in 1990.

Petroleum Product Prices. Rising crude oil prices, strong gasoline demand, and ongoing refinery outages on the West Coast contributed to an increase in U.S. regular gasoline retail prices from a monthly average of $2.47/gal in April to $2.80/gal in June. Falling crude oil prices and narrowing wholesale gasoline margins have since contributed to prices declining to an average of $2.37/gal in September. EIA expects monthly average gasoline prices to decline in the coming months as refineries continue to produce high levels of gasoline, as demand begins to decrease following the summer driving season, and as the market transitions to lower-cost, winter-grade gasoline. EIA projects regular gasoline retail prices to average $2.12/gal in the fourth quarter of 2015.

The U.S. regular gasoline retail price, which averaged $3.36/gal in 2014, is projected to average $2.42/gal in 2015 and $2.38/gal in 2016. The 2015 average price is 1 cent/gal higher than in the September STEO, and the 2016 average price is unchanged.

The diesel fuel retail price, which averaged $3.83/gal in 2014, is projected to fall to an average of $2.72/gal in 2015 and then rise to $2.77/gal in 2016.

Natural Gas

Natural Gas Consumption. EIA's forecast of U.S. total natural gas consumption averages 76.2 billion cubic feet per day (Bcf/d) in 2015 and 76.4 Bcf/d in 2016, compared with 73.1 Bcf/d in 2014. EIA projects natural gas consumption in the power sector to increase by 15.6% in 2015 and then decrease by 2.1% in 2016. Natural gas prices, which are expected to remain below $3 per million British thermal units (MMBtu) through January 2016, support increased use of natural gas for electricity generation in 2015. Industrial sector consumption remains flat in 2015

and increases by 4.2% in 2016, as new industrial projects, particularly in the fertilizer and chemicals sectors, come online late this year and next year, and as industrial consumers continue to experience low natural gas prices. Natural gas consumption in the residential and commercial sectors is projected to decline in both 2015 and 2016.

Natural Gas Production and Trade. EIA expects that marketed natural gas production will increase by 4.2 Bcf/d (5.6%) and by 1.5 Bcf/d (1.9%) in 2015 and 2016, respectively, with increases in the Lower 48 states expected to more than offset continuing production declines in the Gulf of Mexico. Increases in drilling efficiency will continue to support growing natural gas production in the forecast despite relatively low natural gas prices. Most of the growth is expected to come from the Marcellus Shale, as the backlog of uncompleted wells is reduced and as new pipelines come online to deliver Marcellus natural gas to markets in the Northeast.

Increases in domestic natural gas production are expected to reduce demand for natural gas imports from Canada and to support growth in exports to Mexico. Earlier this year, natural gas net imports fell to the lowest monthly level since 1987, averaging 2.3 Bcf/d in both May and June. EIA expects natural gas exports to Mexico, particularly from the Eagle Ford Shale in South Texas, to increase because of growing demand from Mexico's electric power sector coupled with flat natural gas production in Mexico. EIA projects LNG gross exports will increase to an average of 0.79 Bcf/d in 2016, with the startup of a major LNG liquefaction plant in the Lower 48 states at the end of this year.

Natural Gas Inventories. On September 25, natural gas working inventories totaled 3,538 Bcf, 454 Bcf (15%) above the level at the same time in 2014 and 152 Bcf (4%) above the five-year average for that week. EIA projects end-of-October 2015 inventories will total 3,956 Bcf, which would be 158 Bcf above the five-year average, and the highest end-of-October level on record.

Natural Gas Prices. The Henry Hub natural gas spot price averaged $2.66/MMBtu in September, a decrease of 11 cents/MMBtu from the August price. Monthly average Henry Hub spot prices are forecast to remain lower than $3/MMBtu through January, and lower than $3.50/MMBtu through the rest of the forecast. The projected Henry Hub natural gas price averages $2.81/MMBtu in 2015 and $3.05/MMBtu in 2016.

Natural gas futures contracts for January 2016 delivery traded during the five-day period ending October 1 averaged $2.87/MMBtu. Current options and futures prices imply that market participants place the lower and upper bounds for the 95% confidence interval for January 2016 contracts at $1.93/MMBtu and $4.27/MMBtu, respectively. At this time in 2014, the natural gas futures contract for January 2015 delivery averaged $4.19/MMBtu, and the corresponding lower and upper limits of the 95% confidence interval were $2.96/MMBtu and $5.94/MMBtu, respectively.

Coal

Coal Supply. Lower domestic coal consumption and reduced exports contribute to a forecast decline of 89 million short tons (MMst) in U.S. coal production in 2015. Production is expected

to decrease in all coal-producing regions in 2015, with the largest decline on a percentage basis occurring in the Appalachian region. Interior region production, which includes the Illinois Basin (ILB), is expected to decline for the first time since 2009, while Western region production is projected to fall below 500 MMst for the first time since 1998. U.S. coal production is expected to decrease by an additional 28 MMst (3.0%) in 2016, but Interior region production is projected to grow by 1.5%. The forecast 2016 increase in ILB coal production reflects advantages compared with other coal-producing regions, high heat content, closer proximity to major markets than coal produced in the Western region, and lower mining costs than Appalachian-produced coal.

Electric power sector stockpiles were 160 MMst in July, a 5% decrease from the June level. This decrease in June-to-July coal stockpiles follows the normal seasonal pattern whereby coal stockpiles decrease during the summer months. Despite this decrease, coal stockpiles are still relatively high because of the loss in market share to natural gas for power generation. Coal inventories in July 2015 were 35 MMst higher than in July 2014, when inventories were still recovering from the effects of colder-than-normal temperatures during the 2013-14 winter.

Coal Consumption. EIA expects an 8% decrease in total coal consumption in 2015, mainly driven by an 8% drop in electric power sector consumption. Lower natural gas prices are the key factor driving the decrease in coal consumption. Projected low natural gas prices (power sector natural gas prices are 28% lower in 2015 compared with 2014) make it more economical to run natural gas-fired generating units at higher utilization rates. The retirements of coal-fired power plants, in response to the implementation of the Mercury and Air Toxics Standards (MATS), also reduce coal-fired capacity in the power sector in 2015, but because the retirements are occurring throughout 2015, the full effect will not be evident until 2016.

Projected rising electricity demand and higher natural gas prices next year are expected to contribute to higher utilization rates among the remaining coal-fired power plants. Coal consumption in the electric power sector is forecast to remain relatively unchanged in 2016.

Coal Trade. Slower growth in world coal demand, lower international coal prices, and higher coal output in other coal-exporting countries have all contributed to a decline in U.S. coal exports. Lower mining costs, cheaper transportation costs, and favorable exchange rates will continue to provide an advantage to mines in other major coal-exporting countries compared with U.S. producers. Coal exports for the first seven months of 2015 are down 21% compared with the same period in 2014. Forecast coal exports fall by 20 MMst, to 77 MMst, in 2015, and then decrease by another 9 MMst (12%) in 2016 as the current global coal market trends are expected to continue. U.S. coal imports, which increased by more than 2 MMst in 2014 to 11 MMst, are expected to stay near that level in 2015 and 2016.

Coal Prices. The annual average coal price to the electric power sector averaged $2.36/MMBtu in 2014. EIA expects the delivered coal price to average $2.25/MMBtu in 2015 and to increase by one cent to average $2.26/MMBtu in 2016.

Electricity

The monthly natural gas share of total U.S. electricity generation surpassed the coal share in July for the second time ever in July, with natural gas fueling 35.0% of total generation to coal's 34.9% share. The first time this happened was April 2015.

Electricity Consumption. Forecast U.S. sales of electricity to the residential sector are 0.7% higher in 2015 compared with last year, as higher electricity use in the summer months more than offsets lower winter use during the first quarter. Projected residential electricity sales fall by 1.4% in 2016. U.S. commercial sector electricity sales are expected to be 0.7% higher in 2015 than sales last year and then grow by 0.9% in 2016. EIA expects U.S. industrial sector electricity sales to fall by 0.3% during 2015 and grow by 0.9% in 2016.

Electricity Generation. Sustained low natural gas prices have favored natural gas generation this year, at the expense of coal-fired generation, leading to a significant expected increase in the natural gas share of total generation from 27.4% in 2014 to 31.6% this year, while the share supplied by coal falls from 38.7% to 35.0%. In 2016, EIA forecasts that the natural gas generation share will fall slightly to 31.0% and coal's fuel share will average 34.8%. Generation from nuclear power is projected to remain relatively flat in 2015 and decline by 2.0% in 2016.

Electricity Retail Prices. The U.S. retail price of electricity to the residential sector is projected to average 12.6 cents per kilowatthour in 2015, 0.4% higher than the average price last year. The largest price increases are projected to be in New England, where residential electricity prices are forecast to increase by 8.2% in 2015, as electricity distribution companies recover higher generation and power purchase costs incurred during 2014. However, wholesale power prices in New England have been relatively low this year, and utilities in New England have been lowering retail prices in the past few months from their peak in March and April.

Renewables and Carbon Dioxide Emissions

Electricity and Heat Generation from Renewables. EIA expects total renewables used in the electric power sector to decrease by 2.7% in 2015. Conventional hydropower generation is forecast to decrease by 9.7%, and nonhydropower renewable power generation is forecast to increase by 4.0%. The 2015 decrease in hydropower generation reflects the effects of the California drought. Forecast generation from hydropower in the electric power sector increases by 7.3% in 2016.

EIA expects continued growth in utility-scale solar power generation, which is projected to average 89 gigawatthours per day (GWh/d) in 2016. Because the growth is from a small base, utility-scale solar power averages 0.8% of total U.S. electricity generation in 2016. Although solar growth has historically been concentrated in customer-sited distributed generation installations (rooftop panels), EIA expects utility-scale solar capacity will increase by more than 100% (11 GW) between the end of 2014 and the end of 2016, with 4.4 GW of new capacity being built in California. Other leading states in utility-scale solar capacity include North Carolina

and Nevada, which, combined with California, account for almost 70% of the projected utility-scale capacity additions for 2015 and 2016.

Wind capacity, which starts from a significantly larger installed capacity base than solar, grew by 8% in 2014, and is forecast to increase by 13% annually in both 2015 and 2016.

Liquid Biofuels. On May 29, the U.S. Environmental Protection Agency (EPA) proposed a rule setting Renewable Fuel Standard (RFS) volumes for 2014 through 2016. Although these volumes could be modified before the final rule is issued, they are used in developing the current STEO forecast. Ethanol production, which averaged 934,000 b/d in 2014, is forecast to average more than 950,000 b/d in both 2015 and 2016. Ethanol consumption, which averaged 877,000 b/d in 2014, is forecast to average slightly more than 900,000 b/d in both 2015 and 2016, resulting in an average 9.9% ethanol share of the total gasoline pool. EIA does not expect significant increases in E15 or E85 consumption over the forecast period. The proposed RFS targets could encourage imports of Brazilian sugarcane ethanol, which were 3,000 b/d in 2014.

EIA expects the largest effect of the proposed RFS targets will be on biodiesel consumption, which contributes to meeting the biomass-based diesel, advanced biofuel, and total renewable fuel RFS targets. Biodiesel production averaged an estimated 83,000 b/d in 2014 and is forecast to average 92,000 b/d in 2015 and 98,000 b/d in 2016. Net imports of biomass-based diesel are also expected to increase from 15,000 b/d in 2014 to 25,000 b/d in 2015, and to 35,000 b/d in 2016.

Energy-Related Carbon Dioxide Emissions. EIA estimates that emissions of CO2 grew by 1.0% in 2014. Emissions are projected to fall by 0.7% in 2015 and then increase by 0.2% in 2016. These forecasts are sensitive to assumptions about weather and economic growth.

U.S. Economic Assumptions

Recent Economic Indicators. The Bureau of Economic Analysis reported that U.S. real GDP increased at an annual rate of 3.9% in the second quarter of 2015, higher than the previous estimate of 3.7%. The increase in real GDP in the second quarter reflected positive contributions from personal consumption expenditures, exports, state and local government spending, nonresidential fixed investment, and residential fixed investment.

EIA used the September 2015 version of the IHS macroeconomic model with EIA's energy price forecasts as model inputs to develop the economic projections in the STEO.

Production, Income, and Employment. Forecast real GDP growth reaches 2.5% in both 2015 and 2016. The 2015 growth is above the 2.1% forecast last month, while the 2016 growth is the same as last month. Real disposable income grows by 3.3% in 2015, below the 3.5% forecast last month, and by 3.0% in 2016. Total industrial production grows at 1.2% in 2015 and 1.1% in 2016. Projected growth in nonfarm employment averages 2.1% in 2015 and 1.5% in 2016.

Expenditures. Forecast private real fixed investment growth averages 4.8% and 6.5% in 2015 and 2016, respectively, led by equipment in 2015 and 2016 and by equipment and structures in

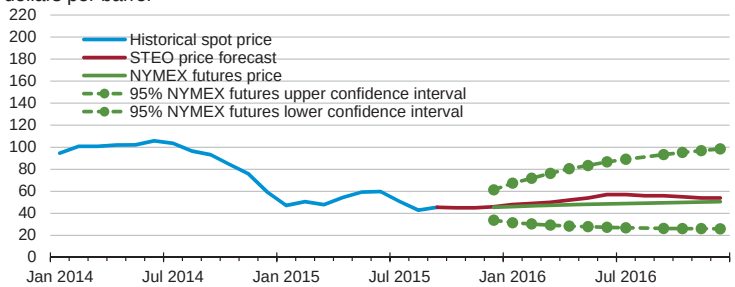
2016. Real consumption expenditures grow faster than real GDP in 2015 and 2016, at 3.0% in both years. Durable goods expenditures drive consumption spending in both years. Export growth is 1.7% and 3.7% over the same two years, while import growth is 5.7% in 2015 and 5.0% in 2016. Total government expenditures rise 0.7% in 2015 and 0.6% in 2016.

Short-Term Energy Outlook

Chart Gallery for October 2015

West Texas Intermediate (WTI) Crude Oil Price

dollars per barrel

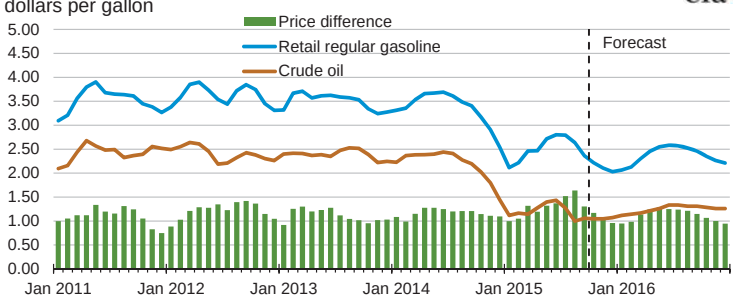


Note: Confidence interval derived from options market information for the 5 trading days ending Oct. 1, 2015. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, October 2015.

U.S. Gasoline and Crude Oil Prices

dollars per gallon

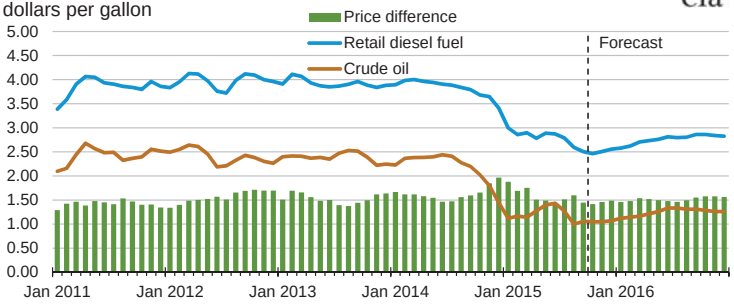


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, October 2015.

U.S. Diesel Fuel and Crude Oil Prices

dollars per gallon

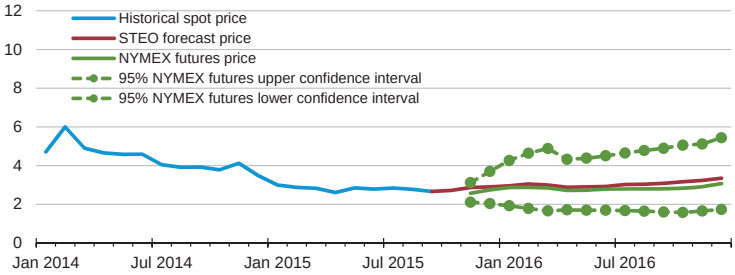


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, October 2015.

Henry Hub Natural Gas Price

dollars per million Btu

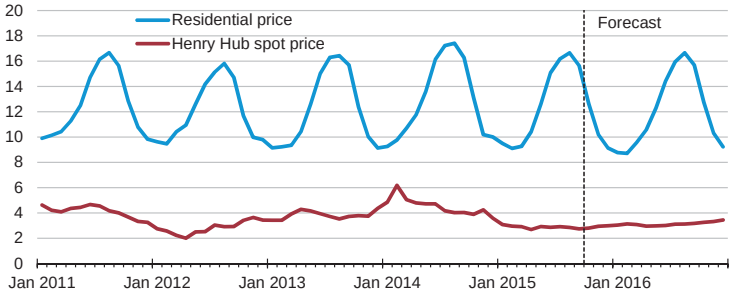


Note: Confidence interval derived from options market information for the 5 trading days ending Oct. 1, 2015. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, October 2015.

U.S. Natural Gas Prices

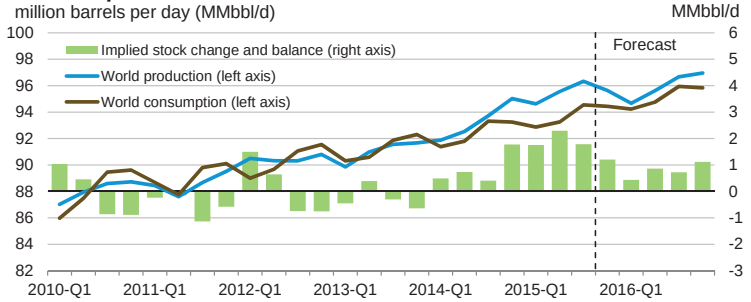
dollars per thousand cubic feet



Source: Short-Term Energy Outlook, October 2015.

World Liquid Fuels Production and Consumption Balance

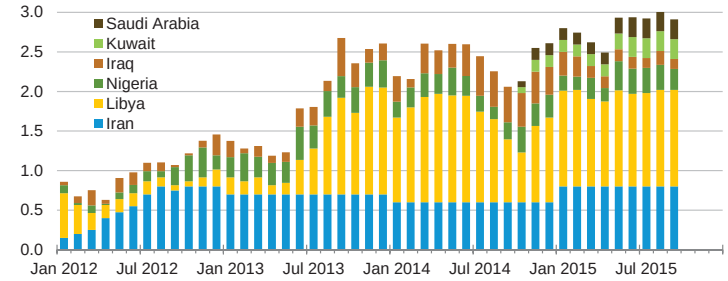
million barrels per day (MMbbl/d)



Source: Short-Term Energy Outlook, October 2015.

Estimated Historical Unplanned OPEC Crude Oil Production Outages

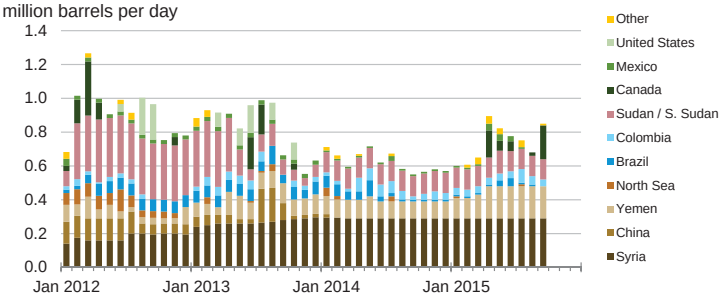
million barrels per day



Source: Short-Term Energy Outlook, October 2015.

Estimated Historical Unplanned Non-OPEC Liquid Fuels Production Outages

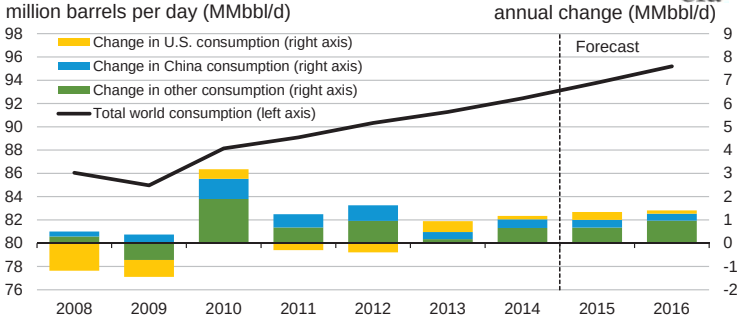
million barrels per day



Source: Short-Term Energy Outlook, October 2015.

World Liquid Fuels Consumption

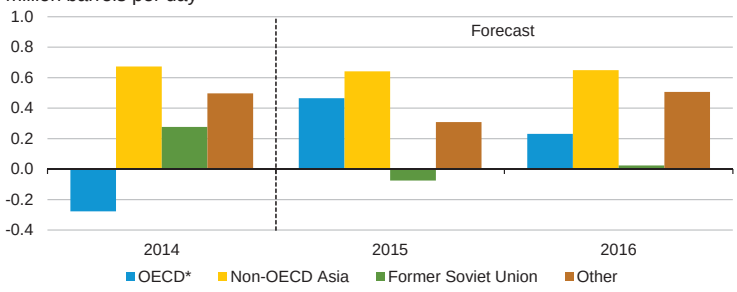
million barrels per day (MMbbl/d) — annual change (MMbbl/d)



Source: Short-Term Energy Outlook, October 2015.

World Liquid Fuels Consumption Growth

million barrels per day

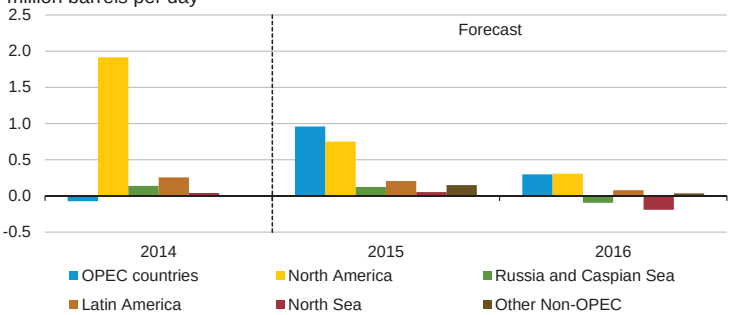


* Countries belonging to the Organization for Economic Cooperation and Development

Source: Short-Term Energy Outlook, October 2015.

World Crude Oil and Liquid Fuels Production Growth

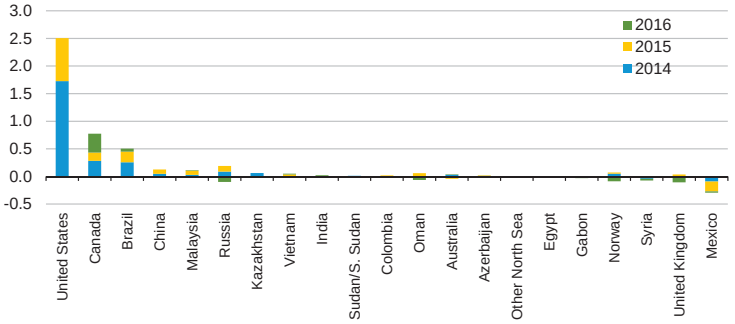
million barrels per day



Source: Short-Term Energy Outlook, October 2015.

Non-OPEC Crude Oil and Liquid Fuels Production Growth

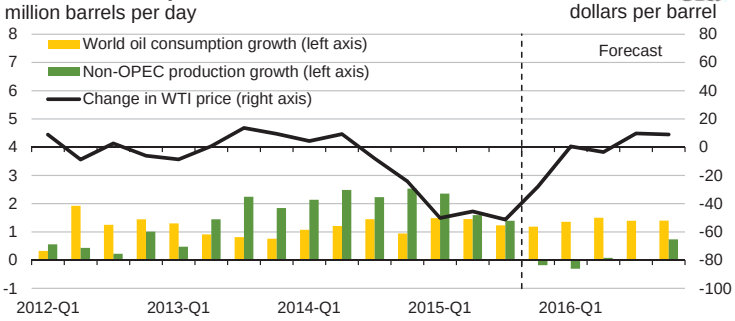
million barrels per day



Source: Short-Term Energy Outlook, October 2015.

World Consumption and Non-OPEC Production Growth

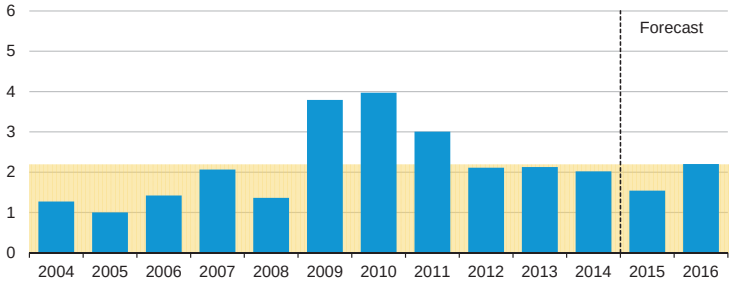
million barrels per day | dollars per barrel



Source: Short-Term Energy Outlook, October 2015.

OPEC surplus crude oil production capacity

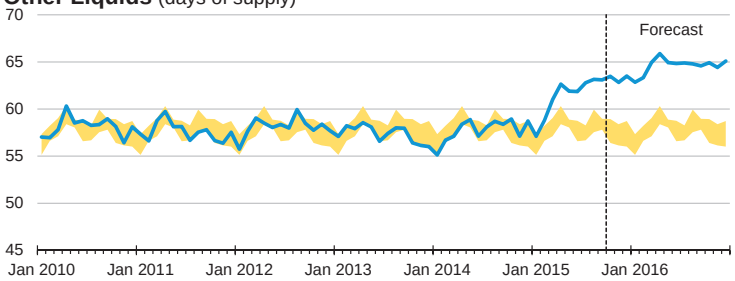
million barrels per day



Note: Shaded area represents 2004-2014 average (2.2 million barrels per day).

Source: Short-Term Energy Outlook, October 2015.

