



Short-Term Energy Outlook (STEO)

Highlights

- This edition of the *Short-Term Energy Outlook* is the first to include forecasts for 2017.
- North Sea Brent crude oil prices averaged \$38/barrel (b) in December, a \$6/b decrease from November, and the lowest monthly average price since June 2004. Brent crude oil prices averaged \$52/b in 2015, down \$47/b from the average in 2014, as growth in global liquids inventories put downward pressure on Brent prices throughout much of the year.
- Forecast Brent crude oil prices average \$40/b in 2016 and \$50/b in 2017. Forecast West Texas Intermediate (WTI) crude oil prices average \$2/b lower than Brent in 2016 and \$3/b lower in 2017. However, the current values of futures and options contracts continue to suggest high uncertainty in the price outlook. For example, EIA's forecast for the average WTI price in April 2016 of \$37/b should be considered in the context of recent contract values for April 2016 delivery ([Market Prices and Uncertainty Report](#)) suggesting that the market expects WTI prices to range from \$25/b to \$56/b (at the 95% confidence interval).
- The price of U.S. retail regular gasoline is forecast to average \$2.03/gallon (gal) in 2016 and \$2.21/gal in 2017, compared with \$2.43/gal in 2015. In December, average retail regular gasoline prices were \$2.04/gal, a decrease of 12 cents/gal from November and 51 cents/gal lower than in December 2014. EIA expects monthly retail prices of U.S. regular gasoline to reach a seven-year low of \$1.90/gal in February 2016, before rising during the spring.
- U.S. crude oil production averaged an estimated 9.4 million barrels per day (b/d) in 2015, and it is forecast to average 8.7 million b/d in 2016 and 8.5 million b/d in 2017. EIA estimates that crude oil production in December fell 80,000 b/d from the November level.
- Natural gas working inventories were 3,643 billion cubic feet (Bcf) on January 1, which was 17% higher than during the same week last year and 15% higher than the previous five-year average (2011-15) for that week. EIA forecasts that inventories will end the winter heating season (March 31) at 2,043 Bcf, which would be 38% above the level at the same time last year. Forecast Henry Hub spot prices average \$2.65/million British thermal units (MMBtu) in 2016 and \$3.22/MMBtu in 2017, compared with an average of \$2.63/MMBtu in 2015.
- A decline in power generation from fossil fuels in the forecast period is offset by an increase from renewable sources. The share of generation from natural gas falls from 33% in 2015 to 31% in 2017, and coal falls from 34% to 33%. For renewables, the forecast share of total

generation supplied by hydropower rises from 6% in 2015 to 7% in 2017, and the forecast share for other renewables increases from 7% in 2015 to 9% in 2017.

Global Petroleum and Other Liquid Fuels

EIA estimates that global oil inventories increased by 1.9 million b/d in 2015, marking the second consecutive year of inventory builds. This oversupply has contributed to oil prices reaching the lowest monthly average level since mid-2004. Inventories are forecast to rise by an additional 0.7 million b/d in 2016, before the global oil market becomes relatively balanced in 2017. The first draw on global oil inventories in 15 consecutive quarters is expected in the third quarter of 2017.

Global Petroleum and Other Liquid Fuels Consumption. EIA estimates global consumption of petroleum and other liquid fuels grew by 1.4 million b/d in 2015, averaging 93.8 million b/d for the year. EIA expects global consumption of petroleum and other liquid fuels to grow by 1.4 million b/d in both 2016 and 2017. Forecast real gross domestic product (GDP) for the world weighted by oil consumption, which increased by an estimated 2.4% in 2015, rises by 2.7% in 2016 and by 3.2% in 2017.

Consumption of petroleum and other liquid fuels in countries outside the Organization for Economic Cooperation and Development (OECD) increased by an estimated 0.8 million b/d in 2015, considerably lower than the 1.4 million b/d increase in 2014 mainly because of the slowdown in Eurasia, which saw a contraction in its consumption, and to a lesser degree because of China's slightly slower demand growth. Non-OECD consumption growth is expected to be 1.1 million b/d in both 2016 and 2017, reflecting higher growth in the Middle East and Eurasia.

OECD petroleum and other liquid fuels consumption rose by 0.6 million b/d in 2015. OECD consumption is expected to continue rising in both 2016 and 2017 by 0.3 and 0.4 million b/d, respectively, driven by an increase in U.S. consumption. OECD Europe demand is also expected to increase through the forecast period, albeit at a slower pace than the 0.3 million b/d increase in 2015. U.S. consumption is forecast to increase by 0.2 and 0.3 million b/d in 2016 and 2017, respectively. Consumption in Japan is forecast to decline by less than 0.1 million b/d in both 2016 and 2017.