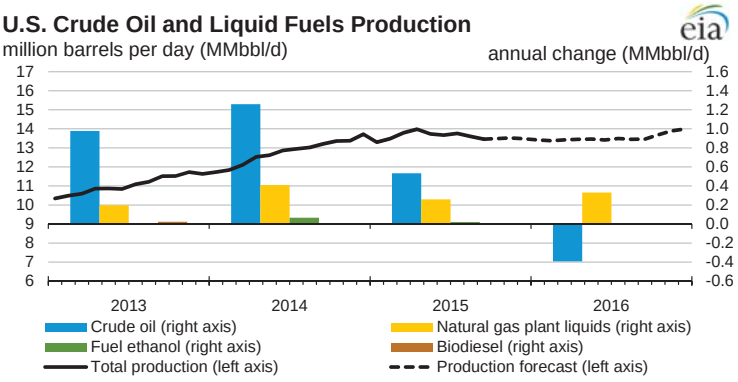
OECD Commercial Stocks of Crude Oil and Other Liquids (days of supply)



Note: Colored band around days of supply of crude oil and other liquids stocks represent the range between the minimum and maximum from Jan. 2010 - Dec. 2014.

Source: Short-Term Energy Outlook, October 2015.

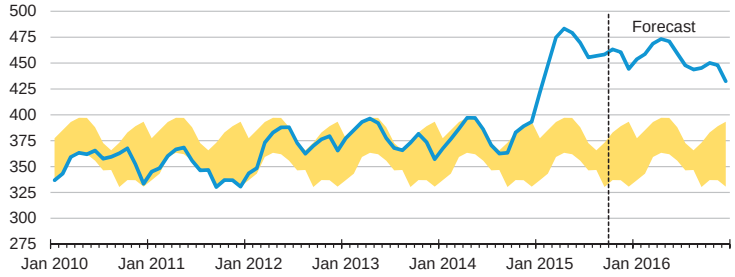
U.S. Crude Oil and Liquid Fuels Production



Source: Short-Term Energy Outlook, October 2015.

U.S. Commercial Crude Oil Stocks

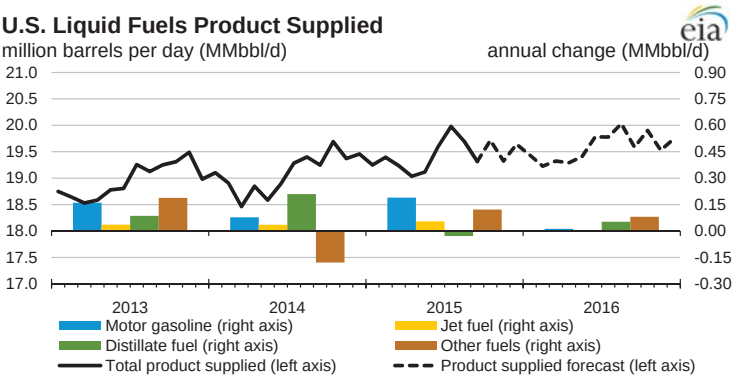
million barrels



Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2010 - Dec. 2014.

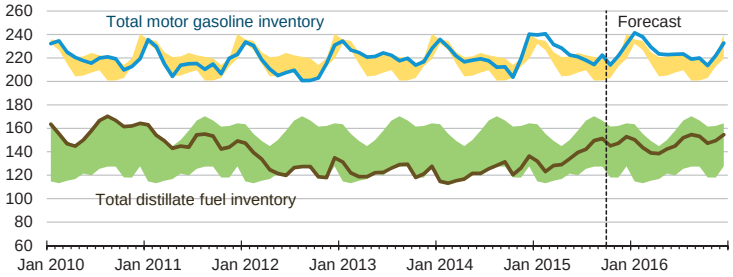
Source: Short-Term Energy Outlook, October 2015.

U.S. Liquid Fuels Product Supplied



Source: Short-Term Energy Outlook, October 2015.

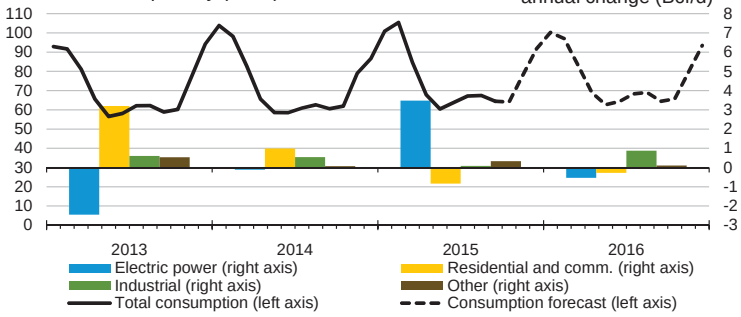
U.S. Gasoline and Distillate Inventories



Note: Colored bands around storage levels represent the range between the minimum and maximum from Jan. 2010 - Dec. 2014.

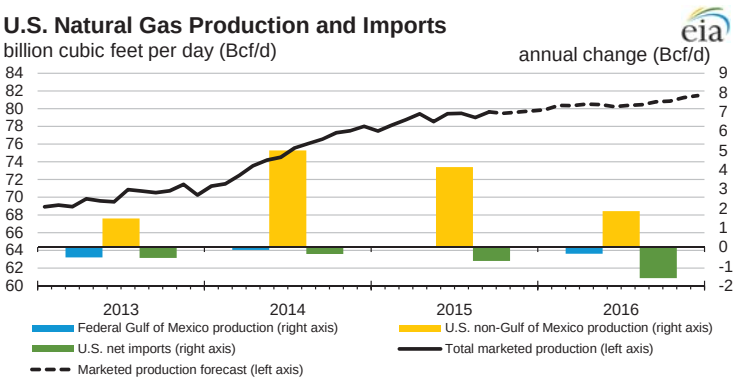
Source: Short-Term Energy Outlook, October 2015.

U.S. Natural Gas Consumption



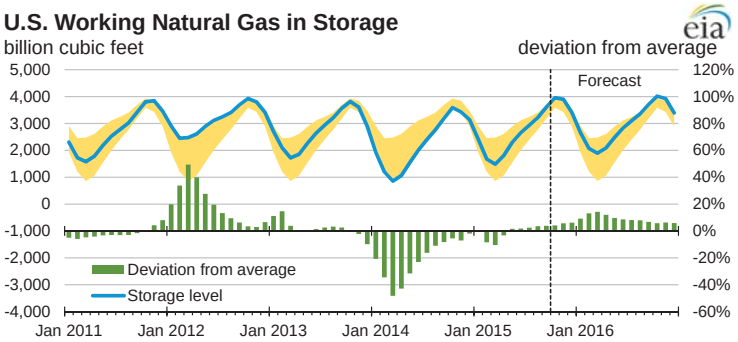
Source: Short-Term Energy Outlook, October 2015.

U.S. Natural Gas Production and Imports



Source: Short-Term Energy Outlook, October 2015.

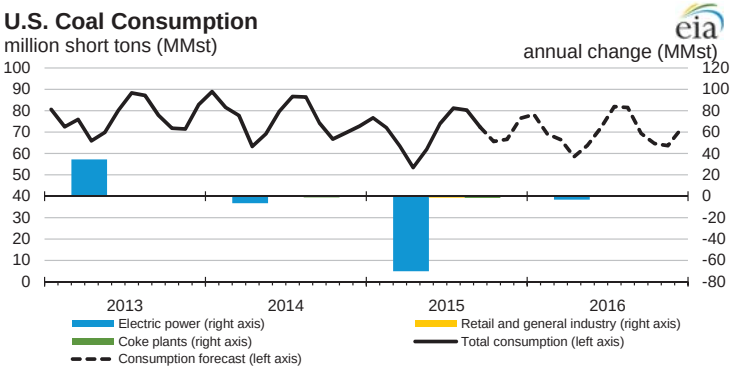
U.S. Working Natural Gas in Storage



Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2010 - Dec. 2014.

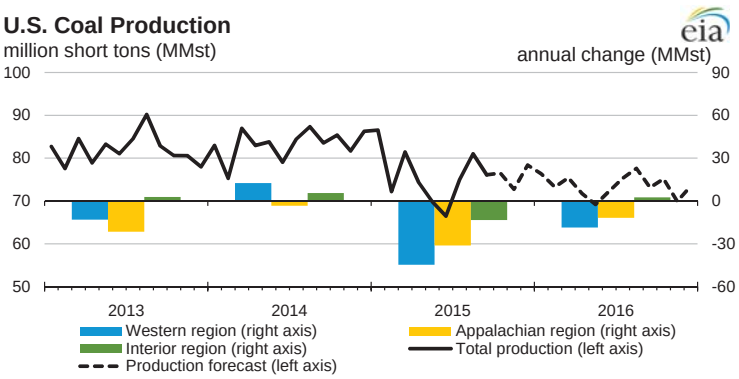
Source: Short-Term Energy Outlook, October 2015.

U.S. Coal Consumption



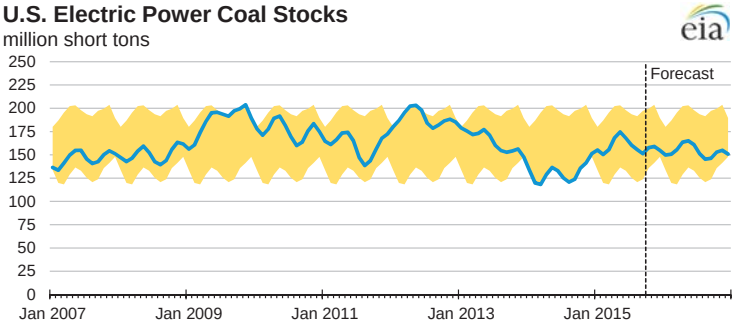
Source: Short-Term Energy Outlook, October 2015.

U.S. Coal Production



Source: Short-Term Energy Outlook, October 2015.

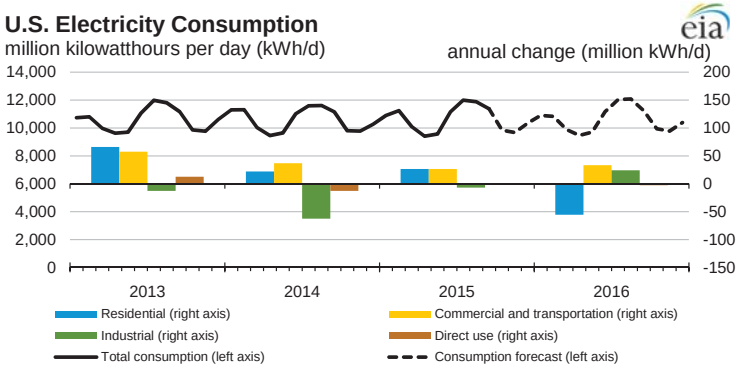
U.S. Electric Power Coal Stocks



Note: Colored band around stock levels represents the range between the minimum and maximum from Jan. 2007 - Dec. 2014.

Source: Short-Term Energy Outlook, October 2015.

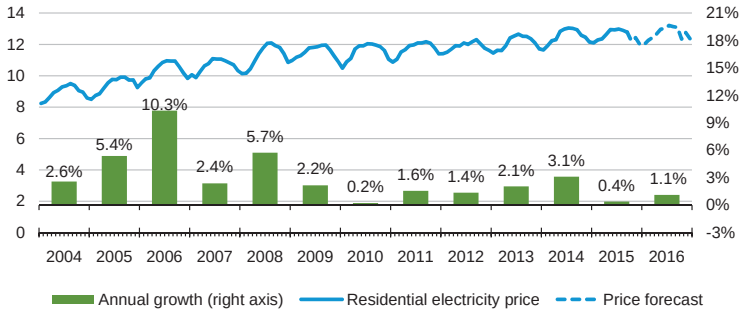
U.S. Electricity Consumption



Source: Short-Term Energy Outlook, October 2015.

U.S. Residential Electricity Price

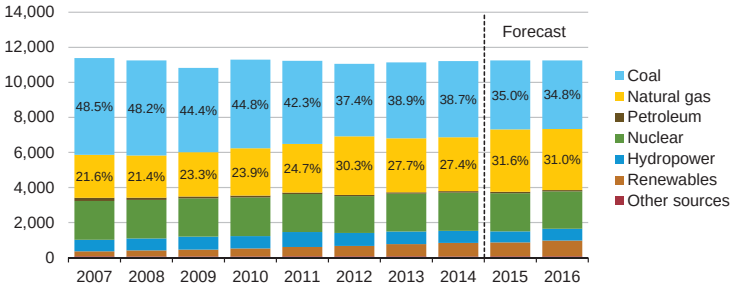
cents per kilowatthour



Source: Short-Term Energy Outlook, October 2015.

U.S. Electricity Generation by Fuel, All Sectors

thousand megawatthours per day

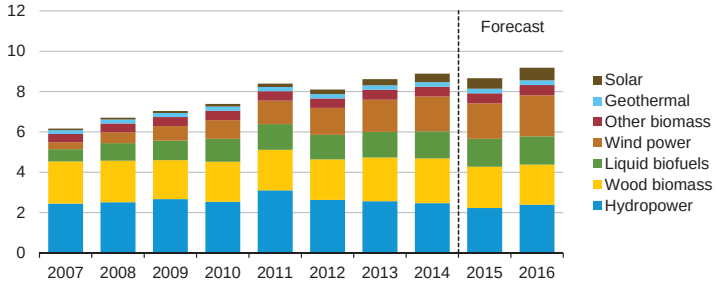


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, October 2015.

U.S. Renewable Energy Supply

quadrillion British thermal units (Btu)

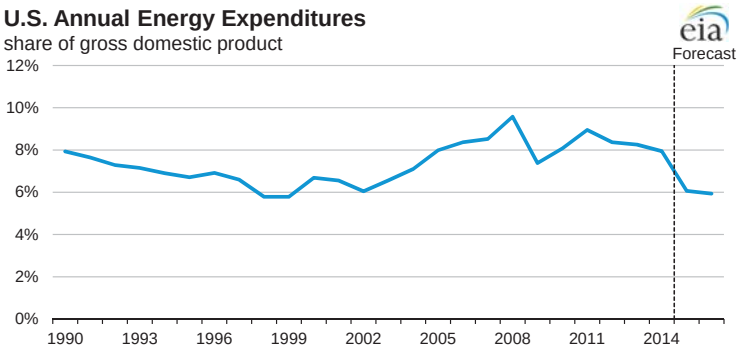


Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: Short-Term Energy Outlook, October 2015.

U.S. Annual Energy Expenditures

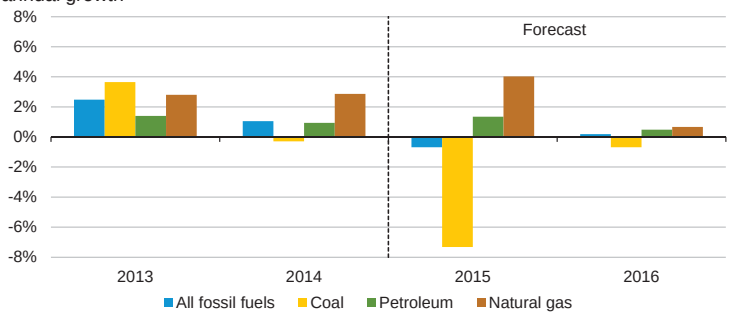
share of gross domestic product



Source: Short-Term Energy Outlook, October 2015.

U.S. Energy-Related Carbon Dioxide Emissions

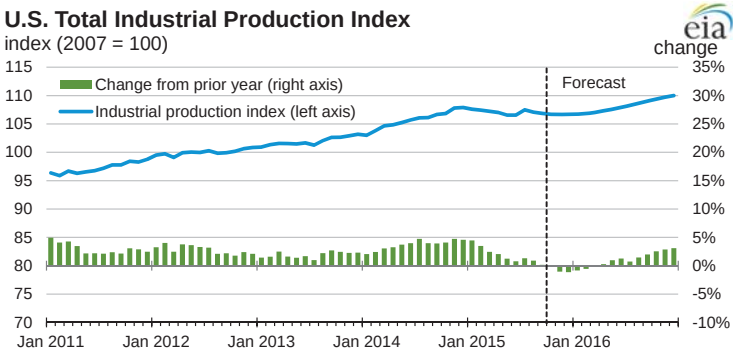
annual growth



Source: Short-Term Energy Outlook, October 2015.

U.S. Total Industrial Production Index

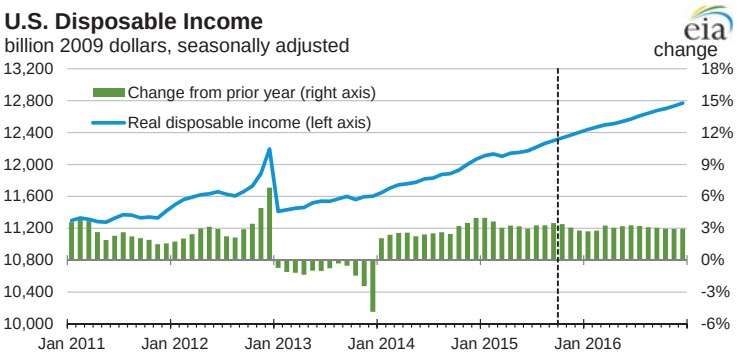
index (2007 = 100)



Source: Short-Term Energy Outlook, October 2015.

U.S. Disposable Income

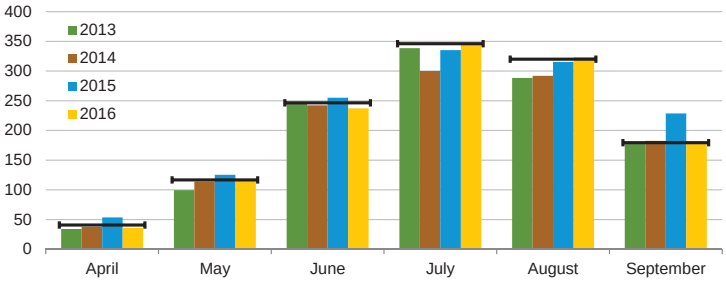
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, October 2015.

U.S. Summer Cooling Degree Days

population-weighted

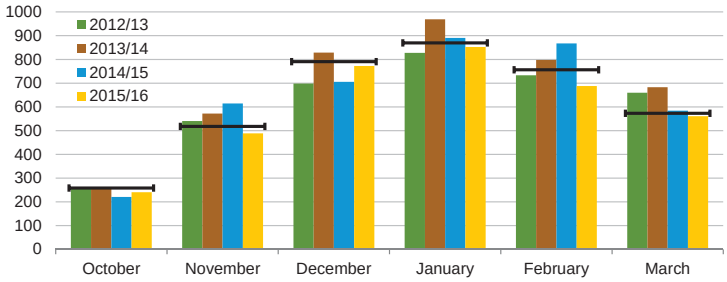


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2006-2015). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, October 2015.

U.S. Winter Heating Degree Days

population-weighted



Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2005 - Mar 2015). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, October 2015.

U.S. Census Regions and Divisions

Source: Short-Term Energy Outlook, October 2015.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

Fuel / Region	Winter of							Forecast	
	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	% Change
Natural Gas									
Northeast									
Consumption (Mcf**)	80.3	75.7	80.7	66.4	76.1	84.1	84.7	75.2	-11.3
Price ($/mcf)	15.83	13.31	12.66	12.21	11.74	11.55	10.87	11.48	5.6
Expenditures ($)	1,272	1,007	1,022	812	893	971	921	863	-6.4
Midwest									
Consumption (Mcf)	80.7	78.6	80.2	65.4	77.6	88.1	83.1	75.2	-9.5
Price ($/mcf)	11.47	9.44	9.23	8.99	8.36	8.70	8.53	8.08	-5.2
Expenditures ($)	926	742	740	587	648	766	709	608	-14.2
South									
Consumption (Mcf)	47.3	53.3	49.3	40.9	46.5	52.1	50.5	47.7	-5.5
Price ($/mcf)	14.07	11.52	11.02	11.45	10.71	10.79	10.85	10.30	-5.1
Expenditures ($)	665	614	544	468	498	562	548	491	-10.3
West									
Consumption (Mcf)	47.8	49.9	49.4	49.1	48.6	46.2	41.3	44.9	8.7
Price ($/mcf)	10.86	9.91	9.67	9.35	9.13	9.96	10.67	9.37	-12.2
Expenditures ($)	519	494	478	459	443	460	441	421	-4.6
U.S. Average									
Consumption (Mcf)	64.2	64.4	65.0	55.7	62.5	68.0	64.8	60.8	-6.2
Price ($/mcf)	12.87	10.83	10.46	10.25	9.73	9.98	9.91	9.51	-4.0
Expenditures ($)	826	698	680	571	608	678	641	578	-9.9
Heating Oil									
U.S. Average									
Consumption (gallons)	576.7	544.8	580.7	471.2	545.5	607.1	609.0	540.9	-11.2
Price ($/gallon)	2.65	2.85	3.38	3.73	3.87	3.88	3.04	2.57	-15.3
Expenditures ($)	1,530	1,552	1,966	1,757	2,113	2,353	1,851	1,392	-24.8
Electricity									
Northeast									
Consumption (kWh***)	7,063	6,847	7,076	6,436	6,862	7,223	7,253	6,825	-5.9
Price ($/kwh)	0.152	0.152	0.154	0.154	0.152	0.163	0.168	0.168	0.0
Expenditures ($)	1,071	1,039	1,091	993	1,045	1,179	1,220	1,148	-5.9
Midwest									
Consumption (kWh)	8,751	8,660	8,733	7,897	8,588	9,169	8,861	8,460	-4.5
Price ($/kwh)	0.097	0.099	0.105	0.111	0.112	0.112	0.117	0.119	1.5
Expenditures ($)	851	856	914	875	958	1,027	1,040	1,008	-3.1
South									
Consumption (kWh)	8,057	8,486	8,224	7,470	7,977	8,385	8,288	8,035	-3.1
Price ($/kwh)	0.109	0.103	0.104	0.107	0.107	0.109	0.111	0.109	-2.2
Expenditures ($)	878	873	856	798	851	913	920	872	-5.2
West									
Consumption (kWh)	7,084	7,239	7,216	7,190	7,150	6,971	6,586	6,867	4.3
Price ($/kwh)	0.107	0.110	0.112	0.115	0.118	0.123	0.127	0.126	-0.4
Expenditures ($)	755	799	809	825	847	859	833	865	3.8
U.S. Average									
Consumption (kWh)	7,725	7,937	7,844	7,253	7,672	7,981	7,803	7,621	-2.3
Price ($/kwh)	0.112	0.110	0.113	0.116	0.117	0.120	0.123	0.122	-0.8
Expenditures ($)	866	873	884	843	895	955	960	930	-3.1

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

Fuel / Region	Winter of							Forecast	
	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	% Change
Propane									
Northeast									
Consumption (gallons)	714.7	672.0	717.5	595.6	675.8	745.4	751.7	671.1	-10.7
Price* ($/gallon)	2.84	2.98	3.24	3.34	3.00	3.56	3.00	2.85	-5.0
Expenditures ($)	2,031	2,004	2,321	1,990	2,031	2,654	2,255	1,913	-15.2
Midwest									
Consumption (gallons)	795.0	779.6	791.8	644.3	766.4	868.6	813.8	743.6	-8.6
Price* ($/gallon)	2.11	1.99	2.11	2.23	1.74	2.61	1.91	1.66	-13.1
Expenditures ($)	1,678	1,548	1,674	1,437	1,333	2,267	1,554	1,234	-20.6
Number of households by primary space heating fuel (thousands)									
Northeast									
Natural gas	10,889	10,992	11,118	11,236	11,345	11,481	11,630	11,728	0.8
Heating oil	6,280	6,016	5,858	5,701	5,458	5,222	5,060	4,867	-3.8
Propane	713	733	744	761	813	844	840	848	1.0
Electricity	2,563	2,645	2,776	2,894	3,011	3,027	3,068	3,161	3.0
Wood	474	501	512	548	582	579	582	598	2.8
Midwest									
Natural gas	18,288	18,050	17,977	18,019	18,054	18,098	18,179	18,101	-0.4
Heating oil	491	451	419	393	360	337	316	291	-7.9
Propane	2,131	2,098	2,073	2,037	2,063	2,096	2,052	2,003	-2.4
Electricity	4,570	4,715	4,922	5,119	5,333	5,429	5,517	5,713	3.6
Wood	584	616	618	631	640	630	631	636	0.8
South									
Natural gas	13,958	13,731	13,657	13,636	13,681	13,773	13,909	13,908	0.0
Heating oil	956	906	853	790	738	700	660	610	-7.6
Propane	2,220	2,165	2,098	2,024	1,982	1,952	1,848	1,719	-7.0
Electricity	25,258	25,791	26,555	27,283	27,857	28,198	28,682	29,285	2.1
Wood	593	586	599	609	612	611	613	628	2.6
West									
Natural gas	15,027	14,939	15,020	15,021	15,008	15,043	15,198	15,251	0.3
Heating oil	294	289	279	261	247	234	226	219	-3.3
Propane	936	940	914	885	909	931	900	879	-2.3
Electricity	7,768	7,877	8,126	8,439	8,671	8,745	8,905	9,180	3.1
Wood	703	721	725	736	728	741	759	757	-0.3
U.S. Totals									
Natural gas	58,162	57,713	57,771	57,912	58,088	58,394	58,916	58,988	0.1
Heating oil	8,021	7,662	7,408	7,145	6,803	6,493	6,262	5,987	-4.4
Propane	5,999	5,936	5,829	5,707	5,766	5,822	5,640	5,448	-3.4
Electricity	40,159	41,029	42,380	43,734	44,872	45,400	46,172	47,340	2.5
Wood	2,353	2,424	2,454	2,524	2,563	2,561	2,584	2,619	1.4
Heating degree days									
Northeast	5,313	4,933	5,337	4,217	4,964	5,597	5,651	4,903	-13.2
Midwest	5,810	5,639	5,773	4,484	5,544	6,451	6,008	5,345	-11.0
South	2,493	2,870	2,632	2,023	2,430	2,787	2,695	2,492	-7.5
West	3,116	3,285	3,258	3,229	3,181	2,978	2,557	2,866	12.1
U.S. Average	3,869	3,937	3,939	3,224	3,721	4,107	3,883	3,603	-7.2

Note: Winter covers the period October 1 through March 31. Fuel prices are nominal prices. 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 2005 and 2009 Residential Energy Consumption Surveys corrected for actual and projected heating degree days. Number of households using heating oil includes kerosene.