Non-OPEC Petroleum and Other Liquid Fuels Supply. EIA estimates that petroleum and other liquid fuels production in countries outside of the Organization of the Petroleum Exporting Countries (OPEC) grew by 1.3 million b/d in 2015. The 2015 growth occurred mainly in North America. EIA expects non-OPEC production to decline by 0.6 million b/d in 2016, which would be the first decline since 2008. Most of the forecast decline in 2016 is expected to be in the United States. Non-OPEC production is forecast to decrease by an additional 0.1 million b/d in 2017.

Changes in non-OPEC production are driven by changes in U.S. tight oil production, which is characterized by high decline rates and relatively short investment horizons that make it among the most price-sensitive production globally. Forecast total U.S. liquid fuels production declines

by 0.4 million b/d in 2016 and remains relatively flat in 2017, as low oil prices contribute to drilling rig counts falling below levels required to sustain current production.

Outside of the United States, forecast non-OPEC production declines by 0.2 million b/d in 2016 and by 0.1 million b/d in 2017. Despite low crude oil prices, production declines are relatively minor because of investments committed to projects when oil prices were higher. Although oil companies have reduced investments, most of the cuts have been in capital exploration budgets that largely affect production levels beyond the forecast period. Additionally, strength in the U.S. dollar and production cost reductions have moderated the effects of declining oil revenues in some countries. Because oil revenues are denominated in dollars, the appreciation of the dollar relative to the currencies of several large oil producers means each dollar of revenue has more purchasing power if production costs are denominated in local currency.

Among other non-OPEC producers, the largest declines are forecast to be in the North Sea and Russia. After increasing in 2015, production in the North Sea is expected to return to its long-term declining trend in 2016 and 2017, as the planned start of several projects is not enough to offset the region's steep decline rates. Production in Russia also increased in 2015, as international sanctions had little effect on oil production, but Russia's production is expected to decline by 0.1 million b/d in both 2016 and 2017. However, Russia's exposure to low oil prices has been mitigated by the depreciation of the ruble relative to the dollar, given ruble-denominated production costs, and by Russia's taxation regime for the oil sector.

Some non-OPEC countries, led by Canada and Brazil, will continue to see increasing oil production during the forecast period. Production in Canada is expected to increase by 50,000 b/d in both 2015 and 2016, as a number of oil sands projects that are under construction will begin production, including the Imperial Oil and Cenovus projects scheduled to come online by the end of 2016. These projects were commissioned before the sharp decline in crude oil price. Production in Brazil is expected to increase by about 40,000 b/d in 2016 and 20,000 b/d in 2017. This growth is down from growth of 0.2 million b/d in 2015, which was the result of several floating production, storage, and offloading facilities coming online. Reduced growth in Brazil's production occurs because Petrobras's high debt levels and the legal fallout from the ongoing corruption probe are expected to reduce investment.

Unplanned supply disruptions among non-OPEC producers averaged 0.4 million b/d in December, reflecting a downward revision of roughly 0.3 million b/d compared with the last STEO. EIA revised downward its estimate of non-OPEC disruptions because of a revision in production capacity held by Syria and Yemen. EIA's estimates of unplanned production outages are calculated as the difference between estimated effective production capacity (the level of supply that could be available within one year) and estimated production. Therefore, these outage estimates can differ from those measured against other capacity types, such as nameplate capacity or the production level prior to the disruption.

OPEC Petroleum and Other Liquid Fuels Supply. At their December 4 meeting, OPEC members voted to reactivate Indonesia's OPEC membership after an almost seven-year hiatus. As of this

STEO, EIA includes Indonesia's crude oil and other liquids production in the OPEC total for both history and the forecast.

OPEC crude oil production averaged 31.6 million b/d in 2015, an increase of 0.9 million b/d from 2014. Iraq led the OPEC production increases. Its production rose by 0.7 million b/d in 2015. Saudi Arabia also boosted production to defend its share of the global oil market, with its production increasing by 0.3 million b/d in 2015.

Forecast OPEC crude oil production increases by 0.5 million b/d in 2016, with Iran expected to increase production once international sanctions targeting its oil sector are suspended. Under the [Joint Comprehensive Plan of Action \(JCPOA\)](#) between Iran and the five permanent members of the United Nations Security Council and Germany (P5+1), which was announced on July 14, 2015, sanctions relief is contingent on verification by the International Atomic Energy Agency (IAEA) that Iran has complied with key nuclear-related steps. Forecast OPEC crude oil production is expected to increase by 0.6 million b/d in 2017, with Iran accounting for most of the increase.