* Prices exclude taxes

** thousand cubic feet

*** kilowatthour

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Energy Supply															
Crude Oil Production (a)															
(million barrels per day)	**8.14**	**8.61**	**8.84**	**9.25**	**9.39**	**9.41**	*9.17*	*9.02*	*8.90*	*8.82*	*8.71*	*8.99*	**8.71**	*9.25*	*8.86*
Dry Natural Gas Production															
(billion cubic feet per day)	**67.53**	**69.73**	**71.59**	**73.04**	**73.68**	**74.42**	*74.68*	*74.90*	*75.45*	*75.65*	*75.76*	*76.40*	**70.49**	*74.42*	*75.82*
Coal Production															
(million short tons)	**245**	**246**	**255**	**253**	**240**	**211**	*232*	*228*	*225*	*213*	*226*	*219*	**1,000**	*911*	*883*
Energy Consumption															
Liquid Fuels															
(million barrels per day)	**18.82**	**18.77**	**19.31**	**19.51**	**19.29**	**19.25**	*19.67*	*19.56*	*19.33*	*19.49*	*19.80*	*19.73*	**19.11**	*19.44*	*19.59*
Natural Gas															
(billion cubic feet per day)	**94.83**	**60.89**	**61.36**	**75.84**	**96.74**	**64.01**	*66.39*	*77.99*	*93.42*	*65.32*	*67.28*	*79.57*	**73.15**	*76.20*	*76.38*
Coal (b)															
(million short tons)	**248**	**212**	**247**	**209**	**212**	**189**	*234*	*209*	*214*	*194*	*233*	*200*	**917**	*844*	*841*
Electricity															
(billion kilowatt hours per day)	**10.87**	**10.04**	**11.46**	**9.95**	**10.73**	**10.04**	*11.76*	*9.96*	*10.54*	*10.11*	*11.79*	*10.04*	**10.58**	*10.62*	*10.62*
Renewables (c)															
(quadrillion Btu)	**2.36**	**2.57**	**2.28**	**2.40**	**2.42**	**2.42**	*2.26*	*2.29*	*2.40*	*2.65*	*2.43*	*2.48*	**9.61**	*9.38*	*9.95*
Total Energy Consumption (d)															
(quadrillion Btu)	**26.58**	**23.03**	**24.14**	**24.81**	**26.39**	**23.01**	*24.21*	*24.48*	*25.91*	*23.15*	*24.44*	*24.78*	**98.56**	*98.09*	*98.29*
Energy Prices															
Crude Oil (e)															
(dollars per barrel)	**97.60**	**101.08**	**96.45**	**73.48**	**47.98**	**57.48**	*46.69*	*44.34*	*48.00*	*53.36*	*55.34*	*53.33*	**92.05**	*49.16*	*52.59*
Natural Gas Henry Hub Spot															
(dollars per million Btu)	**5.21**	**4.61**	**3.96**	**3.80**	**2.90**	**2.75**	*2.76*	*2.83*	*3.00*	*2.90*	*3.05*	*3.25*	**4.39**	*2.81*	*3.05*
Coal															
(dollars per million Btu)	**2.33**	**2.39**	**2.37**	**2.37**	**2.26**	**2.25**	*2.25*	*2.26*	*2.25*	*2.29*	*2.28*	*2.24*	**2.36**	*2.25*	*2.26*
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2009 dollars - SAAR)	**15,725**	**15,902**	**16,069**	**16,151**	**16,177**	**16,324**	*16,415*	*16,503*	*16,595*	*16,705*	*16,827*	*16,956*	**15,962**	*16,355*	*16,771*
Percent change from prior year	**1.7**	**2.6**	**2.9**	**2.5**	**2.9**	**2.7**	*2.2*	*2.2*	*2.6*	*2.3*	*2.5*	*2.7*	**2.4**	*2.5*	*2.5*
GDP Implicit Price Deflator															
(Index, 2009=100)	**108.0**	**108.6**	**109.0**	**109.1**	**109.1**	**109.7**	*110.4*	*110.8*	*111.4*	*111.8*	*112.2*	*112.8*	**108.7**	*110.0*	*112.1*
Percent change from prior year	**1.6**	**1.9**	**1.8**	**1.3**	**1.0**	**1.0**	*1.2*	*1.6*	*2.1*	*2.0*	*1.7*	*1.8*	**1.6**	*1.2*	*1.9*
Real Disposable Personal Income															
(billion chained 2009 dollars - SAAR)	**11,699**	**11,785**	**11,863**	**11,999**	**12,115**	**12,154**	*12,260*	*12,368*	*12,468*	*12,540*	*12,643*	*12,735*	**11,836**	*12,224*	*12,596*
Percent change from prior year	**2.3**	**2.4**	**2.5**	**3.6**	**3.6**	**3.1**	*3.3*	*3.1*	*2.9*	*3.2*	*3.1*	*3.0*	**2.7**	*3.3*	*3.0*
Manufacturing Production Index															
(Index, 2012=100)	**101.9**	**103.5**	**104.6**	**105.6**	**105.5**	**105.8**	*106.3*	*106.1*	*106.3*	*107.1*	*108.2*	*109.4*	**103.9**	*105.9*	*107.7*
Percent change from prior year	**1.0**	**2.6**	**3.7**	**3.9**	**3.5**	**2.2**	*1.6*	*0.5*	*0.7*	*1.2*	*1.8*	*3.1*	**2.8**	*1.9*	*1.7*
Weather															
U.S. Heating Degree-Days	**2,449**	**479**	**80**	**1,541**	**2,342**	**443**	*57*	*1,502*	*2,101*	*473*	*75*	*1,530*	**4,550**	*4,344*	*4,180*
U.S. Cooling Degree-Days	**34**	**394**	**775**	**96**	**47**	**434**	*879*	*93*	*38*	*388*	*848*	*94*	**1,298**	*1,453*	*1,368*

- = no data available

Prices are not adjusted for inflation.

(a) Includes lease condensate.

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

(c) Renewable energy includes minor components of non-marketed renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy.
EIA does not estimate or project end-use consumption of non-marketed renewable energy.

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

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

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

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly* , DOE/EIA-0109;
Petroleum Supply Annual , DOE/EIA-0340/2; *Weekly Petroleum Status Report* , DOE/EIA-0208; *Petroleum Marketing Monthly* , DOE/EIA-0380; *Natural Gas Monthly* , DOE/EIA-0130;
Electric Power Monthly , DOE/EIA-0226; *Quarterly Coal Report* , DOE/EIA-0121; and *International Petroleum Monthly* , DOE/EIA-0520.
Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model. Macroeconomic projections are based on Global Insight Model of the U.S. Economy.
Weather projections from National Oceanic and Atmospheric Administration.

Table 2. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	**98.68**	**103.35**	**97.87**	**73.21**	**48.48**	**57.85**	*46.56*	*45.34*	*49.05*	*54.38*	*56.31*	*54.33*	**93.17**	*49.53*	*53.57*
Brent Spot Average	**108.14**	**109.70**	**101.90**	**76.43**	**53.91**	**61.65**	*50.45*	*50.00*	*54.05*	*59.38*	*61.31*	*59.33*	**98.89**	*53.96*	*58.57*
U.S. Imported Average	**94.18**	**98.64**	**93.85**	**71.43**	**46.40**	**56.15**	*44.40*	*41.84*	*45.51*	*50.83*	*52.83*	*50.84*	**89.63**	*47.19*	*50.12*
U.S. Refiner Average Acquisition Cost	**97.60**	**101.08**	**96.45**	**73.48**	**47.98**	**57.48**	*46.69*	*44.34*	*48.00*	*53.36*	*55.34*	*53.33*	**92.05**	*49.16*	*52.59*
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	**272**	**298**	**276**	**203**	**159**	**201**	*179*	*138*	*149*	*184*	*181*	*155*	**262**	*170*	*167*
Diesel Fuel	**303**	**300**	**288**	**240**	**176**	**189**	*159*	*159*	*170*	*181*	*188*	*188*	**282**	*171*	*182*
Heating Oil	**303**	**289**	**276**	**228**	**178**	**180**	*149*	*157*	*165*	*170*	*177*	*183*	**274**	*166*	*173*
Refiner Prices to End Users															
Jet Fuel	**297**	**295**	**289**	**234**	**172**	**186**	*156*	*153*	*166*	*176*	*181*	*181*	**278**	*166*	*176*
No. 6 Residual Fuel Oil (a)	**249**	**244**	**243**	**194**	**137**	**154**	*128*	*116*	*119*	*128*	*137*	*133*	**231**	*133*	*129*
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	**340**	**368**	**350**	**288**	**227**	**267**	*260*	*212*	*217*	*253*	*252*	*228*	**336**	*242*	*238*
Gasoline All Grades (b)	**348**	**375**	**358**	**296**	**236**	**275**	*269*	*221*	*225*	*262*	*261*	*236*	**344**	*251*	*246*
On-highway Diesel Fuel	**396**	**394**	**384**	**358**	**292**	**285**	*263*	*251*	*264*	*277*	*282*	*284*	**383**	*272*	*277*
Heating Oil	**397**	**382**	**369**	**330**	**288**	**276**	*250*	*252*	*261*	*263*	*265*	*273*	**372**	*273*	*265*
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	**5.36**	**4.75**	**4.08**	**3.91**	**2.99**	**2.83**	*2.84*	*2.92*	*3.09*	*2.99*	*3.14*	*3.35*	**4.52**	*2.89*	*3.14*
Henry Hub Spot (dollars per million Btu)	**5.21**	**4.61**	**3.96**	**3.80**	**2.90**	**2.75**	*2.76*	*2.83*	*3.00*	*2.90*	*3.05*	*3.25*	**4.39**	*2.81*	*3.05*
U.S. End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	**6.19**	**5.63**	**5.08**	**5.18**	**4.57**	**3.68**	*3.72*	*3.99*	*4.29*	*3.85*	*4.04*	*4.44*	**5.55**	*4.01*	*4.17*
Commercial Sector	**8.65**	**9.66**	**9.69**	**8.52**	**7.94**	**8.13**	*8.54*	*7.86*	*7.88*	*8.30*	*8.90*	*8.20*	**8.87**	*8.01*	*8.15*
Residential Sector	**9.82**	**13.11**	**16.94**	**10.52**	**9.29**	**11.96**	*16.15*	*10.03*	*8.96*	*11.85*	*16.08*	*10.15*	**10.94**	*10.35*	*10.28*
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**2.33**	**2.39**	**2.37**	**2.37**	**2.26**	**2.25**	*2.25*	*2.26*	*2.25*	*2.29*	*2.28*	*2.24*	**2.36**	*2.25*	*2.26*
Natural Gas	**6.82**	**4.93**	**4.25**	**4.30**	**4.09**	**3.12**	*3.38*	*3.83*	*3.96*	*3.63*	*3.78*	*4.19*	**4.98**	*3.57*	*3.87*
Residual Fuel Oil (c)	**19.97**	**20.44**	**19.75**	**14.72**	**10.82**	**11.64**	*11.28*	*10.03*	*10.22*	*11.50*	*11.86*	*11.64*	**19.18**	*10.90*	*11.29*
Distillate Fuel Oil	**23.40**	**22.77**	**21.88**	**18.72**	**15.39**	**15.18**	*13.51*	*14.04*	*14.67*	*15.34*	*15.68*	*16.32*	**22.34**	*14.74*	*15.44*
End-Use Prices (cents per kilowatthour)															
Industrial Sector	**6.99**	**6.92**	**7.36**	**6.76**	**6.76**	**6.73**	*7.39*	*6.89*	*6.90*	*6.89*	*7.51*	*6.95*	**7.01**	*6.95*	*7.07*
Commercial Sector	**10.55**	**10.68**	**11.11**	**10.59**	**10.50**	**10.56**	*11.23*	*10.82*	*10.75*	*10.83*	*11.49*	*11.02*	**10.75**	*10.79*	*11.04*
Residential Sector	**11.91**	**12.73**	**13.01**	**12.38**	**12.24**	**12.85**	*12.89*	*12.20*	*12.20*	*12.90*	*13.14*	*12.48*	**12.50**	*12.55*	*12.69*

- = 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.

WTI and Brent crude oils, and Henry Hub natural gas spot prices from Reuter's News Service (http://www.reuters.com).

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

Projections: EIA Regional Short-Term Energy Model.

Table 3a. International Petroleum and Other Liquids Production, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million barrels per day) (a)															
OECD	**25.04**	**25.48**	**25.79**	**26.69**	**26.59**	**26.39**	*26.55*	*26.47*	*26.47*	*26.46*	*26.55*	*27.02*	**25.75**	*26.50*	*26.63*
U.S. (50 States)	**13.15**	**13.96**	**14.37**	**14.82**	**14.71**	**15.02**	*14.91*	*14.80*	*14.67*	*14.75*	*14.80*	*15.18*	**14.08**	*14.86*	*14.85*
Canada	**4.35**	**4.25**	**4.33**	**4.51**	**4.69**	**4.22**	*4.49*	*4.64*	*4.74*	*4.80*	*4.90*	*4.97*	**4.36**	*4.51*	*4.85*
Mexico	**2.89**	**2.86**	**2.79**	**2.75**	**2.68**	**2.58**	*2.66*	*2.66*	*2.64*	*2.63*	*2.62*	*2.60*	**2.82**	*2.64*	*2.62*
North Sea (b)	**3.07**	**2.81**	**2.71**	**3.02**	**3.02**	**3.08**	*2.92*	*2.81*	*2.89*	*2.75*	*2.69*	*2.74*	**2.90**	*2.96*	*2.77*
Other OECD	**1.57**	**1.59**	**1.60**	**1.58**	**1.49**	**1.49**	*1.57*	*1.56*	*1.53*	*1.53*	*1.55*	*1.54*	**1.59**	*1.53*	*1.54*
Non-OECD	**66.84**	**67.05**	**67.93**	**68.34**	**68.04**	**69.17**	*69.79*	*69.18*	*68.20*	*69.16*	*70.11*	*69.93*	**67.55**	*69.05*	*69.36*
OPEC	**36.26**	**35.94**	**36.52**	**36.66**	**36.66**	**37.37**	*37.73*	*37.46*	*37.00*	*37.35*	*38.03*	*38.03*	**36.35**	*37.31*	*37.60*
Crude Oil Portion	**30.01**	**29.70**	**30.28**	**30.34**	**30.29**	**30.96**	*31.25*	*30.90*	*30.36*	*30.63*	*31.23*	*31.16*	**30.08**	*30.85*	*30.85*
Other Liquids	**6.25**	**6.24**	**6.24**	**6.32**	**6.36**	**6.41**	*6.49*	*6.56*	*6.64*	*6.72*	*6.79*	*6.87*	**6.26**	*6.46*	*6.76*
Eurasia	**13.90**	**13.84**	**13.85**	**13.99**	**14.10**	**14.03**	*14.03*	*13.94*	*13.89*	*13.91*	*13.93*	*13.96*	**13.90**	*14.02*	*13.92*
China	**4.60**	**4.61**	**4.54**	**4.68**	**4.66**	**4.73**	*4.69*	*4.67*	*4.64*	*4.67*	*4.68*	*4.68*	**4.61**	*4.69*	*4.67*
Other Non-OECD	**12.09**	**12.67**	**13.02**	**13.00**	**12.62**	**13.03**	*13.34*	*13.11*	*12.67*	*13.23*	*13.48*	*13.26*	**12.70**	*13.03*	*13.16*
Total World Supply	**91.88**	**92.54**	**93.73**	**95.03**	**94.63**	**95.56**	*96.34*	*95.64*	*94.67*	*95.62*	*96.67*	*96.96*	**93.30**	*95.55*	*95.98*
Non-OPEC Supply	**55.62**	**56.60**	**57.21**	**58.36**	**57.97**	**58.19**	*58.60*	*58.19*	*57.67*	*58.27*	*58.64*	*58.92*	**56.95**	*58.24*	*58.38*
Consumption (million barrels per day) (c)															
OECD	**45.75**	**44.84**	**45.97**	**46.44**	**46.53**	**45.33**	*46.28*	*46.73*	*46.73*	*45.63*	*46.47*	*46.95*	**45.75**	*46.22*	*46.45*
U.S. (50 States)	**18.82**	**18.77**	**19.31**	**19.51**	**19.29**	**19.25**	*19.67*	*19.56*	*19.33*	*19.49*	*19.80*	*19.73*	**19.11**	*19.44*	*19.59*
U.S. Territories	**0.35**	**0.35**	**0.35**	**0.35**	**0.37**	**0.37**	*0.37*	*0.37*	*0.40*	*0.40*	*0.40*	*0.40*	**0.35**	*0.37*	*0.40*
Canada	**2.43**	**2.34**	**2.46**	**2.42**	**2.36**	**2.32**	*2.43*	*2.41*	*2.38*	*2.32*	*2.43*	*2.41*	**2.41**	*2.38*	*2.38*
Europe	**12.98**	**13.38**	**13.86**	**13.52**	**13.55**	**13.30**	*13.75*	*13.71*	*13.58*	*13.30*	*13.75*	*13.70*	**13.44**	*13.58*	*13.58*
Japan	**5.02**	**3.88**	**3.88**	**4.43**	**4.74**	**3.85**	*3.88*	*4.25*	*4.55*	*3.82*	*3.85*	*4.22*	**4.30**	*4.18*	*4.11*
Other OECD	**6.14**	**6.11**	**6.11**	**6.21**	**6.21**	**6.23**	*6.18*	*6.42*	*6.50*	*6.30*	*6.25*	*6.49*	**6.14**	*6.26*	*6.38*
Non-OECD	**45.63**	**46.96**	**47.35**	**46.81**	**46.35**	**47.93**	*48.27*	*47.71*	*47.50*	*49.13*	*49.47*	*48.89*	**46.69**	*47.57*	*48.75*
Eurasia	**4.82**	**4.76**	**4.98**	**4.96**	**4.71**	**4.65**	*4.92*	*4.90*	*4.73*	*4.66*	*4.93*	*4.92*	**4.88**	*4.80*	*4.81*
Europe	**0.70**	**0.71**	**0.73**	**0.73**	**0.71**	**0.72**	*0.74*	*0.74*	*0.72*	*0.73*	*0.75*	*0.75*	**0.72**	*0.73*	*0.73*
China	**10.45**	**11.03**	**10.98**	**10.94**	**10.77**	**11.36**	*11.32*	*11.27*	*11.06*	*11.67*	*11.62*	*11.57*	**10.85**	*11.18*	*11.48*
Other Asia	**11.80**	**12.01**	**11.56**	**11.88**	**12.11**	**12.33**	*11.87*	*12.19*	*12.46*	*12.69*	*12.21*	*12.54*	**11.81**	*12.13*	*12.48*
Other Non-OECD	**17.86**	**18.46**	**19.10**	**18.31**	**18.04**	**18.87**	*19.43*	*18.61*	*18.53*	*19.38*	*19.96*	*19.12*	**18.43**	*18.74*	*19.25*
Total World Consumption	**91.38**	**91.80**	**93.32**	**93.25**	**92.87**	**93.26**	*94.55*	*94.44*	*94.23*	*94.76*	*95.95*	*95.84*	**92.45**	*93.79*	*95.20*
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	**0.03**	**-0.66**	**-0.22**	**-0.22**	**-0.54**	**-0.69**	*-0.24*	*0.64*	*0.04*	*-0.27*	*-0.06*	*0.52*	**-0.27**	*-0.21*	*0.06*
Other OECD	**-0.31**	**-0.02**	**-0.50**	**0.33**	**-0.19**	**-0.57**	*-0.55*	*-0.67*	*-0.18*	*-0.21*	*-0.23*	*-0.58*	**-0.12**	*-0.49*	*-0.30*
Other Stock Draws and Balance	**-0.21**	**-0.05**	**0.32**	**-1.90**	**-1.03**	**-1.04**	*-1.00*	*-1.17*	*-0.30*	*-0.39*	*-0.43*	*-1.05*	**-0.46**	*-1.06*	*-0.54*
Total Stock Draw	**-0.49**	**-0.73**	**-0.41**	**-1.78**	**-1.75**	**-2.30**	*-1.78*	*-1.21*	*-0.44*	*-0.86*	*-0.72*	*-1.12*	**-0.86**	*-1.76*	*-0.79*
End-of-period Commercial Crude Oil and Other Liquids Inventories															
U.S. Commercial Inventory	**1,063**	**1,128**	**1,149**	**1,169**	**1,217**	**1,277**	*1,298*	*1,240*	*1,236*	*1,260*	*1,266*	*1,218*	**1,169**	*1,240*	*1,218*
OECD Commercial Inventory	**2,575**	**2,642**	**2,711**	**2,698**	**2,763**	**2,874**	*2,946*	*2,948*	*2,961*	*3,004*	*3,031*	*3,037*	**2,698**	*2,948*	*3,037*

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

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

(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.

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

Projections: EIA Regional Short-Term Energy Model.

Table 3b. Non-OPEC Petroleum and Other Liquids Supply (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
North America	**20.39**	**21.08**	**21.49**	**22.08**	**22.08**	**21.82**	*22.06*	*22.10*	*22.05*	*22.19*	*22.31*	*22.75*	**21.27**	*22.02*	*22.32*
Canada	**4.35**	**4.25**	**4.33**	**4.51**	**4.69**	**4.22**	*4.49*	*4.64*	*4.74*	*4.80*	*4.90*	*4.97*	**4.36**	*4.51*	*4.85*
Mexico	**2.89**	**2.86**	**2.79**	**2.75**	**2.68**	**2.58**	*2.66*	*2.66*	*2.64*	*2.63*	*2.62*	*2.60*	**2.82**	*2.64*	*2.62*
United States	**13.15**	**13.96**	**14.37**	**14.82**	**14.71**	**15.02**	*14.91*	*14.80*	*14.67*	*14.75*	*14.80*	*15.18*	**14.08**	*14.86*	*14.85*
Central and South America	**4.55**	**5.17**	**5.56**	**5.39**	**4.95**	**5.42**	*5.69*	*5.43*	*4.98*	*5.55*	*5.77*	*5.51*	**5.17**	*5.38*	*5.46*
Argentina	**0.70**	**0.71**	**0.73**	**0.73**	**0.70**	**0.71**	*0.75*	*0.75*	*0.70*	*0.72*	*0.76*	*0.76*	**0.72**	*0.73*	*0.74*
Brazil	**2.34**	**2.98**	**3.32**	**3.15**	**2.73**	**3.22**	*3.45*	*3.16*	*2.74*	*3.30*	*3.51*	*3.24*	**2.95**	*3.14*	*3.20*
Colombia	**1.03**	**0.99**	**1.02**	**1.03**	**1.06**	**1.05**	*1.01*	*1.03*	*1.05*	*1.04*	*1.01*	*1.02*	**1.02**	*1.04*	*1.03*
Other Central and S. America	**0.48**	**0.49**	**0.48**	**0.48**	**0.47**	**0.45**	*0.48*	*0.49*	*0.48*	*0.48*	*0.50*	*0.49*	**0.48**	*0.47*	*0.49*
Europe	**4.06**	**3.80**	**3.70**	**4.02**	**4.00**	**4.05**	*3.89*	*3.78*	*3.85*	*3.70*	*3.65*	*3.70*	**3.89**	*3.93*	*3.73*
Norway	**1.97**	**1.80**	**1.86**	**1.97**	**1.94**	**1.94**	*1.93*	*1.87*	*1.87*	*1.79*	*1.83*	*1.83*	**1.90**	*1.92*	*1.83*
United Kingdom (offshore)	**0.93**	**0.85**	**0.66**	**0.84**	**0.88**	**0.96**	*0.81*	*0.77*	*0.84*	*0.79*	*0.68*	*0.72*	**0.82**	*0.86*	*0.76*
Other North Sea	**0.18**	**0.16**	**0.19**	**0.21**	**0.20**	**0.18**	*0.17*	*0.17*	*0.18*	*0.18*	*0.18*	*0.19*	**0.19**	*0.18*	*0.18*
Eurasia	**13.91**	**13.85**	**13.87**	**14.01**	**14.11**	**14.05**	*14.04*	*13.95*	*13.90*	*13.92*	*13.95*	*13.97*	**13.91**	*14.04*	*13.94*
Azerbaijan	**0.85**	**0.86**	**0.88**	**0.84**	**0.86**	**0.87**	*0.88*	*0.88*	*0.88*	*0.88*	*0.87*	*0.87*	**0.86**	*0.87*	*0.87*
Kazakhstan	**1.73**	**1.66**	**1.71**	**1.78**	**1.76**	**1.71**	*1.70*	*1.70*	*1.70*	*1.71*	*1.71*	*1.74*	**1.72**	*1.72*	*1.72*
Russia	**10.86**	**10.83**	**10.79**	**10.93**	**10.99**	**10.98**	*10.96*	*10.88*	*10.83*	*10.84*	*10.87*	*10.87*	**10.85**	*10.95*	*10.85*
Turkmenistan	**0.27**	**0.28**	**0.28**	**0.25**	**0.29**	**0.27**	*0.28*	*0.27*	*0.28*	*0.29*	*0.29*	*0.28*	**0.27**	*0.28*	*0.28*
Other Eurasia	**0.20**	**0.21**	**0.22**	**0.21**	**0.20**	**0.21**	*0.22*	*0.22*	*0.21*	*0.21*	*0.21*	*0.20*	**0.21**	*0.21*	*0.21*
Middle East	**1.19**	**1.17**	**1.20**	**1.16**	**1.19**	**1.15**	*1.17*	*1.15*	*1.12*	*1.10*	*1.10*	*1.10*	**1.18**	*1.16*	*1.11*
Oman	**0.96**	**0.95**	**0.96**	**0.94**	**0.97**	**0.99**	*1.03*	*1.02*	*0.94*	*0.94*	*0.94*	*0.94*	**0.95**	*1.00*	*0.94*
Syria	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.04**	*0.04*	*0.04*	*0.01*	*0.01*	*0.01*	*0.00*	**0.03**	*0.04*	*0.01*
Yemen	**0.13**	**0.13**	**0.13**	**0.12**	**0.11**	**0.05**	*0.03*	*0.02*	*0.10*	*0.08*	*0.09*	*0.08*	**0.13**	*0.05*	*0.09*
Asia and Oceania	**9.19**	**9.20**	**9.08**	**9.35**	**9.31**	**9.38**	*9.43*	*9.45*	*9.45*	*9.49*	*9.54*	*9.54*	**9.20**	*9.39*	*9.51*
Australia	**0.46**	**0.48**	**0.49**	**0.46**	**0.39**	**0.39**	*0.47*	*0.46*	*0.44*	*0.44*	*0.45*	*0.44*	**0.47**	*0.43*	*0.44*
China	**4.60**	**4.61**	**4.54**	**4.68**	**4.66**	**4.73**	*4.69*	*4.67*	*4.64*	*4.67*	*4.68*	*4.68*	**4.61**	*4.69*	*4.67*
India	**1.02**	**1.01**	**0.99**	**1.02**	**1.01**	**1.00**	*1.00*	*1.02*	*1.03*	*1.03*	*1.03*	*1.03*	**1.01**	*1.01*	*1.03*
Indonesia	**0.91**	**0.91**	**0.91**	**0.90**	**0.88**	**0.93**	*0.94*	*0.95*	*0.97*	*0.99*	*1.01*	*1.01*	**0.91**	*0.92*	*0.99*
Malaysia	**0.67**	**0.67**	**0.64**	**0.74**	**0.79**	**0.75**	*0.74*	*0.76*	*0.78*	*0.77*	*0.76*	*0.77*	**0.68**	*0.76*	*0.77*
Vietnam	**0.32**	**0.31**	**0.30**	**0.33**	**0.35**	**0.34**	*0.36*	*0.37*	*0.36*	*0.36*	*0.37*	*0.37*	**0.32**	*0.35*	*0.37*
Africa	**2.34**	**2.32**	**2.33**	**2.35**	**2.33**	**2.32**	*2.33*	*2.33*	*2.31*	*2.31*	*2.32*	*2.35*	**2.34**	*2.33*	*2.32*
Egypt	**0.70**	**0.70**	**0.70**	**0.72**	**0.71**	**0.70**	*0.71*	*0.70*	*0.70*	*0.70*	*0.70*	*0.69*	**0.71**	*0.71*	*0.70*
Equatorial Guinea	**0.29**	**0.29**	**0.29**	**0.29**	**0.27**	**0.27**	*0.27*	*0.27*	*0.25*	*0.25*	*0.25*	*0.25*	**0.29**	*0.27*	*0.25*
Gabon	**0.22**	**0.22**	**0.22**	**0.22**	**0.21**	**0.21**	*0.21*	*0.21*	*0.21*	*0.21*	*0.21*	*0.21*	**0.22**	*0.21*	*0.21*
Sudan	**0.26**	**0.26**	**0.26**	**0.26**	**0.26**	**0.25**	*0.26*	*0.26*	*0.26*	*0.26*	*0.26*	*0.26*	**0.26**	*0.26*	*0.26*
Total non-OPEC liquids	**55.62**	**56.60**	**57.21**	**58.36**	**57.97**	**58.19**	*58.60*	*58.19*	*57.67*	*58.27*	*58.64*	*58.92*	**56.95**	*58.24*	*58.38*
OPEC non-crude liquids	**6.25**	**6.24**	**6.24**	**6.32**	**6.36**	**6.41**	*6.49*	*6.56*	*6.64*	*6.72*	*6.79*	*6.87*	**6.26**	*6.46*	*6.76*
Non-OPEC + OPEC non-crude	**61.87**	**62.83**	**63.45**	**64.69**	**64.34**	**64.60**	*65.09*	*64.75*	*64.31*	*64.99*	*65.43*	*65.80*	**63.22**	*64.70*	*65.13*
Unplanned non-OPEC Production Outages	**0.66**	**0.67**	**0.60**	**0.57**	**0.62**	**0.83**	*0.76*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	**0.62**	*n/a*	*n/a*

- = no data available

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.