Although uncertainty remains as to the timing of sanctions relief, EIA assumes the implementation occurs in the first quarter of 2016, clearing the way to ease sanctions at that time. EIA has moved up the anticipated implementation day because Iran has made faster-than-expected progress in meeting key obligations required under the JCPOA.

Iran's crude oil production is forecast to grow by about 0.3 million b/d in 2016 and by 0.5 million b/d in 2017. The forecast growth of Iran's crude oil production through the forecast period also depends on internal factors including Iran's ability to mitigate production decline rates and meet technical challenges and on its willingness to discount oil.

OPEC noncrude liquids production averaged 6.7 million b/d in 2015, and it is forecast to increase by 0.3 million b/d in both 2016 and 2017, led by increases in Iran and Qatar.

In December, unplanned crude oil supply disruptions among OPEC producers averaged 2.8 million b/d, up slightly compared with the previous month. Kuwait and Saudi Arabia continue to have a combined disruption of 0.5 million b/d at the Wafra and Khafji fields in the Neutral Zone that straddles the two countries.

OPEC surplus crude oil production capacity, which averaged 1.6 million b/d in 2015, is expected to increase to 2.0 million b/d in 2016 and then be 1.9 million b/d in 2017. 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 difference 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, 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. However, the continuing inventory builds and

high current and forecast levels of global oil inventories make the projected low surplus capacity level less significant.

OECD Petroleum Inventories. EIA estimates that OECD commercial crude oil and other liquid fuels inventories totaled 3.06 billion barrels at the end of 2015, equivalent to roughly 66 days of consumption. Forecast OECD inventories rise to 3.13 billion barrels at the end of 2016, and they are also expected to be 3.13 billion barrels at the end of 2017.

Crude Oil Prices. Brent crude oil spot prices decreased by \$6/b in December to a monthly average of \$38/b, the lowest monthly average price since June 2004. Prices fell in December, as OPEC producers (at their December 4 meeting) indicated plans to continue the policy of defending market share in a low oil price environment and as global oil inventories continued to build. Continuing [increases in global liquids inventories](#) have put significant downward pressure on oil prices since mid-2014. Inventories rose by an estimated 1.9 million b/d in 2015, and Brent crude oil prices averaged \$52/b in 2015, a decrease of \$47/b from 2014.

With global inventory builds expected to continue in 2016, upward pressure on crude oil prices will be limited. Forecast Brent prices average \$40/b in 2016. The largest inventory builds occur in the first half of 2016, keeping Brent prices below \$40/b through April.

Brent prices are forecast to average \$50/b in 2017, with upward price pressures concentrated in the latter part that year. At that point the market is expected to experience small inventory draws, with the possibility of further draws beyond the forecast period. Brent prices are forecast to average \$56/b in the fourth quarter of 2017.

Forecast West Texas Intermediate (WTI) crude oil prices average \$2/b lower than Brent in 2016 and \$3/b lower in 2017. EIA had previously assumed the 2016 WTI discount to be \$5/b. The lower forecast WTI discount to Brent is based on the relative storage availability in the United States compared with other regions that encourages placing crude oil in the U.S. market in a period of global oversupply.

During the forecast period, 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.

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 April 2016 delivery, traded during the five-day period ending January 7, averaged \$38/b, while implied volatility averaged 46%. These levels established the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in April 2016 at \$25/b and \$56/b, respectively. The 95% confidence interval for market expectations widens over time, with lower and upper limits of \$22/b and \$82/b for prices in December 2016. Last year at this time, WTI for April 2015 delivery averaged \$51/b, and implied volatility averaged

48%. The corresponding lower and upper limits of the 95% confidence interval were \$34/b and \$76/b.

U.S. Petroleum and Other Liquid Fuels

Monthly data show gasoline consumption in the United States increased by 2.8% during the first 10 months of 2015 compared with same period in 2014. U.S. gasoline consumption growth reflects increases in employment and lower gasoline prices. Growing domestic and global consumption of gasoline 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. Average wholesale gasoline margins reached 73 cents/gal in August, which was the highest monthly average since May 2007. Margins returned closer to typical seasonal levels in October but increased in December, a month in which they typically decline. The estimated average wholesale gasoline margin in December reached 42 cents/gal, which would mark the highest December margin in EIA's data that begin in 1987.

Despite the increasing wholesale gasoline margins, U.S. regular gasoline retail prices fell from a monthly average of \$2.16/gal in November to \$2.04/gal in December because of lower crude oil prices. Monthly average regional gasoline retail prices for December ranged from a low of \$1.79/gal in PADD 3 (Gulf Coast) to a high of \$2.56/gal in PADD 5 (West Coast). EIA expects gasoline prices to fall from current levels, with the U.S. regular gasoline price averaging \$1.90/gal in February 2016.

Liquid Fuels Consumption. Total U.S. liquid fuels consumption is projected to increase by 270,000 b/d (1.4%) in 2015, more than the 140,000 b/d (0.8%) growth in 2014. U.S. consumption has been stimulated by continued [growth in employment and the economy](#) and lower petroleum product prices. In 2016, total liquid fuels consumption is forecast to increase by 160,000 b/d (0.8%) from the 2015 level. In 2017, total U.S. liquid fuels consumption is projected to rise by an additional 270,000 b/d (1.4%).

Motor gasoline consumption increased by an estimated 240,000 b/d (2.6%) in 2015 to an average of 9.2 million b/d, the highest level since the record of 9.3 million b/d in 2007. Although total nonfarm employment and total highway travel since then have increased by 2.9% and 3.7%, respectively, improving vehicle fuel economy continues to keep gasoline consumption below its previous peak throughout the forecast period. Gasoline consumption is forecast to increase by 70,000 b/d (0.8%) in 2016, as employment and population growth offset continuing improvements in vehicle fleet fuel economy. In 2017, motor gasoline consumption is projected to rise by 20,000 b/d (0.2%).

In 2015, jet fuel consumption increased by an estimated 70,000 b/d (4.8%). Forecast jet fuel consumption declines slightly in 2016, with improvement in average airline fleet fuel economy offsetting growth in freight and passenger travel. In 2017, jet fuel consumption is projected to rise by 20,000 b/d (1.3%).

Consumption of distillate fuel, which includes diesel fuel and heating oil, fell by an estimated 80,000 b/d (1.9%) in 2015. Based on expectations of continued economic growth, total distillate consumption is projected to grow by an annual average of 80,000 b/d (2.0%) over the next two years.

Hydrocarbon gas liquids (HGL) consumption is expected to increase by 10,000 b/d in 2016 and by 130,000 b/d in 2017. In 2016, a 30,000 b/d decline in propane consumption, mainly from reduced heating consumption in the first quarter, is offset by growth in petrochemical consumption of HGL, mainly ethane. In 2017, more normal weather contributes to a 20,000 b/d increase in propane consumption, and the start-up of six ethane-fed petrochemical plants contributes to a 100,000 b/d increase in ethane consumption. [New HGL export terminal capacity](#) contributes to an increase in HGL net exports from an estimated average of 840,000 b/d in 2015 to 1.3 million b/d in 2017.

Liquid Fuels Supply. U.S. crude oil production is projected to decrease from an average of 9.4 million b/d in 2015 to 8.7 million b/d in 2016 and to 8.5 million b/d in 2017. The forecast reflects an extended decline in Lower 48 onshore production driven by persistently low oil prices that is partially offset by growing production in the federal Gulf of Mexico.

According to the latest survey-based reporting of monthly crude oil production data, U.S. production averaged 9.5 million b/d through the first 10 months of 2015, about 0.2 million b/d higher than in the fourth quarter of 2014. The estimates include EIA survey-based monthly crude oil production data for Oklahoma for the first time. These new estimates are roughly 0.1 million b/d per month higher than those generated by the previous methodology for Oklahoma, which was based on state-reported data that was later adjusted by EIA. [The recently expanded EIA-914 survey](#) now collects oil production from the largest oil producers in 15 states (including Oklahoma) and the federal Gulf of Mexico.

Based on these estimates, total U.S. production began falling in May 2015, led by Lower 48 onshore production that has fallen nearly 0.5 million b/d. These declines have been tempered by production growth of 0.1 million b/d in the Gulf of Mexico since April.

With WTI prices falling below \$40/b in December 2015 and projected to remain below that level through mid-2016, EIA expects oil production to decline in most Lower 48 onshore oil production regions. The expectation of reduced cash flows in 2016 and 2017 has prompted many companies to scale back investment programs, deferring major new undertakings until a sustained price recovery occurs. The prospect of higher interest rates and tougher lending conditions will likely limit the availability of capital for many smaller producers, giving rise to distressed asset sales and consolidation of acreage holdings by more financially sound firms. The retrenchment in onshore investment is anticipated to push the count of oil-directed rigs and well completions in 2016 and 2017 below current levels.

The focus of drilling and production activities will be on the core areas of major tight oil plays. Despite the significant decline in total rig counts in 2015, rig counts have largely stabilized in the core counties of the Bakken, Eagle Ford, Niobrara, and Permian. In these areas, falling costs and

ongoing technological and process improvements in rig, labor, and well productivity are anticipated to lead to faster rates of well completions and less-rapid production declines relative to other Lower 48 onshore areas. The ongoing gains in learning-by-doing, cost reductions, and rig and well productivity are expected to enhance the economic viability of these areas as well as to be disseminated to other regions, incrementally reducing the breakeven costs of production in more marginal areas.