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Crude Oil															
Algeria	**1.15**	**1.15**	**1.15**	**1.15**	**1.10**	**1.10**	*1.10*	-	-	-	-	-	**1.15**	-	-
Angola	**1.63**	**1.63**	**1.72**	**1.73**	**1.75**	**1.77**	*1.76*	-	-	-	-	-	**1.68**	-	-
Ecudaor	**0.55**	**0.56**	**0.56**	**0.56**	**0.55**	**0.54**	*0.56*	-	-	-	-	-	**0.56**	-	-
Iran	**2.80**	**2.80**	**2.80**	**2.80**	**2.80**	**2.80**	*2.80*	-	-	-	-	-	**2.80**	-	-
Iraq	**3.26**	**3.29**	**3.28**	**3.53**	**3.57**	**4.03**	*4.21*	-	-	-	-	-	**3.34**	-	-
Kuwait	**2.60**	**2.60**	**2.60**	**2.48**	**2.57**	**2.53**	*2.50*	-	-	-	-	-	**2.57**	-	-
Libya	**0.38**	**0.23**	**0.58**	**0.69**	**0.40**	**0.45**	*0.37*	-	-	-	-	-	**0.47**	-	-
Nigeria	**2.00**	**1.97**	**2.07**	**1.98**	**2.03**	**1.88**	*1.92*	-	-	-	-	-	**2.00**	-	-
Qatar	**0.74**	**0.73**	**0.72**	**0.68**	**0.68**	**0.68**	*0.68*	-	-	-	-	-	**0.72**	-	-
Saudi Arabia	**9.80**	**9.65**	**9.70**	**9.63**	**9.73**	**10.07**	*10.25*	-	-	-	-	-	**9.70**	-	-
United Arab Emirates	**2.70**	**2.70**	**2.70**	**2.70**	**2.70**	**2.70**	*2.70*	-	-	-	-	-	**2.70**	-	-
Venezuela	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	*2.40*	-	-	-	-	-	**2.40**	-	-
OPEC Total	**30.01**	**29.70**	**30.28**	**30.34**	**30.29**	**30.96**	*31.25*	*30.90*	*30.36*	*30.63*	*31.23*	*31.16*	**30.08**	*30.85*	*30.85*
Other Liquids	**6.25**	**6.24**	**6.24**	**6.32**	**6.36**	**6.41**	*6.49*	*6.56*	*6.64*	*6.72*	*6.79*	*6.87*	**6.26**	*6.46*	*6.76*
Total OPEC Supply	**36.26**	**35.94**	**36.52**	**36.66**	**36.66**	**37.37**	*37.73*	*37.46*	*37.00*	*37.35*	*38.03*	*38.03*	**36.35**	*37.31*	*37.60*
Crude Oil Production Capacity															
Africa	**5.15**	**4.97**	**5.51**	**5.54**	**5.29**	**5.18**	*5.14*	*5.20*	*5.18*	*5.20*	*5.21*	*5.22*	**5.29**	*5.20*	*5.20*
South America	**2.95**	**2.95**	**2.95**	**2.95**	**2.95**	**2.93**	*2.95*	*2.97*	*2.86*	*2.85*	*2.86*	*2.88*	**2.95**	*2.95*	*2.86*
Middle East	**23.93**	**23.88**	**23.86**	**23.79**	**23.90**	**24.24**	*24.40*	*24.41*	*24.46*	*24.74*	*25.35*	*25.38*	**23.86**	*24.24*	*24.98*
OPEC Total	**32.02**	**31.80**	**32.32**	**32.28**	**32.14**	**32.36**	*32.49*	*32.57*	*32.50*	*32.79*	*33.42*	*33.49*	**32.10**	*32.39*	*33.05*
Surplus Crude Oil Production Capacity															
Africa	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.01**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.01*	*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	**2.01**	**2.09**	**2.04**	**1.93**	**1.83**	**1.40**	*1.24*	*1.68*	*2.13*	*2.16*	*2.19*	*2.33*	**2.02**	*1.54*	*2.20*
OPEC Total	**2.01**	**2.09**	**2.04**	**1.93**	**1.85**	**1.40**	*1.24*	*1.68*	*2.13*	*2.16*	*2.19*	*2.33*	**2.02**	*1.54*	*2.20*
Unplanned OPEC Production Outages	**2.32**	**2.57**	**2.26**	**2.43**	**2.72**	**2.79**	*2.95*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	**2.40**	*n/a*	*n/a*

- = 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 Emirate (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.

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

Projections: EIA Regional Short-Term Energy Model.

Table 3d. World Petroleum and Other Liquids Consumption (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016
North America	**23.21**	**23.09**	**23.74**	**23.92**	**23.53**	**23.52**	*24.03*	*23.92*	*23.66*	*23.77*	*24.16*	*24.08*	**23.49**	*23.75*	*23.92*
Canada	**2.43**	**2.34**	**2.46**	**2.42**	**2.36**	**2.32**	*2.43*	*2.41*	*2.38*	*2.32*	*2.43*	*2.41*	**2.41**	*2.38*	*2.38*
Mexico	**1.95**	**1.97**	**1.96**	**1.98**	**1.87**	**1.95**	*1.92*	*1.93*	*1.93*	*1.95*	*1.92*	*1.93*	**1.97**	*1.92*	*1.93*
United States	**18.82**	**18.77**	**19.31**	**19.51**	**19.29**	**19.25**	*19.67*	*19.56*	*19.33*	*19.49*	*19.80*	*19.73*	**19.11**	*19.44*	*19.59*
Central and South America	**7.05**	**7.30**	**7.33**	**7.31**	**7.05**	**7.37**	*7.41*	*7.38*	*7.17*	*7.44*	*7.47*	*7.45*	**7.25**	*7.30*	*7.38*
Brazil	**3.03**	**3.14**	**3.21**	**3.20**	**3.03**	**3.14**	*3.21*	*3.20*	*3.06*	*3.18*	*3.24*	*3.23*	**3.15**	*3.15*	*3.18*
Europe	**13.68**	**14.09**	**14.59**	**14.25**	**14.26**	**14.02**	*14.49*	*14.45*	*14.30*	*14.03*	*14.49*	*14.45*	**14.16**	*14.31*	*14.32*
Eurasia	**4.85**	**4.79**	**5.01**	**4.99**	**4.74**	**4.67**	*4.95*	*4.93*	*4.76*	*4.69*	*4.97*	*4.95*	**4.91**	*4.83*	*4.84*
Russia	**3.49**	**3.45**	**3.65**	**3.63**	**3.39**	**3.34**	*3.54*	*3.53*	*3.35*	*3.30*	*3.50*	*3.48*	**3.56**	*3.45*	*3.41*
Middle East	**7.97**	**8.33**	**8.98**	**8.17**	**8.01**	**8.64**	*9.22*	*8.37*	*8.36*	*8.96*	*9.56*	*8.68*	**8.36**	*8.56*	*8.89*
Asia and Oceania	**30.88**	**30.48**	**29.99**	**30.91**	**31.39**	**31.15**	*30.62*	*31.53*	*31.95*	*31.84*	*31.30*	*32.22*	**30.56**	*31.17*	*31.83*
China	**10.45**	**11.03**	**10.98**	**10.94**	**10.77**	**11.36**	*11.32*	*11.27*	*11.06*	*11.67*	*11.62*	*11.57*	**10.85**	*11.18*	*11.48*
Japan	**5.02**	**3.88**	**3.88**	**4.43**	**4.74**	**3.85**	*3.88*	*4.25*	*4.55*	*3.82*	*3.85*	*4.22*	**4.30**	*4.18*	*4.11*
India	**3.88**	**3.86**	**3.54**	**3.83**	**4.08**	**4.06**	*3.72*	*4.02*	*4.25*	*4.23*	*3.88*	*4.19*	**3.78**	*3.97*	*4.14*
Africa	**3.73**	**3.73**	**3.68**	**3.70**	**3.89**	**3.88**	*3.84*	*3.86*	*4.04*	*4.03*	*3.99*	*4.01*	**3.71**	*3.86*	*4.02*
Total OECD Liquid Fuels Consumption	**45.75**	**44.84**	**45.97**	**46.44**	**46.53**	**45.33**	*46.28*	*46.73*	*46.73*	*45.63*	*46.47*	*46.95*	**45.75**	*46.22*	*46.45*
Total non-OECD Liquid Fuels Consumption	**45.63**	**46.96**	**47.35**	**46.81**	**46.35**	**47.93**	*48.27*	*47.71*	*47.50*	*49.13*	*49.47*	*48.89*	**46.69**	*47.57*	*48.75*
Total World Liquid Fuels Consumption	**91.38**	**91.80**	**93.32**	**93.25**	**92.87**	**93.26**	*94.55*	*94.44*	*94.23*	*94.76*	*95.95*	*95.84*	**92.45**	*93.79*	*95.20*
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	**113.3**	**114.1**	**114.9**	**115.7**	**116.2**	**116.9**	*117.5*	*118.4*	*119.1*	*120.0*	*120.9*	*122.0*	**114.5**	*117.2*	*120.5*
Percent change from prior year	**2.8**	**2.8**	**2.7**	**2.7**	**2.6**	**2.4**	*2.3*	*2.3*	*2.5*	*2.7*	*2.9*	*3.1*	**2.8**	*2.4*	*2.8*
OECD Index, 2010 Q1 = 100	**109.8**	**110.3**	**111.0**	**111.6**	**112.1**	**112.6**	*113.1*	*113.7*	*114.3*	*115.0*	*115.7*	*116.5*	**110.7**	*112.9*	*115.4*
Percent change from prior year	**1.8**	**1.9**	**1.9**	**1.9**	**2.0**	**2.1**	*1.9*	*1.9*	*2.0*	*2.1*	*2.3*	*2.5*	**1.9**	*2.0*	*2.2*
Non-OECD Index, 2010 Q1 = 100	**117.5**	**118.7**	**119.7**	**120.9**	**121.4**	**122.1**	*122.9*	*124.2*	*125.2*	*126.4*	*127.5*	*128.9*	**119.2**	*122.6*	*127.0*
Percent change from prior year	**3.9**	**3.8**	**3.7**	**3.7**	**3.3**	**2.8**	*2.7*	*2.7*	*3.1*	*3.5*	*3.7*	*3.8*	**3.8**	*2.9*	*3.5*
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100	**108.07**	**107.84**	**109.02**	**113.60**	**119.25**	**119.49**	*123.06*	*125.27*	*125.64*	*125.50*	*125.20*	*125.10*	**109.63**	*121.76*	*125.36*
Percent change from prior year	**3.8**	**2.0**	**1.9**	**6.7**	**10.3**	**10.8**	*12.9*	*10.3*	*5.4*	*5.0*	*1.7*	*-0.1*	**3.6**	*11.1*	*3.0*

- = no data available

OECD = Organisation for Economic Co-operation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

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

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

Historical data: Latest data available from Energy Information Administration international energy statistics.

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

Projections: EIA Regional Short-Term Energy Model.

Table 4a. U.S. Petroleum and Other Liquids Supply, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	**8.14**	**8.61**	**8.84**	**9.25**	**9.39**	**9.41**	*9.17*	*9.02*	*8.90*	*8.82*	*8.71*	*8.99*	**8.71**	*9.25*	*8.86*
Alaska	**0.53**	**0.52**	**0.43**	**0.51**	**0.50**	**0.48**	*0.43*	*0.49*	*0.48*	*0.47*	*0.42*	*0.47*	**0.50**	*0.47*	*0.46*
Federal Gulf of Mexico (b)	**1.32**	**1.42**	**1.43**	**1.42**	**1.46**	**1.47**	*1.51*	*1.55*	*1.61*	*1.62*	*1.52*	*1.63*	**1.40**	*1.50*	*1.59*
Lower 48 States (excl GOM)	**6.29**	**6.68**	**6.98**	**7.32**	**7.42**	**7.47**	*7.24*	*6.98*	*6.81*	*6.73*	*6.77*	*6.89*	**6.82**	*7.28*	*6.80*
Crude Oil Net Imports (c)	**7.11**	**6.93**	**7.15**	**6.78**	**6.84**	**6.74**	*6.94*	*6.52*	*6.67*	*7.28*	*7.54*	*6.68*	**6.99**	*6.76*	*7.04*
SPR Net Withdrawals	**0.00**	**0.05**	**0.00**	**0.00**	**0.00**	**-0.03**	*-0.01*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.01**	*-0.01*	*0.00*
Commercial Inventory Net Withdrawals	**-0.33**	**0.01**	**0.25**	**-0.33**	**-0.91**	**0.06**	*0.12*	*0.15*	*-0.27*	*0.11*	*0.15*	*0.14*	**-0.10**	*-0.14*	*0.03*
Crude Oil Adjustment (d)	**0.27**	**0.27**	**0.12**	**0.25**	**0.20**	**0.30**	*0.36*	*0.15*	*0.19*	*0.19*	*0.21*	*0.15*	**0.23**	*0.25*	*0.19*
Total Crude Oil Input to Refineries	**15.19**	**15.88**	**16.36**	**15.96**	**15.53**	**16.48**	*16.58*	*15.84*	*15.50*	*16.38*	*16.62*	*15.96*	**15.85**	*16.11*	*16.12*
Other Supply															
Refinery Processing Gain	**1.05**	**1.07**	**1.10**	**1.10**	**0.99**	**1.02**	*1.08*	*1.08*	*1.05*	*1.08*	*1.11*	*1.09*	**1.08**	*1.04*	*1.08*
Natural Gas Plant Liquids Production	**2.75**	**3.00**	**3.15**	**3.16**	**3.09**	**3.27**	*3.34*	*3.39*	*3.41*	*3.55*	*3.66*	*3.80*	**3.01**	*3.27*	*3.61*
Renewables and Oxygenate Production (e)	**1.01**	**1.06**	**1.06**	**1.08**	**1.05**	**1.10**	*1.10*	*1.08*	*1.09*	*1.08*	*1.09*	*1.07*	**1.05**	*1.08*	*1.08*
Fuel Ethanol Production	**0.91**	**0.94**	**0.93**	**0.96**	**0.96**	**0.96**	*0.96*	*0.94*	*0.97*	*0.95*	*0.96*	*0.94*	**0.93**	*0.95*	*0.95*
Petroleum Products Adjustment (f)	**0.20**	**0.23**	**0.22**	**0.24**	**0.20**	**0.21**	*0.22*	*0.22*	*0.21*	*0.23*	*0.23*	*0.23*	**0.22**	*0.21*	*0.22*
Product Net Imports (c)	**-1.73**	**-1.74**	**-2.11**	**-2.13**	**-1.89**	**-2.12**	*-2.30*	*-2.54*	*-2.24*	*-2.45*	*-2.69*	*-2.81*	**-1.93**	*-2.21*	*-2.55*
Hydrocarbon Gas Liquids	**-0.36**	**-0.57**	**-0.66**	**-0.64**	**-0.68**	**-0.80**	*-0.90*	*-1.00*	*-1.01*	*-1.11*	*-1.24*	*-1.25*	**-0.56**	*-0.85*	*-1.15*
Unfinished Oils	**0.34**	**0.43**	**0.34**	**0.37**	**0.26**	**0.28**	*0.38*	*0.38*	*0.39*	*0.44*	*0.44*	*0.38*	**0.37**	*0.33*	*0.41*
Other HC/Oxygenates	**-0.09**	**-0.09**	**-0.08**	**-0.09**	**-0.08**	**-0.09**	*-0.06*	*-0.06*	*-0.09*	*-0.07*	*-0.05*	*-0.04*	**-0.09**	*-0.07*	*-0.06*
Motor Gasoline Blend Comp.	**0.30**	**0.58**	**0.46**	**0.39**	**0.41**	**0.52**	*0.55*	*0.40*	*0.41*	*0.61*	*0.44*	*0.40*	**0.44**	*0.47*	*0.46*
Finished Motor Gasoline	**-0.40**	**-0.37**	**-0.33**	**-0.47**	**-0.44**	**-0.32**	*-0.42*	*-0.52*	*-0.38*	*-0.47*	*-0.37*	*-0.47*	**-0.39**	*-0.42*	*-0.42*
Jet Fuel	**-0.07**	**-0.02**	**-0.09**	**-0.09**	**-0.06**	**0.01**	*-0.05*	*-0.01*	*-0.03*	*-0.06*	*-0.01*	*0.00*	**-0.07**	*-0.03*	*-0.03*
Distillate Fuel Oil	**-0.67**	**-1.00**	**-1.07**	**-0.89**	**-0.67**	**-1.05**	*-1.11*	*-0.99*	*-0.76*	*-0.98*	*-1.10*	*-1.05*	**-0.91**	*-0.96*	*-0.98*
Residual Fuel Oil	**-0.23**	**-0.18**	**-0.17**	**-0.18**	**-0.13**	**-0.21**	*-0.19*	*-0.21*	*-0.24*	*-0.26*	*-0.26*	*-0.22*	**-0.19**	*-0.19*	*-0.24*
Other Oils (g)	**-0.55**	**-0.52**	**-0.50**	**-0.53**	**-0.50**	**-0.46**	*-0.50*	*-0.54*	*-0.53*	*-0.54*	*-0.55*	*-0.55*	**-0.53**	*-0.50*	*-0.54*
Product Inventory Net Withdrawals	**0.35**	**-0.72**	**-0.47**	**0.11**	**0.36**	**-0.72**	*-0.35*	*0.48*	*0.31*	*-0.37*	*-0.21*	*0.38*	**-0.18**	*-0.06*	*0.03*
Total Supply	**18.82**	**18.77**	**19.31**	**19.51**	**19.32**	**19.25**	*19.67*	*19.56*	*19.33*	*19.49*	*19.80*	*19.73*	**19.11**	*19.45*	*19.59*
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	**2.70**	**2.12**	**2.32**	**2.66**	**2.72**	**2.27**	*2.39*	*2.71*	*2.77*	*2.38*	*2.46*	*2.80*	**2.45**	*2.52*	*2.60*
Unfinished Oils	**-0.07**	**-0.03**	**-0.03**	**-0.02**	**-0.05**	**0.05**	*0.04*	*0.04*	*0.00*	*0.00*	*0.01*	*0.02*	**-0.04**	*0.02*	*0.01*
Motor Gasoline	**8.54**	**9.01**	**9.13**	**9.00**	**8.81**	**9.26**	*9.32*	*9.05*	*8.87*	*9.24*	*9.31*	*9.07*	**8.92**	*9.11*	*9.12*
Fuel Ethanol blended into Motor Gasoline	**0.84**	**0.89**	**0.89**	**0.90**	**0.87**	**0.92**	*0.92*	*0.89*	*0.87*	*0.91*	*0.93*	*0.90*	**0.88**	*0.90*	*0.90*
Jet Fuel	**1.39**	**1.47**	**1.52**	**1.50**	**1.45**	**1.54**	*1.60*	*1.51*	*1.45*	*1.53*	*1.58*	*1.54*	**1.47**	*1.53*	*1.52*
Distillate Fuel Oil	**4.19**	**3.95**	**3.89**	**4.12**	**4.27**	**3.88**	*3.84*	*4.05*	*4.15*	*4.03*	*3.97*	*4.10*	**4.04**	*4.01*	*4.06*
Residual Fuel Oil	**0.25**	**0.25**	**0.25**	**0.28**	**0.24**	**0.19**	*0.24*	*0.22*	*0.22*	*0.20*	*0.19*	*0.20*	**0.26**	*0.22*	*0.20*
Other Oils (g)	**1.83**	**2.01**	**2.24**	**1.96**	**1.85**	**2.06**	*2.24*	*1.99*	*1.89*	*2.11*	*2.27*	*2.00*	**2.01**	*2.03*	*2.07*
Total Consumption	**18.82**	**18.77**	**19.31**	**19.51**	**19.29**	**19.25**	*19.67*	*19.56*	*19.33*	*19.49*	*19.80*	*19.73*	**19.11**	*19.44*	*19.59*
Total Petroleum and Other Liquids Net Imports	**5.38**	**5.20**	**5.04**	**4.65**	**4.95**	**4.61**	*4.64*	*3.98*	*4.43*	*4.82*	*4.85*	*3.88*	**5.07**	*4.54*	*4.50*
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	**386.7**	**386.0**	**363.3**	**393.3**	**474.8**	**469.5**	*458.4*	*444.3*	*468.9*	*459.3*	*445.3*	*432.5*	**393.3**	*444.3*	*432.5*
Hydrocarbon Gas Liquids	**99.5**	**166.1**	**211.7**	**175.4**	**138.8**	**196.3**	*226.0*	*179.1*	*147.3*	*186.9*	*209.8*	*167.9*	**175.4**	*179.1*	*167.9*
Unfinished Oils	**91.9**	**87.6**	**84.3**	**78.3**	**84.7**	**86.0**	*88.5*	*82.2*	*92.1*	*89.2*	*87.0*	*81.7*	**78.3**	*82.2*	*81.7*
Other HC/Oxygenates	**22.7**	**23.3**	**22.4**	**23.3**	**26.7**	**25.0**	*24.7*	*25.0*	*27.1*	*25.9*	*25.2*	*25.4*	**23.3**	*25.0*	*25.4*
Total Motor Gasoline	**221.6**	**219.3**	**212.5**	**240.4**	**231.5**	**221.0**	*222.4*	*231.7*	*229.4*	*223.2*	*219.9*	*232.7*	**240.4**	*231.7*	*232.7*
Finished Motor Gasoline	**34.4**	**28.8**	**28.4**	**31.2**	**26.9**	**25.7**	*28.3*	*28.9*	*26.6*	*26.3*	*25.7*	*27.2*	**31.2**	*28.9*	*27.2*
Motor Gasoline Blend Comp.	**187.2**	**190.5**	**184.1**	**209.1**	**204.6**	**195.4**	*194.1*	*202.8*	*202.8*	*196.9*	*194.3*	*205.5*	**209.1**	*202.8*	*205.5*
Jet Fuel	**36.4**	**37.1**	**39.8**	**38.3**	**37.2**	**43.7**	*40.2*	*37.6*	*37.9*	*39.0*	*41.8*	*38.3*	**38.3**	*37.6*	*38.3*
Distillate Fuel Oil	**115.2**	**121.6**	**131.4**	**136.3**	**128.3**	**139.4**	*151.3*	*152.9*	*138.9*	*144.9*	*153.2*	*154.5*	**136.3**	*152.9*	*154.5*
Residual Fuel Oil	**36.0**	**36.6**	**36.6**	**33.7**	**38.1**	**41.8**	*39.7*	*38.5*	*38.5*	*38.5*	*36.9*	*37.2*	**33.7**	*38.5*	*37.2*
Other Oils (g)	**52.9**	**50.6**	**46.7**	**49.6**	**57.3**	**54.6**	*47.0*	*48.3*	*55.7*	*53.5*	*46.6*	*48.0*	**49.6**	*48.3*	*48.0*
Total Commercial Inventory	**1,063**	**1,128**	**1,149**	**1,169**	**1,217**	**1,277**	*1,298*	*1,240*	*1,236*	*1,260*	*1,266*	*1,218*	**1,169**	*1,240*	*1,218*
Crude Oil in SPR	**696**	**691**	**691**	**691**	**691**	**694**	*695*	*695*	*695*	*695*	*695*	*695*	**691**	*695*	*695*

- = no data available

(a) Includes lease condensate.

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

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

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

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

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

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

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly* , DOE/EIA-0109; *Petroleum Supply Annual* , DOE/EIA-0340/2; and *Weekly Petroleum Status Report* , DOE/EIA-0208.

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

Projections: EIA Regional Short-Term Energy Model.

Table 4b. U.S. Hydrocarbon Gas Liquids (HGL) and Petroleum Refinery Balances (million barrels per day, except inventories and utilization factor)

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
HGL Production															
Natural Gas Processing Plants															
Ethane	**1.05**	**1.11**	**1.11**	**1.09**	**1.05**	**1.10**	*1.14*	*1.21*	*1.27*	*1.32*	*1.36*	*1.48*	**1.09**	*1.13*	*1.36*
Propane	**0.88**	**0.96**	**1.03**	**1.06**	**1.07**	**1.12**	*1.12*	*1.13*	*1.12*	*1.15*	*1.18*	*1.22*	**0.98**	*1.11*	*1.17*
Butanes	**0.48**	**0.53**	**0.57**	**0.59**	**0.58**	**0.62**	*0.63*	*0.61*	*0.60*	*0.63*	*0.65*	*0.65*	**0.54**	*0.61*	*0.63*
Natural Gasoline (Pentanes Plus)	**0.34**	**0.39**	**0.43**	**0.42**	**0.39**	**0.44**	*0.45*	*0.43*	*0.42*	*0.45*	*0.47*	*0.45*	**0.39**	*0.43*	*0.45*
Refinery and Blender Net Production															
Ethane/Ethylene	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	*0.01*	*0.01*	*0.00*	*0.01*	*0.01*	*0.00*	**0.01**	*0.01*	*0.01*
Propane/Propylene	**0.57**	**0.60**	**0.59**	**0.59**	**0.54**	**0.58**	*0.58*	*0.59*	*0.58*	*0.61*	*0.60*	*0.59*	**0.59**	*0.57*	*0.59*
Butanes/Butylenes	**-0.05**	**0.27**	**0.21**	**-0.18**	**-0.08**	**0.27**	*0.19*	*-0.17*	*-0.03*	*0.26*	*0.18*	*-0.17*	**0.06**	*0.05*	*0.06*
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	**-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*
HGL Net Imports															
Ethane	**-0.02**	**-0.02**	**-0.05**	**-0.06**	**-0.06**	**-0.07**	*-0.07*	*-0.11*	*-0.12*	*-0.15*	*-0.19*	*-0.28*	**-0.04**	*-0.08*	*-0.18*
Propane/Propylene	**-0.17**	**-0.34**	**-0.36**	**-0.39**	**-0.40**	**-0.49**	*-0.52*	*-0.61*	*-0.55*	*-0.62*	*-0.66*	*-0.69*	**-0.32**	*-0.51*	*-0.63*
Butanes/Butylenes	**-0.04**	**-0.06**	**-0.09**	**-0.03**	**-0.06**	**-0.09**	*-0.11*	*-0.09*	*-0.14*	*-0.15*	*-0.17*	*-0.08*	**-0.06**	*-0.09*	*-0.13*
Natural Gasoline (Pentanes Plus)	**-0.13**	**-0.16**	**-0.16**	**-0.15**	**-0.17**	**-0.15**	*-0.19*	*-0.19*	*-0.21*	*-0.19*	*-0.21*	*-0.20*	**-0.15**	*-0.17*	*-0.20*
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	**0.37**	**0.28**	**0.30**	**0.48**	**0.40**	**0.27**	*0.31*	*0.42*	*0.35*	*0.29*	*0.30*	*0.42*	**0.36**	*0.35*	*0.34*
Natural Gasoline (Pentanes Plus)	**0.14**	**0.16**	**0.16**	**0.16**	**0.15**	**0.14**	*0.17*	*0.18*	*0.17*	*0.18*	*0.18*	*0.18*	**0.15**	*0.16*	*0.18*
HGL Consumption															
Ethane/Ethylene	**1.04**	**0.99**	**1.10**	**1.06**	**1.03**	**1.02**	*1.10*	*1.14*	*1.13*	*1.14*	*1.20*	*1.21*	**1.05**	*1.07*	*1.17*
Propane/Propylene	**1.46**	**0.91**	**1.01**	**1.30**	**1.43**	**0.92**	*1.01*	*1.29*	*1.40*	*0.97*	*0.99*	*1.28*	**1.17**	*1.16*	*1.16*
Butanes/Butylenes	**0.15**	**0.18**	**0.17**	**0.22**	**0.16**	**0.24**	*0.22*	*0.22*	*0.19*	*0.23*	*0.22*	*0.23*	**0.18**	*0.21*	*0.22*
Natural Gasoline (Pentanes Plus)	**0.05**	**0.04**	**0.04**	**0.08**	**0.10**	**0.09**	*0.06*	*0.06*	*0.04*	*0.05*	*0.05*	*0.06*	**0.05**	*0.08*	*0.05*
HGL Inventories (million barrels)															
Ethane/Ethylene	**30.03**	**37.15**	**38.95**	**36.45**	**31.38**	**31.65**	*29.73*	*28.41*	*27.63*	*32.04*	*30.94*	*30.35*	**35.67**	*30.28*	*30.24*
Propane/Propylene	**28.81**	**57.90**	**81.41**	**77.95**	**58.10**	**84.20**	*99.19*	*82.01*	*59.59*	*74.47*	*86.25*	*70.59*	**77.95**	*82.01*	*70.59*
Butanes/Butylenes	**26.31**	**52.35**	**72.40**	**41.95**	**32.46**	**59.42**	*76.14*	*50.15*	*40.28*	*59.82*	*71.85*	*47.57*	**41.95**	*50.15*	*47.57*
Natural Gasoline (Pentanes Plus)	**13.99**	**15.77**	**20.39**	**20.61**	**17.16**	**20.51**	*21.40*	*20.06*	*18.62*	*19.92*	*21.11*	*20.33*	**20.61**	*20.06*	*20.33*
Refinery and Blender Net Inputs															
Crude Oil	**15.19**	**15.88**	**16.36**	**15.96**	**15.53**	**16.48**	*16.58*	*15.84*	*15.50*	*16.38*	*16.62*	*15.96*	**15.85**	*16.11*	*16.12*
Hydrocarbon Gas Liquids	**0.52**	**0.43**	**0.46**	**0.64**	**0.54**	**0.40**	*0.48*	*0.60*	*0.52*	*0.47*	*0.48*	*0.60*	**0.51**	*0.50*	*0.52*
Other Hydrocarbons/Oxygenates	**1.09**	**1.16**	**1.16**	**1.14**	**1.12**	**1.18**	*1.21*	*1.20*	*1.16*	*1.20*	*1.24*	*1.21*	**1.14**	*1.18*	*1.20*
Unfinished Oils	**0.26**	**0.51**	**0.41**	**0.45**	**0.24**	**0.22**	*0.32*	*0.41*	*0.28*	*0.47*	*0.45*	*0.42*	**0.41**	*0.30*	*0.40*
Motor Gasoline Blend Components	**0.55**	**1.00**	**0.80**	**0.33**	**0.72**	**0.91**	*0.76*	*0.48*	*0.60*	*0.85*	*0.63*	*0.45*	**0.67**	*0.72*	*0.63*
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	**17.60**	**18.98**	**19.18**	**18.51**	**18.14**	**19.18**	*19.35*	*18.52*	*18.06*	*19.37*	*19.43*	*18.64*	**18.57**	*18.80*	*18.88*
Refinery Processing Gain	**1.05**	**1.07**	**1.10**	**1.10**	**0.99**	**1.02**	*1.08*	*1.08*	*1.05*	*1.08*	*1.11*	*1.09*	**1.08**	*1.04*	*1.08*
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	**0.53**	**0.87**	**0.80**	**0.41**	**0.47**	**0.86**	*0.77*	*0.42*	*0.56*	*0.87*	*0.78*	*0.42*	**0.65**	*0.63*	*0.66*
Finished Motor Gasoline	**9.11**	**9.77**	**9.71**	**9.69**	**9.48**	**9.83**	*9.94*	*9.73*	*9.40*	*9.87*	*9.83*	*9.71*	**9.57**	*9.74*	*9.71*
Jet Fuel	**1.45**	**1.50**	**1.64**	**1.57**	**1.50**	**1.61**	*1.61*	*1.49*	*1.48*	*1.60*	*1.62*	*1.50*	**1.54**	*1.55*	*1.55*
Distillate Fuel	**4.69**	**4.97**	**5.00**	**5.00**	**4.82**	**4.99**	*5.03*	*5.01*	*4.71*	*5.03*	*5.11*	*5.12*	**4.92**	*4.96*	*4.99*
Residual Fuel	**0.46**	**0.44**	**0.42**	**0.43**	**0.43**	**0.44**	*0.42*	*0.42*	*0.45*	*0.45*	*0.43*	*0.42*	**0.44**	*0.42*	*0.44*
Other Oils (a)	**2.42**	**2.50**	**2.70**	**2.52**	**2.44**	**2.48**	*2.65*	*2.54*	*2.50*	*2.63*	*2.75*	*2.56*	**2.54**	*2.53*	*2.61*
Total Refinery and Blender Net Production	**18.65**	**20.05**	**20.28**	**19.62**	**19.13**	**20.20**	*20.42*	*19.61*	*19.11*	*20.46*	*20.53*	*19.73*	**19.65**	*19.85*	*19.96*
Refinery Distillation Inputs	**15.52**	**16.18**	**16.65**	**16.26**	**15.78**	**16.69**	*16.85*	*16.16*	*15.83*	*16.62*	*16.90*	*16.27*	**16.16**	*16.37*	*16.41*
Refinery Operable Distillation Capacity	**17.93**	**17.91**	**17.83**	**17.82**	**17.88**	**17.98**	*18.01*	*18.02*	*18.05*	*18.05*	*18.21*	*18.30*	**17.87**	*17.97*	*18.16*
Refinery Distillation Utilization Factor	**0.87**	**0.90**	**0.93**	**0.91**	**0.88**	**0.93**	*0.94*	*0.90*	*0.88*	*0.92*	*0.93*	*0.89*	**0.90**	*0.91*	*0.90*

- = no data available

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Prices (cents per gallon)															
Refiner Wholesale Price	**272**	**298**	**276**	**203**	**159**	**201**	*179*	*138*	*149*	*184*	*181*	*155*	**262**	*170*	*167*
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	**344**	**365**	**348**	**292**	**228**	**259**	*247*	*211*	*220*	*251*	*250*	*231*	**337**	*237*	*238*
PADD 2	**337**	**365**	**343**	**279**	**216**	**256**	*253*	*206*	*212*	*252*	*249*	*220*	**331**	*233*	*234*
PADD 3	**318**	**345**	**329**	**265**	**204**	**240**	*229*	*189*	*197*	*232*	*230*	*204*	**314**	*215*	*216*
PADD 4	**326**	**351**	**363**	**297**	**207**	**261**	*277*	*216*	*201*	*242*	*252*	*226*	**335**	*241*	*230*
PADD 5	**362**	**401**	**386**	**315**	**271**	**328**	*327*	*246*	*241*	*281*	*281*	*257*	**366**	*293*	*266*
U.S. Average	**340**	**368**	**350**	**288**	**227**	**267**	*260*	*212*	*217*	*253*	*252*	*228*	**336**	*242*	*238*
Gasoline All Grades Including Taxes	**348**	**375**	**358**	**296**	**236**	**275**	*269*	*221*	*225*	*262*	*261*	*236*	**344**	*251*	*246*
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	**57.7**	**63.1**	**55.7**	**62.1**	**64.5**	**61.3**	*59.6*	*60.1*	*60.8*	*62.0*	*57.6*	*60.4*	**62.1**	*60.1*	*60.4*
PADD 2	**49.1**	**49.7**	**47.1**	**52.4**	**52.9**	**50.4**	*48.0*	*50.2*	*51.2*	*48.8*	*49.3*	*50.5*	**52.4**	*50.2*	*50.5*
PADD 3	**78.5**	**73.2**	**74.9**	**84.2**	**78.4**	**74.6**	*77.9*	*81.2*	*79.7*	*77.5*	*78.1*	*82.2*	**84.2**	*81.2*	*82.2*
PADD 4	**6.4**	**6.1**	**7.4**	**7.9**	**6.5**	**6.8**	*7.1*	*7.7*	*7.2*	*6.9*	*6.9*	*7.7*	**7.9**	*7.7*	*7.7*
PADD 5	**29.9**	**27.1**	**27.3**	**33.7**	**29.2**	**28.0**	*29.8*	*32.4*	*30.5*	*28.1*	*28.0*	*31.9*	**33.7**	*32.4*	*31.9*
U.S. Total	**221.6**	**219.3**	**212.5**	**240.4**	**231.5**	**221.0**	*222.4*	*231.7*	*229.4*	*223.2*	*219.9*	*232.7*	**240.4**	*231.7*	*232.7*
Finished Gasoline Inventories															
U.S. Total	**34.4**	**28.8**	**28.4**	**31.2**	**26.9**	**25.7**	*28.3*	*28.9*	*26.6*	*26.3*	*25.7*	*27.2*	**31.2**	*28.9*	*27.2*
Gasoline Blending Components Inventories															
U.S. Total	**187.2**	**190.5**	**184.1**	**209.1**	**204.6**	**195.4**	*194.1*	*202.8*	*202.8*	*196.9*	*194.3*	*205.5*	**209.1**	*202.8*	*205.5*

- = no data available

Prices are not adjusted for inflation.

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

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

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

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Marketing Monthly* , DOE/EIA-0380; *Petroleum Supply Monthly* , DOE/EIA-0109; *Petroleum Supply Annual* , DOE/EIA-0340/2; and *Weekly Petroleum Status Report* , DOE/EIA-0208.

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (billion cubic feet per day)															
Total Marketed Production	**71.75**	**74.09**	**76.06**	**77.60**	**78.12**	**79.12**	*79.37*	*79.61*	*80.19*	*80.41*	*80.52*	*81.20*	**74.89**	*79.06*	*80.58*
Alaska	**0.99**	**0.93**	**0.87**	**0.99**	**0.99**	**0.93**	*0.85*	*0.93*	*0.98*	*0.83*	*0.76*	*0.91*	**0.95**	*0.93*	*0.87*
Federal GOM (a)	**3.31**	**3.52**	**3.51**	**3.43**	**3.37**	**3.69**	*3.60*	*3.20*	*3.25*	*3.20*	*3.03*	*2.99*	**3.44**	*3.46*	*3.12*
Lower 48 States (excl GOM)	**67.45**	**69.64**	**71.68**	**73.19**	**73.76**	**74.50**	*74.93*	*75.48*	*75.96*	*76.37*	*76.74*	*77.29*	**70.51**	*74.67*	*76.59*
Total Dry Gas Production	**67.53**	**69.73**	**71.59**	**73.04**	**73.68**	**74.42**	*74.68*	*74.90*	*75.45*	*75.65*	*75.76*	*76.40*	**70.49**	*74.42*	*75.82*
LNG Gross Imports	**0.17**	**0.17**	**0.15**	**0.16**	**0.43**	**0.08**	*0.18*	*0.17*	*0.14*	*0.16*	*0.17*	*0.15*	**0.16**	*0.21*	*0.15*
LNG Gross Exports	**0.03**	**0.02**	**0.09**	**0.03**	**0.06**	**0.06**	*0.03*	*0.09*	*0.68*	*0.69*	*0.72*	*1.07*	**0.04**	*0.06*	*0.79*
Pipeline Gross Imports	**8.44**	**6.52**	**6.47**	**7.47**	**8.36**	**6.68**	*6.42*	*6.83*	*7.25*	*6.22*	*6.54*	*6.73*	**7.22**	*7.07*	*6.68*
Pipeline Gross Exports	**4.67**	**3.89**	**3.85**	**4.02**	**4.86**	**4.37**	*4.63*	*4.94*	*5.14*	*4.95*	*5.13*	*5.29*	**4.10**	*4.70*	*5.13*
Supplemental Gaseous Fuels	**0.16**	**0.16**	**0.17**	**0.17**	**0.17**	**0.16**	*0.16*	*0.17*	*0.17*	*0.17*	*0.17*	*0.17*	**0.16**	*0.16*	*0.17*
Net Inventory Withdrawals	**22.75**	**-12.71**	**-12.96**	**0.54**	**18.48**	**-12.97**	*-10.37*	*2.24*	*16.57*	*-10.32*	*-9.52*	*3.43*	**-0.69**	*-0.73*	*0.02*
Total Supply	**94.35**	**59.96**	**61.47**	**77.33**	**96.20**	**63.94**	*66.41*	*79.27*	*93.75*	*66.24*	*67.26*	*80.50*	**73.20**	*76.38*	*76.92*
Balancing Item (b)	**0.48**	**0.93**	**-0.11**	**-1.49**	**0.54**	**0.08**	*-0.02*	*-1.28*	*-0.33*	*-0.92*	*0.01*	*-0.93*	**-0.06**	*-0.18*	*-0.54*
Total Primary Supply	**94.83**	**60.89**	**61.36**	**75.84**	**96.74**	**64.01**	*66.39*	*77.99*	*93.42*	*65.32*	*67.28*	*79.57*	**73.15**	*76.20*	*76.38*
Consumption (billion cubic feet per day)															
Residential	**28.78**	**7.53**	**3.69**	**16.01**	**27.53**	**6.90**	*3.84*	*15.81*	*25.55*	*7.58*	*4.10*	*16.40*	**13.94**	*13.46*	*13.39*
Commercial	**16.48**	**6.26**	**4.61**	**10.77**	**16.01**	**5.85**	*4.43*	*10.39*	*14.53*	*5.96*	*4.60*	*10.70*	**9.50**	*9.14*	*8.94*
Industrial	**22.85**	**19.94**	**19.55**	**21.24**	**22.69**	**19.62**	*19.45*	*22.16*	*23.21*	*20.83*	*20.65*	*22.71*	**20.89**	*20.97*	*21.85*
Electric Power (c)	**19.68**	**21.12**	**27.34**	**21.09**	**23.10**	**25.20**	*32.15*	*22.70*	*22.65*	*24.40*	*31.31*	*22.69*	**22.33**	*25.80*	*25.27*
Lease and Plant Fuel	**3.94**	**4.07**	**4.17**	**4.26**	**4.29**	**4.34**	*4.36*	*4.37*	*4.40*	*4.41*	*4.42*	*4.46*	**4.11**	*4.34*	*4.42*
Pipeline and Distribution Use	**3.01**	**1.88**	**1.90**	**2.37**	**3.03**	**2.00**	*2.08*	*2.47*	*2.98*	*2.04*	*2.10*	*2.52*	**2.29**	*2.39*	*2.41*
Vehicle Use	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	*0.10*	*0.10*	*0.10*	*0.10*	*0.10*	*0.10*	**0.10**	*0.10*	*0.10*
Total Consumption	**94.83**	**60.89**	**61.36**	**75.84**	**96.74**	**64.01**	*66.39*	*77.99*	*93.42*	*65.32*	*67.28*	*79.57*	**73.15**	*76.20*	*76.38*
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	**857**	**2,005**	**3,187**	**3,141**	**1,483**	**2,653**	*3,606*	*3,400*	*1,892*	*2,831*	*3,707*	*3,392*	**3,141**	*3,400*	*3,392*
Producing Region (d)	**358**	**691**	**952**	**1,071**	**604**	**1,038**	*1,253*	*1,276*	*854*	*1,116*	*1,269*	*1,237*	**1,071**	*1,276*	*1,237*
East Consuming Region (d)	**316**	**952**	**1,753**	**1,607**	**501**	**1,145**	*1,846*	*1,652*	*716*	*1,253*	*1,887*	*1,641*	**1,607**	*1,652*	*1,641*
West Consuming Region (d)	**184**	**362**	**482**	**464**	**378**	**469**	*507*	*472*	*322*	*463*	*551*	*514*	**464**	*472*	*514*

- = no data available

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

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

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

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

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

LNG: liquefied natural gas.

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Wholesale/Spot															
Henry Hub Spot Price	**5.36**	**4.75**	**4.08**	**3.91**	**2.99**	**2.83**	*2.84*	*2.92*	*3.09*	*2.99*	*3.14*	*3.35*	**4.52**	*2.89*	*3.14*
Residential															
New England	**13.65**	**15.98**	**18.01**	**14.41**	**13.09**	**13.33**	*15.98*	*12.88*	*12.33*	*14.03*	*16.75*	*13.25*	**14.52**	*13.27*	*13.16*
Middle Atlantic	**10.71**	**13.04**	**17.25**	**11.15**	**9.53**	**11.20**	*16.59*	*11.83*	*10.64*	*13.11*	*17.48*	*11.98*	**11.58**	*10.76*	*11.82*
E. N. Central	**8.67**	**12.96**	**16.85**	**8.96**	**7.78**	**10.58**	*16.34*	*8.50*	*7.63*	*11.04*	*16.66*	*8.54*	**9.70**	*8.81*	*8.86*
W. N. Central	**9.10**	**11.75**	**18.16**	**9.83**	**8.66**	**11.85**	*16.96*	*8.60*	*7.49*	*10.33*	*16.90*	*9.05*	**10.10**	*9.45*	*8.84*
S. Atlantic	**11.34**	**16.37**	**22.98**	**12.85**	**10.70**	**16.68**	*22.34*	*12.70*	*11.15*	*16.18*	*22.28*	*12.75*	**13.03**	*12.59*	*12.89*
E. S. Central	**9.63**	**14.08**	**19.70**	**11.14**	**9.34**	**14.36**	*19.08*	*10.68*	*8.90*	*13.02*	*18.26*	*10.91*	**11.02**	*10.72*	*10.46*
W. S. Central	**8.53**	**14.22**	**20.25**	**11.62**	**8.45**	**13.94**	*18.71*	*9.89*	*7.23*	*12.05*	*17.90*	*10.39*	**10.83**	*10.21*	*9.42*
Mountain	**9.07**	**11.22**	**15.15**	**9.86**	**9.57**	**10.87**	*14.78*	*9.58*	*8.69*	*9.64*	*13.45*	*8.85*	**10.13**	*10.17*	*9.24*
Pacific	**10.97**	**11.66**	**12.41**	**11.25**	**11.46**	**11.40**	*11.47*	*9.55*	*9.47*	*10.15*	*10.77*	*9.77*	**11.37**	*10.82*	*9.85*
U.S. Average	**9.82**	**13.11**	**16.94**	**10.52**	**9.29**	**11.96**	*16.15*	*10.03*	*8.96*	*11.85*	*16.08*	*10.15*	**10.94**	*10.35*	*10.28*
Commercial															
New England	**11.35**	**12.82**	**11.77**	**11.36**	**10.77**	**10.11**	*9.36*	*9.86*	*10.35*	*10.12*	*10.17*	*10.41*	**11.64**	*10.32*	*10.31*
Middle Atlantic	**9.30**	**9.06**	**8.04**	**8.05**	**7.91**	**7.48**	*7.03*	*7.80*	*8.17*	*7.88*	*7.80*	*8.51*	**8.78**	*7.72*	*8.17*
E. N. Central	**8.02**	**9.96**	**10.18**	**7.71**	**6.95**	**7.51**	*8.86*	*7.12*	*7.15*	*8.30*	*9.17*	*7.38*	**8.33**	*7.21*	*7.53*
W. N. Central	**8.35**	**9.10**	**10.19**	**8.22**	**7.65**	**7.98**	*8.84*	*7.16*	*7.26*	*7.60*	*8.76*	*7.39*	**8.54**	*7.62*	*7.46*
S. Atlantic	**9.23**	**10.56**	**10.90**	**9.47**	**8.48**	**9.21**	*9.66*	*8.89*	*8.94*	*9.66*	*10.35*	*9.41*	**9.69**	*8.84*	*9.37*
E. S. Central	**8.90**	**10.71**	**11.17**	**9.58**	**8.54**	**9.62**	*10.00*	*8.76*	*8.16*	*9.02*	*9.76*	*8.98*	**9.57**	*8.89*	*8.70*
W. S. Central	**7.49**	**9.24**	**9.26**	**8.25**	**7.15**	**7.21**	*7.87*	*6.97*	*6.78*	*7.46*	*8.06*	*7.40*	**8.23**	*7.22*	*7.24*
Mountain	**7.81**	**8.74**	**9.90**	**8.47**	**8.27**	**8.34**	*9.18*	*7.93*	*7.49*	*7.65*	*8.85*	*7.88*	**8.40**	*8.26*	*7.78*
Pacific	**9.29**	**9.26**	**9.56**	**9.28**	**9.20**	**8.43**	*8.63*	*8.61*	*8.75*	*8.61*	*8.94*	*8.69*	**9.32**	*8.76*	*8.73*
U.S. Average	**8.65**	**9.66**	**9.69**	**8.52**	**7.94**	**8.13**	*8.54*	*7.86*	*7.88*	*8.30*	*8.90*	*8.20*	**8.87**	*8.01*	*8.15*
Industrial															
New England	**10.03**	**9.97**	**8.04**	**9.09**	**9.10**	**7.61**	*6.64*	*8.20*	*8.67*	*8.12*	*7.98*	*8.98*	**9.45**	*8.21*	*8.52*
Middle Atlantic	**9.28**	**8.78**	**8.15**	**7.98**	**8.31**	**7.56**	*7.56*	*7.91*	*7.96*	*7.23*	*7.58*	*8.22*	**8.77**	*8.01*	*7.85*
E. N. Central	**8.03**	**8.87**	**7.89**	**6.94**	**6.41**	**5.65**	*5.63*	*5.77*	*6.28*	*5.94*	*6.13*	*6.24*	**7.84**	*6.03*	*6.20*
W. N. Central	**7.34**	**6.28**	**5.91**	**6.38**	**5.81**	**4.59**	*4.67*	*5.13*	*5.32*	*4.64*	*4.70*	*5.17*	**6.57**	*5.12*	*5.00*
S. Atlantic	**6.91**	**6.42**	**5.92**	**5.99**	**5.46**	**4.50**	*4.73*	*5.02*	*5.17*	*4.98*	*5.16*	*5.48*	**6.34**	*4.96*	*5.21*
E. S. Central	**6.37**	**6.14**	**5.31**	**5.50**	**5.15**	**4.28**	*4.33*	*4.66*	*5.00*	*4.65*	*4.82*	*5.14*	**5.86**	*4.64*	*4.91*
W. S. Central	**5.15**	**4.91**	**4.52**	**4.26**	**3.21**	**2.92**	*3.08*	*3.06*	*3.14*	*3.11*	*3.42*	*3.54*	**4.71**	*3.07*	*3.31*
Mountain	**6.55**	**6.68**	**6.95**	**6.65**	**6.61**	**6.22**	*6.24*	*5.99*	*5.46*	*5.14*	*5.76*	*5.83*	**6.69**	*6.27*	*5.56*
Pacific	**7.84**	**7.63**	**7.70**	**7.54**	**7.32**	**6.57**	*6.50*	*6.20*	*5.99*	*5.83*	*6.37*	*6.52*	**7.68**	*6.67*	*6.18*
U.S. Average	**6.19**	**5.63**	**5.08**	**5.18**	**4.57**	**3.68**	*3.72*	*3.99*	*4.29*	*3.85*	*4.04*	*4.44*	**5.55**	*4.01*	*4.17*