EIA expects U.S. crude oil production to decline steadily from 9.2 million b/d in December 2015, reaching about 8.5 million b/d in November 2016. Production is expected to stay near 8.5 million b/d for most of 2017. This level of production would be 1.2 million b/d below the April 2015 level, which was the highest monthly production since April 1971.

Productivity improvements, lower breakeven costs, and anticipated oil price increases in the second half of 2017 are expected to end over two years of falling Lower 48 onshore production. Onshore production averaged 7.6 million b/d in the second quarter of 2015, and it is forecast to fall below 6.2 million b/d in September 2017 before increasing modestly in the fourth quarter of 2017. The forecast remains sensitive to actual wellhead prices and rapidly changing drilling economics that vary across regions and operators.

Projected crude oil production in the Gulf of Mexico rises during the forecast period, and oil production in Alaska falls. Production in these areas is less sensitive than onshore production in the Lower 48 states to short-term price movements and reflects anticipated growth from new projects in the Gulf of Mexico and declines from legacy fields in Alaska. Several projects in the Gulf that came or will come online in 2014-16 will push up production from an average of 1.6 million b/d in 2015 to 1.9 million b/d in the fourth quarter of 2017. It is possible some projects will start production later than expected, potentially shifting some of the anticipated production gains from late 2017 into early 2018.

Late in the forecast period EIA expects small sales from the U.S. Strategic Petroleum Reserve (SPR). [Recent legislation](#) authorized sales of SPR oil between Fiscal Years (FY) 2018-25 for deficit reduction, SPR modernization, and highway funding purposes. EIA assumes 5 million barrels of SPR sales for deficit reduction purposes in FY 2018 (which starts in October 2017), equivalent to 14,000 b/d of SPR draws during the fourth quarter of 2017. EIA further assumes no SPR sales occur for SPR modernization during the forecast period.

EIA projects HGL production at natural gas processing plants will increase by 0.2 million b/d (6.3%) in 2016 and by 0.3 million b/d (8.1%) in 2017. Expected additions of natural gas processing and distribution infrastructure contribute to forecast HGL production growing at a faster pace than the natural gas streams from which it is produced. EIA expects higher ethane recovery rates in 2016 and 2017, following planned increases to petrochemical plant feedstock demand in the United States and abroad. Planned terminal builds and expansions and a growing ship fleet allow more U.S. ethane, propane, and butanes to reach international markets, with forecast net HGL exports averaging 1.1 million b/d in 2016 and 1.3 million b/d in 2017.

The growth in domestic crude oil and other liquids production has contributed to a significant decline in imports. The share of total U.S. liquid fuels consumption met by net imports fell from 60% in 2005 to an estimated 24% in 2015. EIA expects the net import share to remain flat in 2016, before increasing slightly to 25% in 2017, as domestic oil production falls. This would be the first annual increase in the share of consumption met by net imports since 2005.

Petroleum Product Prices. Lower crude oil prices contributed to U.S. regular gasoline retail prices declining to an average of \$2.04/gal in December, down from an average of \$2.16/gal in November. EIA projects regular gasoline retail prices to fall to an average \$1.90/gal in February 2016 and average \$1.95/gal in the first quarter of 2016.

The U.S. regular gasoline retail price, which averaged \$2.43/gal in 2015, is projected to average \$2.03/gal in 2016, 33 cents/gal lower than estimated in last month's STEO, and \$2.21/gal in 2017.

The diesel fuel retail price, which averaged \$2.71/gal in 2015, is projected to average \$2.29/gal in 2016, 38 cents/gal lower than in last month's STEO, and \$2.59/gal in 2017.

Lower projected crude oil prices this winter (2015-16) compared with last winter contribute to a reduction in the forecast residential heating oil price and average household heating oil expenditures. Households that use heating oil as a primary space heating fuel are expected to pay an average of \$2.17/gal this winter, 87 cents/gal less than last winter. The average household is now expected to spend \$1,088 for heating oil this winter, \$763 less than last winter. The reduction in expenditures also reflects lower forecast consumption because warmer temperatures are forecast this winter compared with last winter.

Propane prices this winter are expected to be 9% lower than last winter in the Northeast and 18% lower in the Midwest, contributing to households spending 24% and 31% less on propane in those regions, respectively.

Natural Gas

Forecast Henry Hub spot prices average \$2.65/MMBtu in 2016 and \$3.22/MMBtu in 2017, compared with an average of \$2.63/MMBtu in 2015. Although annual average prices for 2015 and 2016 are similar, prices are forecast to rise through much of 2016, from prices that began the year near \$2/MMBtu. Price increases reflect consumption growth, mainly from the industrial sector, that outpaces production growth in 2016.