- = no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million short tons)															
Production	**245.2**	**245.8**	**255.3**	**253.3**	**240.2**	**210.7**	*232.1*	*227.6*	*225.0*	*213.3*	*226.1*	*218.6*	**999.7**	*910.6*	*882.9*
Appalachia	**67.5**	**69.7**	**67.5**	**63.5**	**62.3**	**57.7**	*60.3*	*56.8*	*59.8*	*58.3*	*54.3*	*52.9*	**268.2**	*237.1*	*225.4*
Interior	**46.3**	**44.8**	**49.3**	**48.3**	**45.2**	**39.7**	*44.8*	*45.6*	*43.9*	*43.7*	*46.0*	*44.3*	**188.7**	*175.4*	*177.9*
Western	**131.4**	**131.4**	**138.5**	**141.5**	**132.7**	**113.2**	*127.0*	*125.2*	*121.3*	*111.2*	*125.8*	*121.3*	**542.8**	*498.1*	*479.6*
Primary Inventory Withdrawals	**-0.5**	**0.6**	**2.4**	**-1.5**	**-0.7**	**0.3**	*3.1*	*-1.6*	*-1.0*	*0.7*	*2.9*	*-1.6*	**0.9**	*1.1*	*1.0*
Imports	**2.4**	**3.6**	**3.2**	**2.2**	**3.0**	**2.6**	*3.0*	*2.8*	*2.2*	*2.4*	*3.3*	*2.9*	**11.3**	*11.5*	*10.8*
Exports	**27.7**	**24.6**	**22.7**	**22.3**	**22.0**	**19.8**	*16.4*	*19.0*	*15.2*	*18.7*	*16.3*	*17.8*	**97.3**	*77.2*	*68.2*
Metallurgical Coal	**16.9**	**15.8**	**15.2**	**15.2**	**13.5**	**12.7**	*9.6*	*10.9*	*10.7*	*11.3*	*9.4*	*10.6*	**63.0**	*46.7*	*42.0*
Steam Coal	**10.9**	**8.8**	**7.5**	**7.1**	**8.5**	**7.0**	*6.8*	*8.1*	*4.5*	*7.4*	*6.9*	*7.2*	**34.3**	*30.4*	*26.1*
Total Primary Supply	**219.4**	**225.4**	**238.2**	**231.6**	**220.5**	**193.9**	*221.8*	*209.8*	*211.0*	*197.6*	*215.9*	*202.0*	**914.6**	*846.0*	*826.5*
Secondary Inventory Withdrawals	**30.6**	**-14.8**	**8.4**	**-28.0**	**-3.3**	**-13.2**	*16.2*	*-3.8*	*0.1*	*-6.0*	*14.1*	*-4.8*	**-3.8**	*-4.1*	*3.4*
Waste Coal (a)	**3.2**	**2.8**	**2.6**	**2.6**	**2.7**	**2.7**	*2.7*	*2.7*	*2.8*	*2.8*	*2.8*	*2.8*	**11.2**	*10.8*	*11.1*
Total Supply	**253.2**	**213.4**	**249.2**	**206.2**	**219.9**	**183.4**	*240.7*	*208.7*	*213.8*	*194.4*	*232.8*	*200.0*	**922.0**	*852.7*	*841.0*
Consumption (million short tons)															
Coke Plants	**4.8**	**5.1**	**5.2**	**5.2**	**4.4**	**4.4**	*5.1*	*5.0*	*4.3*	*4.0*	*5.0*	*4.9*	**20.4**	*18.9*	*18.2*
Electric Power Sector (b)	**231.3**	**196.0**	**231.2**	**193.0**	**196.5**	**174.6**	*218.0*	*192.4*	*198.0*	*179.6*	*217.0*	*183.7*	**851.4**	*781.4*	*778.3*
Retail and Other Industry	**12.0**	**10.9**	**11.0**	**11.1**	**11.4**	**10.4**	*10.7*	*11.3*	*11.6*	*10.8*	*10.8*	*11.3*	**45.0**	*43.8*	*44.5*
Residential and Commercial	**0.7**	**0.4**	**0.4**	**0.7**	**0.8**	**0.6**	*0.6*	*0.8*	*0.9*	*0.6*	*0.5*	*0.7*	**2.2**	*2.7*	*2.6*
Other Industrial	**11.3**	**10.5**	**10.6**	**10.4**	**10.6**	**9.8**	*10.1*	*10.5*	*10.7*	*10.2*	*10.3*	*10.7*	**42.8**	*41.0*	*41.9*
Total Consumption	**248.2**	**212.0**	**247.4**	**209.3**	**212.3**	**189.4**	*233.7*	*208.7*	*213.8*	*194.4*	*232.8*	*200.0*	**916.9**	*844.0*	*841.0*
Discrepancy (c)	**5.0**	**1.3**	**1.8**	**-3.0**	**7.7**	**-6.0**	*7.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	**5.1**	*8.7*	*0.0*
End-of-period Inventories (million short tons)															
Primary Inventories (d)	**46.2**	**45.6**	**43.2**	**44.7**	**45.5**	**45.2**	*42.1*	*43.7*	*44.7*	*44.0*	*41.1*	*42.7*	**44.7**	*43.7*	*42.7*
Secondary Inventories	**124.0**	**138.9**	**130.5**	**158.4**	**161.7**	**174.9**	*158.7*	*162.5*	*162.4*	*168.4*	*154.3*	*159.1*	**158.4**	*162.5*	*159.1*
Electric Power Sector	**118.3**	**132.9**	**123.8**	**151.4**	**155.6**	**168.0**	*151.2*	*154.7*	*155.6*	*161.0*	*146.3*	*150.9*	**151.4**	*154.7*	*150.9*
Retail and General Industry	**3.5**	**3.6**	**4.4**	**4.8**	**4.1**	**4.5**	*5.1*	*5.5*	*4.8*	*5.0*	*5.6*	*5.9*	**4.8**	*5.5*	*5.9*
Coke Plants	**1.8**	**1.9**	**1.8**	**1.9**	**1.6**	**1.9**	*1.9*	*1.9*	*1.6*	*1.9*	*1.8*	*1.8*	**1.9**	*1.9*	*1.8*
Coal Market Indicators															
Coal Miner Productivity (Tons per hour)	**5.47**	**5.47**	**5.47**	**5.47**	**5.61**	**5.61**	*5.61*	*5.61*	*5.46*	*5.46*	*5.46*	*5.46*	**5.47**	*5.61*	*5.46*
Total Raw Steel Production (Million short tons per day)	**0.262**	**0.263**	**0.271**	**0.262**	**0.247**	**0.242**	*0.248*	*0.228*	*0.240*	*0.235*	*0.240*	*0.221*	**0.264**	*0.241*	*0.234*
Cost of Coal to Electric Utilities (Dollars per million Btu)	**2.33**	**2.39**	**2.37**	**2.37**	**2.26**	**2.25**	*2.25*	*2.26*	*2.25*	*2.29*	*2.28*	*2.24*	**2.36**	*2.25*	*2.26*

- = no data available

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

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

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 7a. U.S. Electricity Industry Overview

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Electricity Supply (billion kilowatthours per day)															
Electricity Generation	**11.49**	**10.77**	**12.06**	**10.54**	**11.33**	**10.74**	*12.42*	*10.52*	*11.02*	*10.91*	*12.43*	*10.66*	**11.21**	*11.25*	*11.26*
Electric Power Sector (a)	**11.04**	**10.36**	**11.62**	**10.11**	**10.91**	**10.33**	*11.97*	*10.10*	*10.61*	*10.50*	*11.98*	*10.23*	**10.78**	*10.83*	*10.83*
Comm. and Indus. Sectors (b)	**0.44**	**0.41**	**0.44**	**0.42**	**0.42**	**0.41**	*0.45*	*0.43*	*0.41*	*0.40*	*0.45*	*0.44*	**0.43**	*0.43*	*0.42*
Net Imports	**0.11**	**0.12**	**0.16**	**0.14**	**0.17**	**0.20**	*0.18*	*0.11*	*0.11*	*0.11*	*0.14*	*0.09*	**0.13**	*0.16*	*0.11*
Total Supply	**11.59**	**10.89**	**12.22**	**10.68**	**11.50**	**10.94**	*12.59*	*10.63*	*11.13*	*11.02*	*12.57*	*10.75*	**11.35**	*11.42*	*11.37*
Losses and Unaccounted for (c)	**0.72**	**0.86**	**0.76**	**0.73**	**0.77**	**0.90**	*0.83*	*0.67*	*0.59*	*0.90*	*0.78*	*0.71*	**0.77**	*0.79*	*0.75*
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	**10.48**	**9.67**	**11.07**	**9.58**	**10.36**	**9.68**	*11.37*	*9.59*	*10.18*	*9.76*	*11.40*	*9.66*	**10.20**	*10.25*	*10.25*
Residential Sector	**4.31**	**3.36**	**4.26**	**3.45**	**4.19**	**3.35**	*4.50*	*3.44*	*3.98*	*3.38*	*4.45*	*3.45*	**3.84**	*3.87*	*3.81*
Commercial Sector	**3.62**	**3.65**	**4.06**	**3.54**	**3.61**	**3.67**	*4.13*	*3.57*	*3.62*	*3.70*	*4.18*	*3.61*	**3.72**	*3.75*	*3.78*
Industrial Sector	**2.52**	**2.65**	**2.73**	**2.57**	**2.53**	**2.64**	*2.71*	*2.56*	*2.55*	*2.66*	*2.75*	*2.58*	**2.62**	*2.61*	*2.63*
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)	**0.39**	**0.36**	**0.39**	**0.37**	**0.37**	**0.36**	*0.39*	*0.37*	*0.36*	*0.35*	*0.39*	*0.38*	**0.38**	*0.37*	*0.37*
Total Consumption	**10.87**	**10.04**	**11.46**	**9.95**	**10.73**	**10.04**	*11.76*	*9.96*	*10.54*	*10.11*	*11.79*	*10.04*	**10.58**	*10.62*	*10.62*
Average residential electricity usage per customer (kWh)	**3,022**	**2,371**	**3,038**	**2,454**	**2,914**	**2,347**	*3,183*	*2,424*	*2,767*	*2,344*	*3,113*	*2,405*	**10,885**	*10,867*	*10,629*
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	**2.33**	**2.39**	**2.37**	**2.37**	**2.26**	**2.25**	*2.25*	*2.26*	*2.25*	*2.29*	*2.28*	*2.24*	**2.36**	*2.25*	*2.26*
Natural Gas	**6.82**	**4.93**	**4.25**	**4.30**	**4.09**	**3.12**	*3.38*	*3.83*	*3.96*	*3.63*	*3.78*	*4.19*	**4.98**	*3.57*	*3.87*
Residual Fuel Oil	**19.97**	**20.44**	**19.75**	**14.72**	**10.82**	**11.64**	*11.28*	*10.03*	*10.22*	*11.50*	*11.86*	*11.64*	**19.18**	*10.90*	*11.29*
Distillate Fuel Oil	**23.40**	**22.77**	**21.88**	**18.72**	**15.39**	**15.18**	*13.51*	*14.04*	*14.67*	*15.34*	*15.68*	*16.32*	**22.34**	*14.74*	*15.44*
End-Use Prices (cents per kilowatthour)															
Residential Sector	**11.91**	**12.73**	**13.01**	**12.38**	**12.24**	**12.85**	*12.89*	*12.20*	*12.20*	*12.90*	*13.14*	*12.48*	**12.50**	*12.55*	*12.69*
Commercial Sector	**10.55**	**10.68**	**11.11**	**10.59**	**10.50**	**10.56**	*11.23*	*10.82*	*10.75*	*10.83*	*11.49*	*11.02*	**10.75**	*10.79*	*11.04*
Industrial Sector	**6.99**	**6.92**	**7.36**	**6.76**	**6.76**	**6.73**	*7.39*	*6.89*	*6.90*	*6.89*	*7.51*	*6.95*	**7.01**	*6.95*	*7.07*

- = no data available. kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

(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.

(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 for which revenue information is not available. See Table 7.6 of the EIA *Monthly Energy Review* .

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Residential Sector															
New England	**153**	**111**	**136**	**118**	**152**	**111**	*142*	*121*	*141*	*113*	*137*	*121*	**129**	*131*	*128*
Middle Atlantic	**423**	**315**	**383**	**323**	**423**	**321**	*415*	*324*	*386*	*316*	*407*	*321*	**361**	*371*	*357*
E. N. Central	**616**	**446**	**513**	**479**	**588**	**428**	*550*	*473*	*545*	*435*	*554*	*474*	**513**	*510*	*502*
W. N. Central	**352**	**246**	**293**	**265**	**325**	**232**	*309*	*262*	*316*	*239*	*309*	*264*	**289**	*282*	*282*
S. Atlantic	**1,080**	**858**	**1,088**	**861**	**1,072**	**889**	*1,151*	*862*	*1,000*	*869*	*1,138*	*862*	**971**	*993*	*967*
E. S. Central	**404**	**278**	**363**	**288**	**390**	**276**	*389*	*283*	*356*	*280*	*380*	*281*	**333**	*334*	*324*
W. S. Central	**617**	**501**	**731**	**498**	**602**	**503**	*778*	*500*	*573*	*534*	*754*	*504*	**587**	*596*	*591*
Mountain	**238**	**242**	**321**	**226**	**234**	**240**	*332*	*231*	*245*	*246*	*348*	*238*	**257**	*259*	*269*
Pacific contiguous	**419**	**347**	**422**	**378**	**394**	**336**	*423*	*368*	*404*	*336*	*410*	*371*	**391**	*380*	*380*
AK and HI	**14**	**11**	**12**	**13**	**13**	**11**	*12*	*13*	*13*	*12*	*12*	*13*	**13**	*13*	*13*
Total	**4,315**	**3,355**	**4,260**	**3,449**	**4,194**	**3,348**	*4,502*	*3,437*	*3,978*	*3,379*	*4,450*	*3,448*	**3,844**	*3,870*	*3,815*
Commercial Sector															
New England	**148**	**138**	**154**	**139**	**148**	**139**	*158*	*139*	*144*	*140*	*155*	*139*	**145**	*146*	*145*
Middle Atlantic	**442**	**413**	**461**	**409**	**444**	**416**	*469*	*407*	*439*	*415*	*468*	*407*	**431**	*434*	*432*
E. N. Central	**511**	**490**	**526**	**480**	**510**	**490**	*540*	*485*	*508*	*497*	*552*	*493*	**502**	*506*	*513*
W. N. Central	**287**	**273**	**298**	**272**	**281**	**269**	*305*	*273*	*283*	*274*	*312*	*278*	**282**	*282*	*287*
S. Atlantic	**803**	**842**	**920**	**793**	**805**	**859**	*934*	*808*	*809*	*855*	*943*	*822*	**840**	*852*	*857*
E. S. Central	**239**	**237**	**271**	**226**	**235**	**239**	*282*	*228*	*236*	*239*	*285*	*230*	**243**	*246*	*248*
W. S. Central	**494**	**521**	**610**	**504**	**496**	**529**	*629*	*510*	*503*	*538*	*635*	*519*	**532**	*541*	*549*
Mountain	**239**	**259**	**287**	**243**	**239**	**256**	*285*	*244*	*245*	*261*	*297*	*250*	**257**	*256*	*263*
Pacific contiguous	**442**	**463**	**514**	**461**	**434**	**458**	*515*	*456*	*437*	*465*	*513*	*459*	**470**	*466*	*469*
AK and HI	**17**	**16**	**17**	**17**	**16**	**16**	*17*	*17*	*16*	*16*	*17*	*17*	**16**	*16*	*17*
Total	**3,621**	**3,652**	**4,056**	**3,544**	**3,609**	**3,671**	*4,133*	*3,566*	*3,621*	*3,701*	*4,176*	*3,613*	**3,719**	*3,746*	*3,778*
Industrial Sector															
New England	**49**	**50**	**52**	**50**	**49**	**51**	51	*50*	*49*	*50*	*53*	*49*	**50**	*50*	*50*
Middle Atlantic	**201**	**198**	**205**	**194**	**198**	**196**	204	*197*	*202*	*202*	*208*	*197*	**199**	*199*	*202*
E. N. Central	**525**	**532**	**544**	**519**	**520**	**525**	530	*503*	*512*	*520*	*529*	*502*	**530**	*519*	*516*
W. N. Central	**231**	**240**	**253**	**238**	**237**	**242**	254	*247*	*242*	*252*	*267*	*249*	**241**	*245*	*252*
S. Atlantic	**372**	**397**	**404**	**383**	**376**	**407**	396	*376*	*373*	*399*	*404*	*381*	**389**	*389*	*389*
E. S. Central	**279**	**287**	**296**	**283**	**279**	**287**	288	*279*	*294*	*290*	*288*	*283*	**286**	*283*	*289*
W. S. Central	**431**	**465**	**471**	**444**	**428**	**457**	485	*451*	*440*	*469*	*487*	*453*	**453**	*455*	*462*
Mountain	**210**	**235**	**250**	**220**	**217**	**235**	248	*224*	*219*	*241*	*258*	*229*	**229**	*231*	*237*
Pacific contiguous	**213**	**228**	**244**	**223**	**216**	**226**	239	*220*	*210*	*223*	*239*	*221*	**227**	*225*	*223*
AK and HI	**13**	**14**	**14**	**14**	**13**	**13**	14	*14*	*13*	*13*	*14*	*14*	**14**	*14*	*14*
Total	**2,522**	**2,646**	**2,734**	**2,567**	**2,531**	**2,641**	2,709	*2,562*	*2,553*	*2,660*	*2,749*	*2,577*	**2,618**	*2,611*	*2,635*
Total All Sectors (a)															
New England	**352**	**300**	**344**	**308**	**350**	**304**	353	*311*	*336*	*304*	*347*	*310*	**326**	*329*	*324*
Middle Atlantic	**1,078**	**936**	**1,059**	**936**	**1,077**	**944**	1,099	*940*	*1,038*	*943*	*1,095*	*936*	**1,002**	*1,015*	*1,003*
E. N. Central	**1,654**	**1,469**	**1,584**	**1,480**	**1,620**	**1,445**	1,622	*1,464*	*1,567*	*1,453*	*1,638*	*1,471*	**1,547**	*1,537*	*1,532*
W. N. Central	**870**	**760**	**843**	**776**	**843**	**744**	868	*783*	*841*	*766*	*887*	*791*	**812**	*810*	*821*
S. Atlantic	**2,259**	**2,100**	**2,415**	**2,041**	**2,256**	**2,159**	2,485	*2,050*	*2,186*	*2,127*	*2,489*	*2,068*	**2,204**	*2,238*	*2,218*
E. S. Central	**922**	**803**	**931**	**797**	**904**	**802**	958	*789*	*885*	*809*	*954*	*794*	**863**	*863*	*861*
W. S. Central	**1,542**	**1,487**	**1,812**	**1,446**	**1,527**	**1,489**	1,893	*1,460*	*1,516*	*1,542*	*1,877*	*1,476*	**1,572**	*1,593*	*1,603*
Mountain	**687**	**737**	**858**	**689**	**690**	**731**	865	*699*	*710*	*748*	*904*	*717*	**743**	*747*	*770*
Pacific contiguous	**1,076**	**1,040**	**1,182**	**1,064**	**1,046**	**1,022**	1,178	*1,047*	*1,054*	*1,027*	*1,165*	*1,053*	**1,091**	*1,074*	*1,075*
AK and HI	**44**	**41**	**43**	**43**	**42**	**41**	44	*44*	*43*	*41*	*43*	*44*	**43**	*43*	*43*
Total	**10,481**	**9,674**	**11,072**	**9,581**	**10,356**	**9,681**	11,365	*9,586*	*10,176*	*9,762*	*11,397*	*9,659*	**10,202**	*10,248*	*10,250*

- = no data available

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

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

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

Regions refer to U.S. Census divisions.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Residential Sector															
New England	**17.53**	**18.03**	**17.60**	**18.24**	**20.42**	**20.31**	*18.08*	*18.36*	*19.20*	*19.17*	*18.79*	*19.34*	**17.82**	*19.28*	*19.12*
Middle Atlantic	**16.26**	**16.58**	**16.66**	**16.02**	**15.76**	**16.07**	*16.25*	*15.99*	*16.16*	*16.51*	*16.79*	*16.54*	**16.38**	*16.01*	*16.50*
E. N. Central	**11.56**	**12.96**	**12.98**	**12.73**	**12.22**	**13.19**	*13.08*	*12.82*	*12.48*	*13.51*	*13.54*	*13.34*	**12.50**	*12.80*	*13.20*
W. N. Central	**10.04**	**11.80**	**12.31**	**10.65**	**10.25**	**12.16**	*12.46*	*10.82*	*10.50*	*12.41*	*12.82*	*11.13*	**11.14**	*11.38*	*11.69*
S. Atlantic	**11.31**	**11.98**	**12.13**	**11.61**	**11.39**	**11.91**	*12.13*	*11.35*	*11.17*	*11.76*	*12.15*	*11.49*	**11.75**	*11.71*	*11.66*
E. S. Central	**10.30**	**11.21**	**10.97**	**10.66**	**10.34**	**11.16**	*10.68*	*10.44*	*10.56*	*11.48*	*11.21*	*11.02*	**10.75**	*10.63*	*11.05*
W. S. Central	**10.40**	**11.43**	**11.39**	**11.06**	**10.67**	**11.36**	*10.84*	*10.44*	*10.39*	*11.22*	*11.06*	*10.76*	**11.07**	*10.82*	*10.87*
Mountain	**10.93**	**12.02**	**12.33**	**11.31**	**11.31**	**12.21**	*12.36*	*11.47*	*11.56*	*12.53*	*12.72*	*11.82*	**11.71**	*11.89*	*12.21*
Pacific	**12.93**	**12.78**	**15.53**	**13.15**	**13.68**	**13.46**	*15.83*	*12.81*	*13.55*	*13.62*	*15.73*	*12.36*	**13.65**	*14.02*	*13.86*
U.S. Average	**11.91**	**12.73**	**13.01**	**12.38**	**12.24**	**12.85**	*12.89*	*12.20*	*12.20*	*12.90*	*13.14*	*12.48*	**12.50**	*12.55*	*12.69*
Commercial Sector															
New England	**15.62**	**14.32**	**14.43**	**14.33**	**16.93**	**15.17**	*14.49*	*14.66*	*17.58*	*16.07*	*15.51*	*15.54*	**14.68**	*15.30*	*16.17*
Middle Atlantic	**14.29**	**13.32**	**13.94**	**12.94**	**13.18**	**12.98**	*14.15*	*13.37*	*13.35*	*13.31*	*14.45*	*13.58*	**13.64**	*13.44*	*13.69*
E. N. Central	**9.69**	**9.96**	**10.00**	**9.88**	**9.75**	**9.94**	*10.07*	*9.91*	*9.86*	*10.04*	*10.17*	*9.94*	**9.88**	*9.92*	*10.01*
W. N. Central	**8.60**	**9.39**	**9.86**	**8.69**	**8.57**	**9.51**	*10.11*	*8.94*	*8.80*	*9.79*	*10.41*	*9.18*	**9.15**	*9.31*	*9.57*
S. Atlantic	**9.83**	**9.68**	**9.70**	**9.65**	**9.68**	**9.44**	*9.88*	*9.97*	*9.94*	*9.71*	*10.14*	*10.16*	**9.72**	*9.75*	*9.99*
E. S. Central	**10.26**	**10.51**	**10.40**	**10.22**	**10.22**	**10.35**	*10.33*	*10.68*	*10.59*	*10.64*	*10.57*	*10.85*	**10.35**	*10.39*	*10.66*
W. S. Central	**8.13**	**8.34**	**8.30**	**8.15**	**8.05**	**7.90**	*8.17*	*8.17*	*8.24*	*8.16*	*8.39*	*8.27*	**8.24**	*8.08*	*8.27*
Mountain	**9.12**	**9.89**	**10.19**	**9.42**	**9.39**	**9.95**	*10.33*	*9.61*	*9.62*	*10.22*	*10.59*	*9.85*	**9.69**	*9.85*	*10.10*
Pacific	**11.73**	**13.21**	**15.67**	**13.79**	**12.30**	**13.40**	*16.17*	*14.04*	*12.85*	*13.70*	*16.60*	*14.49*	**13.68**	*14.08*	*14.49*
U.S. Average	**10.55**	**10.68**	**11.11**	**10.59**	**10.50**	**10.56**	*11.23*	*10.82*	*10.75*	*10.83*	*11.49*	*11.02*	**10.75**	*10.79*	*11.04*
Industrial Sector															
New England	**12.97**	**11.47**	**11.43**	**11.18**	**13.18**	**11.72**	*11.96*	*12.39*	*14.34*	*12.48*	*12.60*	*12.95*	**11.74**	*12.30*	*13.08*
Middle Atlantic	**8.74**	**7.36**	**7.28**	**7.07**	**7.87**	**7.19**	*7.68*	*7.38*	*7.92*	*7.29*	*7.74*	*7.46*	**7.61**	*7.53*	*7.60*
E. N. Central	**7.01**	**6.84**	**7.01**	**6.85**	**6.87**	**6.78**	*7.25*	*7.10*	*7.08*	*6.98*	*7.42*	*7.21*	**6.93**	*7.00*	*7.17*
W. N. Central	**6.52**	**6.68**	**7.32**	**6.32**	**6.49**	**6.88**	*7.63*	*6.57*	*6.68*	*7.04*	*7.79*	*6.68*	**6.72**	*6.90*	*7.06*
S. Atlantic	**6.80**	**6.68**	**6.96**	**6.49**	**6.56**	**6.38**	*7.12*	*6.52*	*6.67*	*6.57*	*7.21*	*6.52*	**6.73**	*6.65*	*6.75*
E. S. Central	**6.16**	**6.23**	**6.76**	**5.68**	**5.78**	**5.95**	*6.68*	*5.82*	*5.80*	*6.03*	*6.75*	*5.80*	**6.22**	*6.06*	*6.09*
W. S. Central	**5.87**	**6.04**	**6.34**	**5.92**	**5.65**	**5.50**	*5.88*	*5.62*	*5.64*	*5.61*	*5.97*	*5.63*	**6.05**	*5.67*	*5.72*
Mountain	**6.15**	**6.73**	**7.38**	**6.25**	**6.18**	**6.65**	*7.36*	*6.42*	*6.39*	*6.84*	*7.56*	*6.57*	**6.66**	*6.68*	*6.87*
Pacific	**7.70**	**8.11**	**9.59**	**8.63**	**7.83**	**8.28**	*9.59*	*8.92*	*8.17*	*8.46*	*9.70*	*9.04*	**8.54**	*8.68*	*8.87*
U.S. Average	**6.99**	**6.92**	**7.36**	**6.76**	**6.76**	**6.73**	*7.39*	*6.89*	*6.90*	*6.89*	*7.51*	*6.95*	**7.01**	*6.95*	*7.07*
All Sectors (a)															
New England	**16.05**	**15.19**	**15.20**	**15.29**	**17.90**	**16.46**	*15.54*	*15.70*	*17.74*	*16.60*	*16.34*	*16.57*	**15.45**	*16.41*	*16.82*
Middle Atlantic	**14.00**	**13.15**	**13.63**	**12.78**	**13.20**	**12.82**	*13.72*	*12.99*	*13.32*	*13.07*	*14.02*	*13.28*	**13.42**	*13.21*	*13.44*
E. N. Central	**9.53**	**9.73**	**9.93**	**9.74**	**9.72**	**9.75**	*10.17*	*9.88*	*9.86*	*9.98*	*10.42*	*10.10*	**9.73**	*9.89*	*10.10*
W. N. Central	**8.63**	**9.31**	**9.95**	**8.64**	**8.64**	**9.49**	*10.23*	*8.82*	*8.83*	*9.70*	*10.46*	*9.04*	**9.14**	*9.31*	*9.52*
S. Atlantic	**10.04**	**10.05**	**10.34**	**9.88**	**9.97**	**9.88**	*10.48*	*9.92*	*9.94*	*9.96*	*10.58*	*10.04*	**10.09**	*10.08*	*10.15*
E. S. Central	**9.04**	**9.22**	**9.47**	**8.77**	**8.90**	**9.05**	*9.38*	*8.88*	*8.99*	*9.28*	*9.67*	*9.11*	**9.13**	*9.07*	*9.27*
W. S. Central	**8.41**	**8.66**	**9.04**	**8.47**	**8.41**	**8.33**	*8.68*	*8.16*	*8.30*	*8.44*	*8.83*	*8.31*	**8.66**	*8.41*	*8.49*
Mountain	**8.84**	**9.58**	**10.17**	**9.03**	**9.03**	**9.63**	*10.26*	*9.20*	*9.29*	*9.89*	*10.54*	*9.45*	**9.46**	*9.58*	*9.84*
Pacific	**11.39**	**11.93**	**14.35**	**12.47**	**11.89**	**12.28**	*14.70*	*12.52*	*12.18*	*12.52*	*14.86*	*12.58*	**12.59**	*12.91*	*13.09*
U.S. Average	**10.25**	**10.36**	**10.92**	**10.21**	**10.29**	**10.31**	*10.97*	*10.26*	*10.35*	*10.47*	*11.18*	*10.46*	**10.45**	*10.48*	*10.64*

- = no data available

Prices are not adjusted for inflation.