EIA expects production growth will be relatively flat in 2016, partly in response to lower prices and declining rig activity. With higher prices in 2017, and as new consumption and more export capacity comes online, EIA projects production will pick up slightly.

Natural Gas Consumption. EIA's forecast of U.S. total natural gas consumption averages 76.6 billion cubic feet/day (Bcf/d) in 2016 and 77.2 Bcf/d in 2017, compared with 75.5 Bcf/d in 2015. Increases in industrial sector consumption drive total consumption growth in 2016 and 2017. Industrial sector consumption of natural gas increases by 3.5% in 2016 and by 2.5% in 2017, as

new projects in the fertilizer and chemicals sectors come online. EIA expects a 0.1 Bcf/d (0.3%) decline in consumption of natural gas for power generation in 2016 and a 1.4% decrease in 2017. Natural gas consumption in the residential and commercial sectors is projected to increase in 2016 and 2017, reflecting slightly higher heating demand in those years.

Natural Gas Production and Trade. In September, total marketed production of natural gas hit a record high of 80.2 Bcf/d before declining the following month, according to EIA's survey data. EIA estimates that marketed natural gas production averaged 79.1 Bcf/d in 2015, an increase of 4.2 Bcf/d (5.7%) from 2014. EIA projects growth will slow to 0.7% in 2016, as low natural gas prices and declining rig activity begin to affect production. In 2017, however, forecast production growth increases to 1.8%, as forecast prices rise and more demand comes from industrial sectors and liquefied natural gas (LNG) exporters.

Although demand growth levels off, production remains high, which is expected to reduce demand for natural gas imports from Canada and to support growth in exports to Mexico. EIA expects natural gas exports to Mexico 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 0.7 Bcf/d in 2016, with the start-up of Cheniere's Sabine Pass LNG liquefaction plant planned for early this year. EIA projects gross exports will average 1.4 Bcf/d in 2017, as Sabine Pass ramps up its capacity.

Natural Gas Inventories. On January 1, natural gas working inventories were 3,643 Bcf. Withdrawals during the heating season have been relatively low because of warmer-than-normal weather. January 1 inventories were 535 Bcf (17%) above year-ago levels and 464 Bcf (15%) above the five-year (2011-15) average. Inventories are forecast to be 2,043 Bcf at the end of March 2016, which would be 421 Bcf above the five-year average.

Natural Gas Prices. The Henry Hub natural gas spot price averaged \$1.93/MMBtu in December, a decrease of 16 cents/MMBtu from the November price. Warmer-than-normal temperatures in the first half of the heating season, record inventory levels, production growth, and forecasts for a warm winter contributed to spot prices remaining low. Monthly average Henry Hub spot prices are forecast to rise through 2016, but they remain less than \$3/MMBtu until December. Forecast Henry Hub natural gas prices average \$2.65/MMBtu in 2016 and \$3.22/MMBtu in 2017.

Natural gas futures contracts for April 2016 delivery traded during the five-day period ending January 7 averaged \$2.38/MMBtu. Current options and futures prices imply market participants place the lower and upper bounds for the 95% confidence interval for April 2016 contracts at \$1.61/MMBtu and \$3.52/MMBtu, respectively. In January 2015, the natural gas futures contract for April 2015 delivery averaged \$2.88/MMBtu, and the corresponding lower and upper limits of the 95% confidence interval were \$1.90/MMBtu and \$4.36/MMBtu.

Coal

Coal Supply. EIA estimates U.S. coal production declined by 109 million short tons (MMst) (11%) in 2015, the largest decline ever recorded. The 2015 drop in production occurred in all coal-producing regions, with the largest percentage decrease occurring in the Appalachian region (15%). Production in the Interior region, which includes the Illinois Basin, declined by 11% in 2015, which was the first decline in that region since 2009. Western region production declined by 9%, with production below 500 MMst for the first time since 1998.

Forecast U.S. coal production continues to decline over the next two years. Production is projected to fall by 38 MMst (4%) in 2016 and by an additional 9 MMst (1%) in 2017. Interior region production, which accounted for only 13% of coal production 10 years ago (2006), is projected to account for 20% of production in 2016 and 2017. This increase in share reflects the region's growing competitive advantages compared to the other coal-producing regions. These factors include the higher heat content of the coal, closer proximity to major markets than coal produced in the Western region, and lower mining costs than Appalachian-produced coal. Appalachian production, which accounted for 34% of production 10 years ago, is projected to decline to 24% in 2016 and 2017. The Western region's share, which was 53% 10 years ago, increases to 56% in 2016 and 2017.

Electric power sector coal stockpiles were 176 MMst in October, an 8% increase from September, which is similar to the typical seasonal pattern. October coal inventories averaged 155 MMst during the previous 10 years (2005-14). Coal stockpiles are still relatively high because of the loss in market share to natural gas for power generation.

Coal Consumption. EIA estimates that coal consumption decreased by 11% in 2015, mainly as a result of an 11% drop in electric power sector consumption. Lower natural gas prices are the primary driver of the decrease in coal consumption. Low natural gas prices make it more economical to increase generation at natural gas-fired units and to decrease generation at coal-fired units. Retirements of coal-fired power plants, stemming from both increased competition with natural gas generation and the implementation of the [Mercury and Air Toxics Standards \(MATS\)](#), also reduce coal-fired generation capacity, but the full effect will not be evident until 2016.

Higher forecast natural gas prices in 2016 and 2017 are expected to contribute to higher utilization rates among the remaining coal-fired power plants. This higher utilization rate somewhat mitigates the effect of lower consumption from coal-plant retirements. Coal consumption in the electric power sector is forecast to remain relatively unchanged in 2016. In 2017, increases in nuclear (1%), hydropower (8%), and other renewable-based (12%) electricity generation are forecast to contribute to a 1% decline in electric power sector coal consumption.

Coal Trade. Slower growth in world coal demand and lower international coal prices have 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 over the next few years.

EIA estimates U.S. coal exports decreased 20 MMst (21%) from 2014 levels to 77 MMst in 2015. The current global coal market trends are expected to continue, and coal exports are forecast to decline by an additional 9 MMst (12%) in 2016 and by 2 MMst (4%) in 2017.

U.S. coal imports, which were 11 MMst in 2014, remained at that level in 2015. Coal imports, primarily from Latin America, are forecast to maintain their market share with power generators along the Atlantic and Gulf coasts, as imported coal's delivered price in those markets remains competitive with prices for domestically produced coal. Imports are projected to average just under 11 MMst in 2016 and 2017.

Coal Prices. The annual average price of coal to the electric power sector averaged \$2.36/MMBtu in 2014. EIA estimates the delivered coal price averaged \$2.23/MMBtu in 2015. Forecast prices are \$2.19/MMBtu in 2016 and \$2.20/MMBtu in 2017.

Electricity

The mix of generating units that supply electricity in the United States is undergoing a significant transformation. Many older coal plants are being decommissioned as the industry adapts to sustained low costs of competing natural gas generating units and the effects of environmental regulations. EIA estimates that at least 14 gigawatts (GW) of coal-fired capacity were retired during 2015, equal to nearly 5% of the operable coal capacity existing at the end of 2014. Power plant operators have reported to EIA that they plan to retire at least 10.7 GW of additional coal capacity during 2016 and 2017. This total could rise as state policies related to the Clean Power Plan take shape.

Electricity Consumption. Forecast U.S. retail sales of electricity to the residential sector fall by 0.5% during 2016 compared with 2015. Residential electricity consumption during the first quarter this year is projected to be 5.8% lower than the same period in 2015, which experienced colder-than-normal weather with heating degree days 7% above the 10-year average. EIA expects U.S. residential electricity sales to grow by 1.7% in 2017. The total number of residential customers grows by 0.9% next year, which would be the highest growth rate since 2007. Forecast U.S. retail electricity sales to the commercial sector rise by 0.9% and by 1.1% in 2016 and 2017, respectively. Forecast U.S. industrial sector sales increase by 1.1% in 2016 and by 0.4% in 2017.

Electricity Generation. Total U.S. electricity generation in 2016 is expected to average 11.3 terawatt-hours per day, 0.4% higher than 2015 generation. Total generation grows by an additional 1.0% in 2017. Natural gas prices are forecast to remain at relatively low levels, with the Henry Hub spot price remaining below \$3/MMBtu until late 2016. EIA expects that the share of total generation fueled by natural gas in 2016 will average 32.2% while coal supplies 33.6% of generation, similar to their shares in 2015. The projected generation shares for natural gas and coal generation fall in 2017 to 31.4% and 33.0%, respectively, as generation from renewable energy sources increases.

Electricity Retail Prices. The U.S. retail price of electricity in the residential sector is projected to average 12.7 cents per kilowatthour (kWh) in 2016, which is unchanged from the average price in 2015. The U.S. retail price of electricity in the residential sector is projected to be 13.0 cents/kWh in 2017, 3.0% higher than the average price in 2016. In New England, where residential electricity prices are forecast to be highest in the country in 2016, the forecast residential electricity price averages 19.1 cents/kWh in the first quarter of 2016, whereas in the West South Central region it is expected to be lowest in 2016, averaging 10.2 cents/kWh in the first quarter of 2016.