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

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

Regions refer to U.S. Census divisions.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
United States															
Coal	**4,864**	**4,029**	**4,624**	**3,869**	**4,094**	**3,516**	*4,326*	*3,817*	*4,036*	*3,653*	*4,326*	*3,644*	**4,344**	*3,939*	*3,915*
Natural Gas	**2,715**	**2,898**	**3,725**	**2,948**	**3,236**	**3,452**	*4,343*	*3,205*	*3,180*	*3,327*	*4,227*	*3,211*	**3,074**	*3,561*	*3,488*
Petroleum (a)	**148**	**64**	**66**	**58**	**124**	**61**	*74*	*69*	*83*	*71*	*77*	*67*	**84**	*82*	*74*
Other Gases	**28**	**29**	**35**	**34**	**34**	**33**	*36*	*34*	*33*	*33*	*37*	*35*	**32**	*34*	*35*
Nuclear	**2,201**	**2,060**	**2,289**	**2,184**	**2,248**	**2,133**	*2,291*	*2,041*	*2,144*	*2,005*	*2,261*	*2,129*	**2,184**	*2,178*	*2,135*
Renewable Energy Sources:															
Conventional Hydropower	**703**	**849**	**652**	**633**	**797**	**688**	*575*	*507*	*642*	*818*	*656*	*631*	**709**	*641*	*686*
Wind	**553**	**549**	**367**	**525**	**506**	**531**	*435*	*558*	*606*	*649*	*474*	*614*	**498**	*507*	*585*
Wood Biomass	**119**	**114**	**121**	**118**	**117**	**109**	*123*	*116*	*115*	*109*	*125*	*120*	**118**	*116*	*117*
Waste Biomass	**56**	**59**	**60**	**59**	**55**	**57**	*60*	*60*	*58*	*59*	*61*	*60*	**58**	*58*	*60*
Geothermal	**45**	**45**	**45**	**46**	**47**	**46**	*47*	*48*	*49*	*48*	*48*	*49*	**46**	*47*	*48*
Solar	**35**	**61**	**61**	**44**	**56**	**88**	*84*	*49*	*53*	*108*	*117*	*79*	**50**	*69*	*89*
Pumped Storage Hydropower	**-13**	**-18**	**-21**	**-16**	**-14**	**-10**	*-16*	*-14*	*-13*	*-12*	*-15*	*-13*	**-17**	*-14*	*-13*
Other Nonrenewable Fuels (b)	**32**	**34**	**36**	**35**	**33**	**36**	*37*	*35*	*34*	*37*	*38*	*35*	**34**	*35*	*36*
Total Generation	**11,486**	**10,773**	**12,060**	**10,536**	**11,333**	**10,739**	*12,416*	*10,525*	*11,020*	*10,906*	*12,431*	*10,661*	**11,214**	*11,254*	*11,256*
Northeast Census Region															
Coal	**353**	**244**	**210**	**207**	**293**	**177**	*188*	*217*	*275*	*174*	*178*	*179*	**253**	*219*	*201*
Natural Gas	**413**	**485**	**632**	**493**	**479**	**533**	*702*	*542*	*506*	*571*	*708*	*540*	**506**	*565*	*581*
Petroleum (a)	**55**	**2**	**3**	**3**	**47**	**2**	*5*	*5*	*9*	*4*	*6*	*5*	**16**	*15*	*6*
Other Gases	**2**	**2**	**2**	**2**	**2**	**2**	*2*	*2*	*2*	*2*	*2*	*2*	**2**	*2*	*2*
Nuclear	**542**	**471**	**539**	**531**	**545**	**499**	*544*	*481*	*505*	*470*	*527*	*496*	**521**	*517*	*500*
Hydropower (c)	**94**	**100**	**84**	**91**	**91**	**97**	*92*	*74*	*93*	*107*	*98*	*92*	**92**	*88*	*98*
Other Renewables (d)	**73**	**64**	**60**	**72**	**76**	**65**	*60*	*69*	*73*	*64*	*61*	*73*	**67**	*67*	*68*
Other Nonrenewable Fuels (b)	**11**	**12**	**13**	**12**	**11**	**12**	*12*	*12*	*11*	*12*	*12*	*12*	**12**	*12*	*12*
Total Generation	**1,542**	**1,381**	**1,543**	**1,411**	**1,543**	**1,387**	*1,605*	*1,402*	*1,474*	*1,405*	*1,591*	*1,399*	**1,469**	*1,484*	*1,468*
South Census Region															
Coal	**2,122**	**1,849**	**2,100**	**1,614**	**1,713**	**1,539**	*1,918*	*1,528*	*1,653*	*1,593*	*1,895*	*1,485*	**1,920**	*1,675*	*1,657*
Natural Gas	**1,544**	**1,729**	**2,088**	**1,637**	**1,976**	**2,060**	*2,448*	*1,796*	*1,834*	*2,033*	*2,399*	*1,786*	**1,751**	*2,070*	*2,013*
Petroleum (a)	**53**	**28**	**26**	**24**	**42**	**25**	*31*	*26*	*34*	*29*	*31*	*24*	**33**	*31*	*30*
Other Gases	**11**	**11**	**14**	**14**	**13**	**12**	*13*	*14*	*13*	*12*	*14*	*14*	**13**	*13*	*13*
Nuclear	**966**	**882**	**994**	**977**	**974**	**956**	*1,005*	*896*	*941*	*884*	*1,006*	*948*	**955**	*958*	*945*
Hydropower (c)	**150**	**107**	**80**	**107**	**127**	**113**	*91*	*82*	*129*	*124*	*100*	*103*	**111**	*103*	*114*
Other Renewables (d)	**241**	**257**	**204**	**240**	**228**	**262**	*249*	*283*	*298*	*321*	*268*	*322*	**235**	*256*	*302*
Other Nonrenewable Fuels (b)	**13**	**13**	**14**	**14**	**14**	**15**	*15*	*14*	*14*	*15*	*15*	*14*	**13**	*14*	*14*
Total Generation	**5,100**	**4,875**	**5,520**	**4,627**	**5,089**	**4,981**	*5,770*	*4,638*	*4,916*	*5,012*	*5,728*	*4,697*	**5,031**	*5,120*	*5,089*
Midwest Census Region															
Coal	**1,801**	**1,439**	**1,682**	**1,492**	**1,581**	**1,305**	*1,603*	*1,458*	*1,533*	*1,363*	*1,620*	*1,426*	**1,603**	*1,487*	*1,486*
Natural Gas	**194**	**184**	**203**	**189**	**295**	**254**	*335*	*230*	*274*	*236*	*336*	*252*	**193**	*278*	*275*
Petroleum (a)	**14**	**13**	**12**	**9**	**12**	**11**	*13*	*11*	*12*	*11*	*12*	*11*	**12**	*12*	*11*
Other Gases	**11**	**12**	**14**	**12**	**13**	**13**	*15*	*12*	*12*	*13*	*15*	*12*	**12**	*13*	*13*
Nuclear	**533**	**543**	**586**	**525**	**553**	**529**	*569*	*513*	*539*	*502*	*562*	*530*	**547**	*541*	*533*
Hydropower (c)	**33**	**45**	**44**	**41**	**42**	**46**	*43*	*31*	*42*	*49*	*45*	*39*	**41**	*41*	*44*
Other Renewables (d)	**253**	**214**	**148**	**244**	**250**	**217**	*161*	*246*	*259*	*247*	*178*	*265*	**214**	*218*	*237*
Other Nonrenewable Fuels (b)	**4**	**5**	**5**	**4**	**4**	**5**	*5*	*5*	*4*	*5*	*5*	*5*	**4**	*5*	*5*
Total Generation	**2,843**	**2,454**	**2,693**	**2,516**	**2,749**	**2,379**	*2,743*	*2,507*	*2,675*	*2,426*	*2,774*	*2,540*	**2,626**	*2,594*	*2,604*
West Census Region															
Coal	**588**	**497**	**632**	**556**	**506**	**496**	*617*	*613*	*576*	*523*	*633*	*554*	**568**	*558*	*572*
Natural Gas	**564**	**500**	**802**	**628**	**486**	**605**	*858*	*637*	*566*	*486*	*784*	*633*	**624**	*648*	*618*
Petroleum (a)	**25**	**21**	**24**	**23**	**23**	**23**	*25*	*26*	*27*	*27*	*28*	*27*	**23**	*25*	*27*
Other Gases	**5**	**5**	**6**	**6**	**6**	**6**	*6*	*6*	*7*	*6*	*6*	*6*	**5**	*6*	*6*
Nuclear	**160**	**164**	**170**	**150**	**176**	**149**	*173*	*151*	*159*	*148*	*165*	*156*	**161**	*162*	*157*
Hydropower (c)	**414**	**579**	**423**	**378**	**522**	**422**	*332*	*306*	*364*	*526*	*398*	*384*	**448**	*395*	*418*
Other Renewables (d)	**240**	**293**	**243**	**236**	**228**	**287**	*279*	*233*	*251*	*342*	*318*	*261*	**253**	*257*	*293*
Other Nonrenewable Fuels (b)	**5**	**5**	**5**	**4**	**4**	**4**	*5*	*4*	*4*	*5*	*5*	*5*	**5**	*5*	*5*
Total Generation	**2,001**	**2,063**	**2,304**	**1,982**	**1,953**	**1,992**	*2,297*	*1,977*	*1,954*	*2,062*	*2,339*	*2,026*	**2,088**	*2,055*	*2,096*

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

(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.

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: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Fuel Consumption for Electricity Generation, All Sectors															
United States															
Coal (thousand st/d)	**2,579**	**2,161**	**2,522**	**2,105**	**2,190**	**1,927**	*2,378*	*2,098*	*2,181*	*1,979*	*2,366*	*2,004*	**2,341**	*2,148*	*2,133*
Natural Gas (million cf/d)	**20,666**	**22,042**	**28,356**	**22,049**	**23,991**	**26,114**	*33,187*	*23,702*	*23,548*	*25,268*	*32,297*	*23,700*	**23,296**	*26,765*	*26,213*
Petroleum (thousand b/d)	**262**	**111**	**115**	**103**	**216**	**108**	*130*	*123*	*147*	*125*	*135*	*120*	**147**	*144*	*132*
Residual Fuel Oil	**86**	**24**	**29**	**24**	**77**	**26**	*32*	*30*	*34*	*30*	*33*	*29*	**41**	*41*	*32*
Distillate Fuel Oil	**87**	**24**	**24**	**25**	**66**	**26**	*27*	*29*	*37*	*28*	*29*	*28*	**40**	*37*	*30*
Petroleum Coke (a)	**69**	**60**	**59**	**50**	**59**	**52**	*66*	*59*	*68*	*62*	*68*	*58*	**59**	*59*	*64*
Other Petroleum Liquids (b)	**20**	**3**	**3**	**4**	**13**	**4**	*4*	*5*	*8*	*5*	*6*	*5*	**7**	*7*	*6*
Northeast Census Region															
Coal (thousand st/d)	**161**	**113**	**102**	**96**	**132**	**82**	*90*	*101*	*125*	*79*	*82*	*82*	**118**	*101*	*92*
Natural Gas (million cf/d)	**3,191**	**3,701**	**4,921**	**3,729**	**3,614**	**4,077**	*5,435*	*4,065*	*3,799*	*4,321*	*5,449*	*4,015*	**3,890**	*4,302*	*4,398*
Petroleum (thousand b/d)	**92**	**4**	**6**	**5**	**76**	**4**	*10*	*9*	*17*	*8*	*11*	*9*	**26**	*25*	*11*
South Census Region															
Coal (thousand st/d)	**1,084**	**963**	**1,116**	**855**	**889**	**820**	*1,026*	*822*	*869*	*845*	*1,012*	*800*	**1,004**	*889*	*882*
Natural Gas (million cf/d)	**11,736**	**13,138**	**15,819**	**12,131**	**14,453**	**15,565**	*18,636*	*13,198*	*13,489*	*15,400*	*18,227*	*13,100*	**13,214**	*15,468*	*15,057*
Petroleum (thousand b/d)	**101**	**51**	**49**	**45**	**79**	**45**	*56*	*50*	*65*	*54*	*58*	*46*	**61**	*57*	*56*
Midwest Census Region															
Coal (thousand st/d)	**1,005**	**811**	**952**	**842**	**884**	**745**	*912*	*823*	*860*	*764*	*915*	*805*	**902**	*841*	*836*
Natural Gas (million cf/d)	**1,574**	**1,436**	**1,638**	**1,513**	**2,275**	**1,977**	*2,695*	*1,757*	*2,092*	*1,857*	*2,727*	*1,920*	**1,540**	*2,176*	*2,150*
Petroleum (thousand b/d)	**28**	**23**	**22**	**17**	**23**	**22**	*23*	*22*	*22*	*20*	*21*	*21*	**23**	*22*	*21*
West Census Region															
Coal (thousand st/d)	**329**	**274**	**351**	**313**	**286**	**280**	*350*	*352*	*327*	*292*	*357*	*316*	**317**	*317*	*323*
Natural Gas (million cf/d)	**4,165**	**3,767**	**5,979**	**4,675**	**3,649**	**4,494**	*6,421*	*4,682*	*4,168*	*3,691*	*5,895*	*4,664*	**4,651**	*4,819*	*4,608*
Petroleum (thousand b/d)	**41**	**33**	**38**	**36**	**38**	**36**	*40*	*42*	*44*	*43*	*45*	*44*	**37**	*39*	*44*
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	**118.3**	**132.9**	**123.8**	**151.4**	**155.6**	**168.0**	*151.2*	*154.7*	*155.6*	*161.0*	*146.3*	*150.9*	**151.4**	*154.7*	*150.9*
Residual Fuel Oil (mmb)	**10.5**	**10.6**	**10.4**	**12.7**	**10.2**	**10.5**	*10.9*	*11.6*	*11.7*	*11.5*	*11.2*	*11.4*	**12.7**	*11.6*	*11.4*
Distillate Fuel Oil (mmb)	**15.5**	**15.5**	**15.5**	**16.9**	**15.8**	**15.9**	*15.9*	*16.2*	*16.3*	*16.1*	*16.0*	*16.3*	**16.9**	*16.2*	*16.3*
Petroleum Coke (mmb)	**1.7**	**2.0**	**1.9**	**4.2**	**4.1**	**5.2**	*5.3*	*5.2*	*5.1*	*5.0*	*4.9*	*4.9*	**4.2**	*5.2*	*4.9*

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

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

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.*

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Electric Power Sector															
Hydroelectric Power (a)	**0.596**	**0.731**	**0.566**	**0.549**	**0.677**	**0.593**	*0.499*	*0.437*	*0.549*	*0.704*	*0.569*	*0.546*	**2.443**	*2.205*	*2.367*
Wood Biomass (b)	**0.063**	**0.056**	**0.064**	**0.063**	**0.063**	**0.056**	*0.067*	*0.060*	*0.063*	*0.057*	*0.070*	*0.063*	**0.247**	*0.245*	*0.254*
Waste Biomass (c)	**0.063**	**0.065**	**0.066**	**0.066**	**0.063**	**0.062**	*0.068*	*0.068*	*0.066*	*0.067*	*0.070*	*0.068*	**0.260**	*0.261*	*0.271*
Wind	**0.473**	**0.475**	**0.321**	**0.459**	**0.433**	**0.459**	*0.380*	*0.488*	*0.524*	*0.562*	*0.414*	*0.537*	**1.729**	*1.760*	*2.038*
Geothermal	**0.039**	**0.039**	**0.039**	**0.041**	**0.040**	**0.040**	*0.041*	*0.042*	*0.042*	*0.041*	*0.042*	*0.043*	**0.158**	*0.163*	*0.169*
Solar	**0.029**	**0.051**	**0.052**	**0.037**	**0.047**	**0.074**	*0.072*	*0.042*	*0.045*	*0.092*	*0.101*	*0.068*	**0.170**	*0.236*	*0.306*
Subtotal	**1.263**	**1.418**	**1.109**	**1.215**	**1.323**	**1.284**	*1.127*	*1.137*	*1.288*	*1.523*	*1.267*	*1.325*	**5.006**	*4.871*	*5.403*
Industrial Sector															
Hydroelectric Power (a)	**0.008**	**0.006**	**0.006**	**0.007**	**0.007**	**0.004**	*0.006*	*0.006*	*0.005*	*0.005*	*0.006*	*0.006*	**0.026**	*0.023*	*0.021*
Wood Biomass (b)	**0.318**	**0.327**	**0.335**	**0.336**	**0.321**	**0.316**	*0.319*	*0.318*	*0.307*	*0.304*	*0.315*	*0.317*	**1.317**	*1.274*	*1.243*
Waste Biomass (c)	**0.044**	**0.046**	**0.046**	**0.046**	**0.045**	**0.047**	*0.048*	*0.047*	*0.046*	*0.046*	*0.048*	*0.048*	**0.183**	*0.187*	*0.188*
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*
Biofuel Losses and Co-products (f)	**0.181**	**0.189**	**0.191**	**0.196**	**0.189**	**0.192**	*0.192*	*0.192*	*0.195*	*0.191*	*0.195*	*0.191*	**0.757**	*0.765*	*0.772*
Subtotal	**0.557**	**0.574**	**0.583**	**0.591**	**0.567**	**0.565**	*0.571*	*0.568*	*0.559*	*0.552*	*0.569*	*0.568*	**2.304**	*2.271*	*2.248*
Commercial Sector															
Wood Biomass (b)	**0.018**	**0.018**	**0.018**	**0.018**	**0.018**	**0.020**	*0.019*	*0.019*	*0.019*	*0.019*	*0.019*	*0.019*	**0.071**	*0.076*	*0.077*
Waste Biomass (c)	**0.012**	**0.011**	**0.011**	**0.012**	**0.012**	**0.010**	*0.012*	*0.012*	*0.011*	*0.010*	*0.012*	*0.011*	**0.046**	*0.046*	*0.044*
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	**0.036**	**0.036**	**0.036**	**0.036**	**0.037**	**0.037**	*0.037*	*0.036*	*0.035*	*0.035*	*0.037*	*0.037*	**0.144**	*0.148*	*0.144*
Residential Sector															
Wood Biomass (b)	**0.143**	**0.145**	**0.146**	**0.146**	**0.110**	**0.111**	*0.113*	*0.113*	*0.103*	*0.104*	*0.105*	*0.105*	**0.580**	*0.447*	*0.418*
Geothermal	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	*0.010*	*0.010*	*0.011*	*0.011*	*0.011*	*0.011*	**0.040**	*0.040*	*0.044*
Solar (d)	**0.062**	**0.063**	**0.063**	**0.063**	**0.069**	**0.070**	*0.071*	*0.071*	*0.077*	*0.077*	*0.078*	*0.078*	**0.252**	*0.281*	*0.311*
Subtotal	**0.215**	**0.217**	**0.220**	**0.220**	**0.189**	**0.191**	*0.194*	*0.194*	*0.191*	*0.193*	*0.195*	*0.195*	**0.871**	*0.768*	*0.773*
Transportation Sector															
Ethanol (e)	**0.255**	**0.274**	**0.278**	**0.280**	**0.266**	**0.284**	*0.283*	*0.280*	*0.270*	*0.282*	*0.290*	*0.281*	**1.087**	*1.113*	*1.123*
Biodiesel (e)	**0.038**	**0.048**	**0.058**	**0.054**	**0.034**	**0.058**	*0.063*	*0.070*	*0.059*	*0.063*	*0.069*	*0.071*	**0.198**	*0.225*	*0.261*
Subtotal	**0.293**	**0.321**	**0.336**	**0.334**	**0.300**	**0.341**	*0.348*	*0.350*	*0.329*	*0.345*	*0.359*	*0.352*	**1.285**	*1.339*	*1.384*
All Sectors Total															
Hydroelectric Power (a)	**0.604**	**0.737**	**0.572**	**0.555**	**0.685**	**0.597**	*0.505*	*0.443*	*0.554*	*0.709*	*0.575*	*0.551*	**2.469**	*2.229*	*2.389*
Wood Biomass (b)	**0.542**	**0.546**	**0.563**	**0.563**	**0.512**	**0.503**	*0.517*	*0.510*	*0.492*	*0.484*	*0.510*	*0.505*	**2.214**	*2.042*	*1.992*
Waste Biomass (c)	**0.119**	**0.121**	**0.124**	**0.124**	**0.120**	**0.119**	*0.129*	*0.127*	*0.123*	*0.123*	*0.130*	*0.127*	**0.488**	*0.494*	*0.503*
Wind	**0.473**	**0.475**	**0.321**	**0.459**	**0.433**	**0.459**	*0.380*	*0.488*	*0.524*	*0.562*	*0.414*	*0.537*	**1.729**	*1.760*	*2.038*
Geothermal	**0.055**	**0.055**	**0.055**	**0.057**	**0.056**	**0.056**	*0.058*	*0.058*	*0.059*	*0.058*	*0.059*	*0.060*	**0.222**	*0.228*	*0.237*
Solar	**0.092**	**0.116**	**0.117**	**0.102**	**0.117**	**0.146**	*0.142*	*0.114*	*0.123*	*0.171*	*0.180*	*0.148*	**0.427**	*0.520*	*0.622*
Ethanol (e)	**0.260**	**0.279**	**0.283**	**0.285**	**0.271**	**0.289**	*0.295*	*0.285*	*0.275*	*0.287*	*0.295*	*0.286*	**1.107**	*1.139*	*1.144*
Biodiesel (e)	**0.038**	**0.048**	**0.058**	**0.054**	**0.034**	**0.058**	*0.063*	*0.070*	*0.059*	*0.063*	*0.069*	*0.071*	**0.198**	*0.225*	*0.261*
Biofuel Losses and Co-products (f)	**0.181**	**0.189**	**0.191**	**0.196**	**0.189**	**0.192**	*0.192*	*0.192*	*0.195*	*0.191*	*0.195*	*0.191*	**0.757**	*0.765*	*0.772*
Total Consumption	**2.364**	**2.566**	**2.284**	**2.396**	**2.417**	**2.419**	*2.262*	*2.285*	*2.402*	*2.647*	*2.426*	*2.476*	**9.610**	*9.383*	*9.951*

- = no data available

(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.

(f) Losses and co-products from the production of fuel ethanol and biodiesel

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: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2009 dollars - SAAR)	**15,725**	**15,902**	**16,069**	**16,151**	**16,177**	**16,324**	*16,415*	*16,503*	*16,595*	*16,705*	*16,827*	*16,956*	**15,962**	*16,355*	*16,771*
Real Personal Consumption Expend.															
(billion chained 2009 dollars - SAAR)	**10,725**	**10,826**	**10,919**	**11,033**	**11,081**	**11,166**	*11,244*	*11,333*	*11,406*	*11,497*	*11,586*	*11,668*	**10,876**	*11,206*	*11,539*
Real Fixed Investment															
(billion chained 2009 dollars - SAAR)	**2,578**	**2,613**	**2,664**	**2,680**	**2,701**	**2,729**	*2,783*	*2,828*	*2,877*	*2,920*	*2,959*	*3,004*	**2,634**	*2,760*	*2,940*
Business Inventory Change															
(billion chained 2009 dollars - SAAR)	**43**	**89**	**88**	**89**	**127**	**136**	*106*	*70*	*51*	*39*	*43*	*52*	**77**	*110*	*46*
Real Government Expenditures															
(billion chained 2009 dollars - SAAR)	**2,828**	**2,837**	**2,849**	**2,839**	**2,839**	**2,857**	*2,865*	*2,867*	*2,868*	*2,871*	*2,876*	*2,882*	**2,838**	*2,857*	*2,874*
Real Exports of Goods & Services															
(billion chained 2009 dollars - SAAR)	**2,039**	**2,087**	**2,096**	**2,124**	**2,091**	**2,118**	*2,130*	*2,150*	*2,170*	*2,189*	*2,210*	*2,234*	**2,086**	*2,123*	*2,201*
Real Imports of Goods & Services															
(billion chained 2009 dollars - SAAR)	**2,473**	**2,530**	**2,525**	**2,588**	**2,633**	**2,651**	*2,686*	*2,719*	*2,752*	*2,787*	*2,824*	*2,860*	**2,529**	*2,672*	*2,806*
Real Disposable Personal Income															
(billion chained 2009 dollars - SAAR)	**11,699**	**11,785**	**11,863**	**11,999**	**12,115**	**12,154**	*12,260*	*12,368*	*12,468*	*12,540*	*12,643*	*12,735*	**11,836**	*12,224*	*12,596*
Non-Farm Employment															
(millions)	**137.8**	**138.6**	**139.4**	**140.2**	**141.0**	**141.6**	*142.3*	*142.8*	*143.4*	*143.8*	*144.3*	*144.9*	**139.0**	*141.9*	*144.1*
Civilian Unemployment Rate															
(percent)	**6.6**	**6.2**	**6.1**	**5.7**	**5.6**	**5.4**	*5.2*	*5.3*	*5.3*	*5.3*	*5.3*	*5.3*	**6.2**	*5.4*	*5.3*
Housing Starts															
(millions - SAAR)	**0.93**	**0.98**	**1.03**	**1.06**	**0.98**	**1.16**	*1.16*	*1.21*	*1.24*	*1.25*	*1.30*	*1.37*	**1.00**	*1.13*	*1.29*
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	**103.8**	**105.3**	**106.3**	**107.5**	**107.4**	**106.7**	*107.1*	*106.7*	*106.9*	*107.6*	*108.6*	*109.7*	**105.7**	*107.0*	*108.2*
Manufacturing	**101.9**	**103.5**	**104.6**	**105.6**	**105.5**	**105.8**	*106.3*	*106.1*	*106.3*	*107.1*	*108.2*	*109.4*	**103.9**	*105.9*	*107.7*
Food	**102.6**	**103.1**	**102.2**	**103.9**	**104.7**	**104.7**	*105.3*	*105.4*	*105.7*	*106.3*	*107.0*	*107.6*	**103.0**	*105.0*	*106.7*
Paper	**97.3**	**98.1**	**97.5**	**97.9**	**97.2**	**97.1**	*96.4*	*96.9*	*96.7*	*96.7*	*96.9*	*97.3*	**97.7**	*96.9*	*96.9*
Petroleum and Coal Products	**107.1**	**107.3**	**107.2**	**106.7**	**107.9**	**108.9**	*108.4*	*109.2*	*109.6*	*110.1*	*110.7*	*111.0*	**107.1**	*108.6*	*110.4*
Chemicals	**97.9**	**99.0**	**101.0**	**102.0**	**102.8**	**102.8**	*103.8*	*104.3*	*104.6*	*105.3*	*106.3*	*107.5*	**100.0**	*103.4*	*105.9*
Nonmetallic Mineral Products	**105.1**	**107.8**	**110.6**	**110.6**	**111.3**	**111.1**	*112.4*	*112.5*	*113.8*	*115.4*	*117.2*	*119.0*	**108.5**	*111.8*	*116.4*
Primary Metals	**103.4**	**105.6**	**107.1**	**105.7**	**100.7**	**100.5**	*102.2*	*100.6*	*99.6*	*100.0*	*101.0*	*102.0*	**105.4**	*101.0*	*100.7*
Coal-weighted Manufacturing (a)	**102.6**	**103.9**	**104.7**	**104.6**	**103.6**	**103.9**	*104.8*	*104.6*	*104.6*	*105.2*	*106.2*	*107.2*	**103.9**	*104.2*	*105.8*
Distillate-weighted Manufacturing (a)	**103.9**	**105.5**	**106.6**	**107.1**	**106.6**	**106.4**	*107.1*	*107.2*	*107.7*	*108.6*	*109.8*	*110.9*	**105.8**	*106.8*	*109.2*
Electricity-weighted Manufacturing (a)	**102.5**	**104.0**	**104.9**	**105.4**	**104.7**	**105.0**	*105.9*	*105.9*	*105.9*	*106.6*	*107.8*	*108.9*	**104.2**	*105.4*	*107.3*
Natural Gas-weighted Manufacturing (a)	**103.2**	**103.7**	**104.5**	**104.9**	**104.5**	**105.1**	*105.9*	*106.2*	*106.2*	*106.9*	*108.2*	*109.5*	**104.1**	*105.4*	*107.7*
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	**2.35**	**2.37**	**2.38**	**2.37**	**2.35**	**2.37**	*2.38*	*2.38*	*2.40*	*2.41*	*2.42*	*2.44*	**2.37**	*2.37*	*2.42*
Producer Price Index: All Commodities															
(index, 1982=1.00)	**2.06**	**2.07**	**2.06**	**2.02**	**1.92**	**1.92**	*1.92*	*1.91*	*1.92*	*1.93*	*1.94*	*1.95*	**2.05**	*1.92*	*1.94*
Producer Price Index: Petroleum															
(index, 1982=1.00)	**2.88**	**2.99**	**2.90**	**2.35**	**1.71**	**1.95**	*1.81*	*1.62*	*1.70*	*1.91*	*1.94*	*1.81*	**2.78**	*1.77*	*1.84*
GDP Implicit Price Deflator															
(index, 2009=100)	**108.0**	**108.6**	**109.0**	**109.1**	**109.1**	**109.7**	*110.4*	*110.8*	*111.4*	*111.8*	*112.2*	*112.8*	**108.7**	*110.0*	*112.1*
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	**7,708**	**8,691**	**8,614**	**8,300**	**7,991**	**8,982**	*8,892*	*8,463*	*8,141*	*8,990*	*8,907*	*8,560*	**8,331**	*8,584*	*8,650*
Air Travel Capacity															
(Available ton-miles/day, thousands)	**503**	**548**	**561**	**535**	**517**	**575**	*578*	*552*	*513*	*554*	*579*	*556*	**537**	*556*	*550*
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	**310**	**347**	**353**	**332**	**322**	**357**	*371*	*350*	*318*	*346*	*376*	*354*	**336**	*350*	*349*
Airline Ticket Price Index															
(index, 1982-1984=100)	**297.3**	**334.3**	**301.0**	**298.2**	**286.4**	**313.0**	*284.9*	*291.9*	*295.6*	*317.7*	*304.9*	*311.9*	**307.7**	*294.1*	*307.5*
Raw Steel Production															
(million short tons per day)	**0.262**	**0.263**	**0.271**	**0.262**	**0.247**	**0.242**	*0.248*	*0.228*	*0.240*	*0.235*	*0.240*	*0.221*	**0.264**	*0.241*	*0.234*
Carbon Dioxide (CO_2) Emissions (million metric tons)															
Petroleum	**546**	**557**	**572**	**578**	**562**	**568**	*579*	*574*	*564*	*570*	*581*	*578*	**2,252**	*2,282*	*2,293*
Natural Gas	**461**	**299**	**305**	**377**	**471**	**314**	*327*	*387*	*460*	*320*	*334*	*395*	**1,441**	*1,499*	*1,509*
Coal	**463**	**397**	**461**	**391**	**397**	**354**	*446*	*391*	*401*	*365*	*436*	*375*	**1,713**	*1,587*	*1,577*
Total Energy (c)	**1,473**	**1,255**	**1,341**	**1,349**	**1,432**	**1,238**	*1,355*	*1,356*	*1,427*	*1,259*	*1,354*	*1,351*	**5,417**	*5,380*	*5,391*

- = no data available

SAAR = Seasonally-adjusted annual rate

(a) Fuel share weights of individual sector indices based on EIA*Manufacturing Energy Consumption Survey.*

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

(c) Includes electric power sector use of geothermal energy and non-biomass waste.

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

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Real Gross State Product (Billion $2009)															
New England	**853**	**857**	**860**	**864**	**864**	**873**	*877*	*882*	*886*	*891*	*897*	*903*	**858**	*874*	*894*
Middle Atlantic	**2,387**	**2,401**	**2,424**	**2,425**	**2,422**	**2,447**	*2,461*	*2,474*	*2,487*	*2,501*	*2,515*	*2,530*	**2,409**	*2,451*	*2,508*
E. N. Central	**2,174**	**2,198**	**2,215**	**2,223**	**2,225**	**2,245**	*2,256*	*2,266*	*2,276*	*2,288*	*2,303*	*2,317*	**2,202**	*2,248*	*2,296*
W. N. Central	**1,007**	**1,025**	**1,036**	**1,041**	**1,047**	**1,055**	*1,060*	*1,066*	*1,072*	*1,079*	*1,086*	*1,094*	**1,027**	*1,057*	*1,083*
S. Atlantic	**2,781**	**2,813**	**2,830**	**2,846**	**2,852**	**2,885**	*2,903*	*2,921*	*2,940*	*2,960*	*2,983*	*3,008*	**2,817**	*2,890*	*2,973*
E. S. Central	**720**	**729**	**732**	**736**	**738**	**744**	*748*	*752*	*755*	*760*	*765*	*770*	**729**	*745*	*763*
W. S. Central	**1,918**	**1,952**	**1,992**	**2,014**	**2,018**	**2,026**	*2,035*	*2,047*	*2,058*	*2,073*	*2,091*	*2,110*	**1,969**	*2,032*	*2,083*
Mountain	**1,000**	**1,007**	**1,021**	**1,028**	**1,033**	**1,042**	*1,048*	*1,055*	*1,062*	*1,070*	*1,079*	*1,090*	**1,014**	*1,044*	*1,075*
Pacific	**2,798**	**2,831**	**2,869**	**2,884**	**2,888**	**2,917**	*2,934*	*2,949*	*2,967*	*2,990*	*3,013*	*3,038*	**2,845**	*2,922*	*3,002*
Industrial Output, Manufacturing (Index, Year 2007=100)															
New England	**116.0**	**117.2**	**118.0**	**118.7**	**118.3**	**119.1**	*120.1*	*119.9*	*120.0*	*120.9*	*122.1*	*123.3*	**117.5**	*119.3*	*121.6*
Middle Atlantic	**116.2**	**117.5**	**118.3**	**119.1**	**118.8**	**119.5**	*120.5*	*120.2*	*120.3*	*121.0*	*122.2*	*123.4*	**117.8**	*119.7*	*121.7*
E. N. Central	**119.9**	**121.9**	**123.3**	**124.9**	**125.3**	**126.2**	*126.7*	*126.5*	*126.6*	*127.5*	*128.8*	*130.2*	**122.5**	*126.2*	*128.3*
W. N. Central	**118.7**	**120.7**	**121.9**	**123.3**	**122.8**	**122.9**	*123.5*	*123.3*	*123.5*	*124.5*	*125.9*	*127.2*	**121.1**	*123.1*	*125.3*
S. Atlantic	**118.6**	**120.8**	**122.3**	**123.7**	**123.7**	**124.2**	*125.0*	*124.8*	*125.0*	*125.9*	*127.2*	*128.4*	**121.3**	*124.4*	*126.7*
E. S. Central	**120.5**	**122.4**	**124.2**	**125.5**	**125.6**	**125.8**	*126.3*	*126.2*	*126.3*	*127.2*	*128.5*	*129.7*	**123.2**	*126.0*	*127.9*
W. S. Central	**118.0**	**120.2**	**121.6**	**123.0**	**121.8**	**120.5**	*120.0*	*119.6*	*119.7*	*120.4*	*121.7*	*123.1*	**120.7**	*120.5*	*121.2*
Mountain	**120.0**	**121.7**	**123.0**	**124.1**	**124.7**	**125.5**	*126.5*	*126.6*	*127.1*	*128.4*	*130.2*	*131.7*	**122.2**	*125.8*	*129.4*
Pacific	**118.7**	**120.5**	**121.6**	**122.7**	**122.5**	**123.3**	*123.8*	*123.4*	*123.6*	*124.6*	*126.0*	*127.4*	**120.9**	*123.2*	*125.4*
Real Personal Income (Billion $2009)															
New England	**712**	**714**	**719**	**732**	**741**	**743**	*749*	*755*	*761*	*764*	*770*	*775*	**719**	*747*	*767*
Middle Atlantic	**1,837**	**1,841**	**1,856**	**1,883**	**1,911**	**1,915**	*1,930*	*1,944*	*1,959*	*1,965*	*1,977*	*1,989*	**1,854**	*1,925*	*1,972*
E. N. Central	**1,951**	**1,962**	**1,971**	**1,997**	**2,023**	**2,031**	*2,046*	*2,061*	*2,075*	*2,084*	*2,097*	*2,109*	**1,970**	*2,040*	*2,091*
W. N. Central	**941**	**951**	**956**	**967**	**973**	**977**	*987*	*999*	*1,008*	*1,013*	*1,019*	*1,026*	**954**	*984*	*1,016*
S. Atlantic	**2,508**	**2,530**	**2,548**	**2,581**	**2,619**	**2,634**	*2,659*	*2,685*	*2,709*	*2,727*	*2,749*	*2,772*	**2,542**	*2,649*	*2,739*
E. S. Central	**730**	**735**	**739**	**748**	**759**	**761**	*767*	*773*	*779*	*783*	*788*	*793*	**738**	*765*	*786*
W. S. Central	**1,617**	**1,632**	**1,649**	**1,670**	**1,689**	**1,690**	*1,703*	*1,717*	*1,731*	*1,743*	*1,757*	*1,773*	**1,642**	*1,699*	*1,751*
Mountain	**881**	**887**	**894**	**909**	**921**	**924**	*934*	*942*	*951*	*958*	*966*	*974*	**893**	*930*	*962*
Pacific	**2,103**	**2,121**	**2,148**	**2,175**	**2,207**	**2,220**	*2,240*	*2,261*	*2,281*	*2,295*	*2,313*	*2,331*	**2,137**	*2,232*	*2,305*
Households (Thousands)															
New England	**5,764**	**5,765**	**5,762**	**5,767**	**5,771**	**5,770**	*5,770*	*5,776*	*5,779*	*5,783*	*5,787*	*5,792*	**5,767**	*5,776*	*5,792*
Middle Atlantic	**15,836**	**15,838**	**15,829**	**15,843**	**15,850**	**15,854**	*15,849*	*15,860*	*15,863*	*15,873*	*15,880*	*15,884*	**15,843**	*15,860*	*15,884*
E. N. Central	**18,576**	**18,587**	**18,582**	**18,596**	**18,598**	**18,593**	*18,586*	*18,600*	*18,608*	*18,620*	*18,633*	*18,647*	**18,596**	*18,600*	*18,647*
W. N. Central	**8,410**	**8,423**	**8,429**	**8,447**	**8,460**	**8,469**	*8,475*	*8,490*	*8,501*	*8,515*	*8,530*	*8,547*	**8,447**	*8,490*	*8,547*
S. Atlantic	**24,217**	**24,276**	**24,320**	**24,398**	**24,467**	**24,523**	*24,576*	*24,655*	*24,724*	*24,799*	*24,878*	*24,958*	**24,398**	*24,655*	*24,958*
E. S. Central	**7,450**	**7,453**	**7,452**	**7,461**	**7,466**	**7,468**	*7,468*	*7,478*	*7,486*	*7,497*	*7,508*	*7,520*	**7,461**	*7,478*	*7,520*
W. S. Central	**14,103**	**14,148**	**14,182**	**14,232**	**14,275**	**14,310**	*14,341*	*14,387*	*14,428*	*14,472*	*14,518*	*14,563*	**14,232**	*14,387*	*14,563*
Mountain	**8,604**	**8,625**	**8,642**	**8,672**	**8,697**	**8,720**	*8,741*	*8,770*	*8,798*	*8,829*	*8,862*	*8,896*	**8,672**	*8,770*	*8,896*
Pacific	**18,186**	**18,232**	**18,267**	**18,324**	**18,372**	**18,409**	*18,440*	*18,488*	*18,537*	*18,588*	*18,635*	*18,685*	**18,324**	*18,488*	*18,685*
Total Non-farm Employment (Millions)															
New England	**7.1**	**7.1**	**7.1**	**7.1**	**7.2**	**7.2**	*7.2*	*7.3*	*7.3*	*7.3*	*7.3*	*7.3*	**7.1**	*7.2*	*7.3*
Middle Atlantic	**18.7**	**18.8**	**18.8**	**18.9**	**18.9**	**19.0**	*19.1*	*19.2*	*19.2*	*19.3*	*19.3*	*19.3*	**18.8**	*19.1*	*19.3*
E. N. Central	**21.0**	**21.1**	**21.2**	**21.3**	**21.4**	**21.5**	*21.5*	*21.6*	*21.6*	*21.7*	*21.8*	*21.8*	**21.1**	*21.5*	*21.7*
W. N. Central	**10.3**	**10.3**	**10.4**	**10.4**	**10.4**	**10.5**	*10.5*	*10.5*	*10.6*	*10.6*	*10.6*	*10.7*	**10.3**	*10.5*	*10.6*
S. Atlantic	**26.1**	**26.2**	**26.4**	**26.6**	**26.7**	**26.9**	*27.1*	*27.2*	*27.3*	*27.5*	*27.6*	*27.7*	**26.3**	*27.0*	*27.5*
E. S. Central	**7.6**	**7.7**	**7.7**	**7.8**	**7.8**	**7.8**	*7.8*	*7.9*	*7.9*	*7.9*	*7.9*	*8.0*	**7.7**	*7.8*	*7.9*
W. S. Central	**16.1**	**16.2**	**16.4**	**16.5**	**16.6**	**16.6**	*16.7*	*16.7*	*16.8*	*16.8*	*16.9*	*17.0*	**16.3**	*16.7*	*16.9*
Mountain	**9.7**	**9.7**	**9.8**	**9.9**	**9.9**	**10.0**	*10.0*	*10.1*	*10.2*	*10.2*	*10.3*	*10.3*	**9.8**	*10.0*	*10.2*
Pacific	**21.1**	**21.2**	**21.4**	**21.6**	**21.8**	**21.9**	*22.0*	*22.1*	*22.2*	*22.3*	*22.4*	*22.5*	**21.3**	*21.9*	*22.3*

- = no data available

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

Regions refer to U.S. Census divisions.

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

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

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

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Information Administration | Short-Term Energy Outlook - October 2015

	2014				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Heating Degree Days															
New England	**3,561**	**883**	**147**	**2,080**	**3,852**	**819**	*94*	*2,089*	*3,146*	*838*	*134*	*2,184*	**6,670**	*6,853*	*6,302*
Middle Atlantic	**3,440**	**702**	**100**	**1,967**	**3,584**	**612**	*57*	*1,902*	*2,883*	*667*	*90*	*2,008*	**6,208**	*6,156*	*5,647*
E. N. Central	**3,935**	**728**	**169**	**2,366**	**3,695**	**661**	*112*	*2,185*	*3,062*	*725*	*129*	*2,259*	**7,198**	*6,653*	*6,174*
W. N. Central	**3,862**	**755**	**177**	**2,512**	**3,377**	**653**	*114*	*2,403*	*3,159*	*682*	*154*	*2,437*	**7,308**	*6,547*	*6,431*
South Atlantic	**1,714**	**196**	**14**	**1,039**	**1,675**	**155**	*15*	*986*	*1,490*	*215*	*17*	*1,006*	**2,962**	*2,831*	*2,727*
E. S. Central	**2,266**	**228**	**17**	**1,410**	**2,144**	**184**	*23*	*1,335*	*1,880*	*268*	*23*	*1,337*	**3,921**	*3,686*	*3,508*
W. S. Central	**1,481**	**92**	**4**	**847**	**1,399**	**69**	*2*	*866*	*1,302*	*106*	*5*	*804*	**2,424**	*2,337*	*2,217*
Mountain	**2,118**	**715**	**151**	**1,766**	**1,904**	**708**	*90*	*1,859*	*2,200*	*665*	*138*	*1,785*	**4,750**	*4,561*	*4,788*
Pacific	**1,247**	**465**	**56**	**985**	**1,075**	**523**	*66*	*1,046*	*1,286*	*482*	*80*	*1,099*	**2,754**	*2,710*	*2,948*
U.S. Average	**2,449**	**479**	**80**	**1,541**	**2,342**	**443**	*57*	*1,502*	*2,101*	*473*	*75*	*1,530*	**4,550**	*4,344*	*4,180*
Heating Degree Days, Prior 10-year Average															
New England	**3,152**	**836**	**134**	**2,167**	**3,166**	**838**	*134*	*2,147*	*3,212*	*824*	*136*	*2,134*	**6,289**	*6,285*	*6,306*
Middle Atlantic	**2,905**	**660**	**88**	**1,983**	**2,936**	**666**	*90*	*1,976*	*2,983*	*651*	*91*	*1,962*	**5,636**	*5,667*	*5,688*
E. N. Central	**3,117**	**690**	**120**	**2,243**	**3,192**	**694**	*123*	*2,262*	*3,247*	*689*	*129*	*2,250*	**6,170**	*6,272*	*6,315*
W. N. Central	**3,209**	**686**	**149**	**2,404**	**3,273**	**691**	*150*	*2,433*	*3,298*	*693*	*152*	*2,436*	**6,449**	*6,546*	*6,580*
South Atlantic	**1,465**	**194**	**14**	**1,006**	**1,481**	**196**	*14*	*1,013*	*1,502*	*185*	*15*	*1,007*	**2,679**	*2,704*	*2,709*
E. S. Central	**1,810**	**236**	**19**	**1,336**	**1,853**	**236**	*19*	*1,358*	*1,898*	*225*	*20*	*1,353*	**3,402**	*3,465*	*3,496*
W. S. Central	**1,157**	**85**	**5**	**827**	**1,189**	**86**	*5*	*834*	*1,221*	*83*	*5*	*839*	**2,075**	*2,113*	*2,148*
Mountain	**2,267**	**728**	**156**	**1,887**	**2,258**	**731**	*150*	*1,873*	*2,231*	*725*	*144*	*1,879*	**5,038**	*5,012*	*4,979*
Pacific	**1,554**	**625**	**96**	**1,236**	**1,533**	**621**	*92*	*1,205*	*1,493*	*609*	*87*	*1,196*	**3,511**	*3,451*	*3,385*
U.S. Average	**2,161**	**492**	**77**	**1,569**	**2,182**	**493**	*77*	*1,567*	*2,199*	*483*	*77*	*1,560*	**4,298**	*4,319*	*4,319*
Cooling Degree Days															
New England	**0**	**76**	**342**	**0**	**0**	**72**	*504*	*1*	*0*	*92*	*417*	*0*	**418**	*577*	*509*
Middle Atlantic	**0**	**157**	**433**	**6**	**0**	**184**	*610*	*7*	*0*	*169*	*559*	*5*	**595**	*801*	*733*
E. N. Central	**0**	**230**	**376**	**2**	**0**	**219**	*497*	*9*	*0*	*215*	*542*	*8*	**608**	*725*	*765*
W. N. Central	**0**	**262**	**537**	**12**	**3**	**266**	*665*	*11*	*3*	*273*	*683*	*11*	**811**	*944*	*969*
South Atlantic	**107**	**642**	**1,058**	**194**	**137**	**763**	*1,160*	*233*	*109*	*615*	*1,132*	*224*	**2,001**	*2,292*	*2,080*
E. S. Central	**6**	**507**	**925**	**66**	**23**	**581**	*1,029*	*65*	*25*	*492*	*1,033*	*65*	**1,505**	*1,698*	*1,615*
W. S. Central	**34**	**780**	**1,441**	**219**	**51**	**857**	*1,577*	*183*	*63*	*800*	*1,485*	*201*	**2,474**	*2,668*	*2,549*
Mountain	**31**	**437**	**868**	**94**	**45**	**432**	*920*	*78*	*19*	*443*	*975*	*88*	**1,429**	*1,475*	*1,526*
Pacific	**41**	**228**	**692**	**113**	**54**	**231**	*695*	*76*	*31*	*201*	*592*	*75*	**1,073**	*1,055*	*899*
U.S. Average	**34**	**394**	**775**	**96**	**47**	**434**	*879*	*93*	*38*	*388*	*848*	*94*	**1,298**	*1,453*	*1,368*
Cooling Degree Days, Prior 10-year Average															
New England	**0**	**83**	**417**	**1**	**0**	**85**	*420*	*1*	*0*	*81*	*421*	*1*	**500**	*505*	*503*
Middle Atlantic	**0**	**167**	**558**	**5**	**0**	**168**	*557*	*5*	*0*	*168*	*548*	*6*	**730**	*731*	*722*
E. N. Central	**3**	**230**	**546**	**6**	**3**	**234**	*545*	*6*	*3*	*229*	*528*	*6*	**785**	*787*	*765*
W. N. Central	**7**	**277**	**678**	**9**	**7**	**282**	*683*	*9*	*7*	*279*	*674*	*9*	**972**	*981*	*969*
South Atlantic	**110**	**636**	**1,154**	**213**	**110**	**635**	*1,154*	*210*	*113*	*659*	*1,144*	*211*	**2,112**	*2,108*	*2,128*
E. S. Central	**35**	**528**	**1,045**	**57**	**33**	**526**	*1,053*	*52*	*32*	*542*	*1,039*	*53*	**1,666**	*1,664*	*1,667*
W. S. Central	**102**	**882**	**1,506**	**190**	**94**	**883**	*1,519*	*184*	*90*	*890*	*1,518*	*183*	**2,680**	*2,679*	*2,681*
Mountain	**18**	**420**	**922**	**70**	**17**	**423**	*929*	*75*	*21*	*429*	*930*	*75*	**1,431**	*1,445*	*1,456*
Pacific	**26**	**166**	**589**	**58**	**26**	**171**	*601*	*65*	*29*	*181*	*614*	*67*	**839**	*863*	*891*
U.S. Average	**41**	**393**	**843**	**83**	**40**	**396**	*849*	*83*	*42*	*404*	*845*	*84*	**1,361**	*1,369*	*1,375*

- = no data available

Notes: Regional degree days for each period are calculated by EIA as contemporaneous period population-weighted averages of state degree day data published by the National Oceanic and Atmospheric Administration (NOAA).

See *Change in Regional and U.S. Degree-Day Calculations* (http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf) for more information.

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.gov/tools/glossary/) for a list of states in each region.

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

Projections: Based on forecasts by the NOAA Climate Prediction Center (http://www.cpc.ncep.noaa.gov/pacdir/DDdir/NHOME3.shtml).