Renewables and Carbon Dioxide Emissions

Electricity and Heat Generation from Renewables. EIA expects total renewables used in the electric power sector to increase by 9.5% in 2016. Forecast hydropower generation in the electric power sector increases by 4.8% in 2016. The current El Niño cycle has [mixed implications](#) for the hydroelectric generation outlook. This winter started off wet in the Pacific Northwest, where roughly half of the nation's hydropower is generated. In December 2015, most of the Pacific Northwest saw precipitation levels more than 30% above normal (according to [the Northwest River Forecast Center](#)), which points to [above-normal snowpack levels](#) in the region. California also had above-average levels of precipitation in December. However, [drought conditions](#) persist in much of the state.

In December 2015, Congress passed an extension and modification of federal tax credits for new wind and solar generators. Production tax credit eligibility for wind generators was extended for plants starting construction through the end of 2019, with the value of the credit declining from 2.4 cents/kWh to 1.0 cent/kWh for the first 10 years of plant operation. Investment tax credits eligibility for solar generators was extended at the 30% level for plants starting construction through the end of 2019, with the value dropping each year down to 10% for plants under construction in 2022 and beyond.

EIA expects little impact from these renewable electricity tax credit extensions in 2016 because most plants that will enter service in 2016 are already being developed. Impacts in 2017 depend on how many wind and solar projects are already in the development queue but not yet under construction. The U.S. Environmental Protection Agency's (EPA) approval of the Clean Power Plan in August 2015 may also affect new renewable builds over the next several years, but these near-term effects will be less certain until states start to lay out their implementation plans.

EIA expects continued growth in utility-scale solar power generation, which is projected to average 129 gigawatthours per day (GWh/d) in 2017, an increase of 45% from the 2016 level. Utility-scale solar power averages 1.1% of total U.S. electricity generation in 2017. Although solar growth has historically been concentrated in [customer-sited distributed generation installations](#) (rooftop panels), EIA expects utility-scale solar capacity will increase by 126% (13 GW) between the end of 2014 and the end of 2016, with 4.9 GW of new capacity being built in California. Other states leading in utility-scale solar capacity additions include North Carolina

and Nevada, which, combined with California, account for about two-thirds 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 13% in 2015, and it is forecast to increase by 14% in 2016 and by 3% in 2017.

Liquid Biofuels. On November 30, EPA finalized a rule setting Renewable Fuel Standard (RFS) volumes for 2014 through 2016. EIA used these finalized volumes to develop the current STEO forecast and assumes the 2016 targets for 2017, except the biomass-based diesel 2017 target of 2.0 billion gallons, which was included in the November 30 rule. Ethanol production, which averaged an estimated 964,000 b/d in 2015, is forecast to average about 970,000 b/d in both 2016 and 2017. Ethanol consumption, which averaged 910,000 b/d in 2015, is forecast to average 930,000 b/d in both 2016 and 2017. This level of consumption results in the ethanol share of the total gasoline pool averaging 10.0% in both 2016 and 2017. EIA does not expect significant increases in E15 or E85 consumption over the forecast period.

EIA expects that the largest effect of the proposed RFS targets will be on biodiesel consumption, which helps to meet the RFS targets for use of biomass-based diesel, advanced biofuel, and total renewable fuel. Biodiesel production averaged an estimated 85,000 b/d in 2015 and is forecast to average 107,000 b/d in 2016 and 112,000 b/d in 2017. Net imports of biomass-based diesel are also expected to increase from 28,000 b/d in 2015 to 47,000 b/d in both 2016 and 2017.

Energy-Related Carbon Dioxide Emissions. EIA estimates that emissions of CO₂ declined by 1.9% in 2015. Emissions are projected to increase 0.6% in 2016 but remain flat in 2017. 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 [real GDP](#) increased at an annual rate of 2.0% in the third quarter of 2015. The increase in real GDP in the third quarter reflected positive contributions from personal consumption expenditures, state and local government spending, and residential fixed investment.

EIA used the December 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 2.7% in 2016 and 3.3% in 2017, above the growth of 2.5% estimated for 2015. Real disposable income grows by 3.2% and 3.5% in 2016 and 2017, respectively. Total industrial production grows at 0.8% in 2016 and 3.7% in 2017. Projected growth in nonfarm employment averages 1.5% in 2016 and 2017.

Expenditures. Forecast private real fixed investment growth averages 5.9% and 7.3% in 2016 and 2017, respectively. Real consumption expenditures grow faster than real GDP at 3.0% in 2016 and 3.7% in 2017. Durable goods expenditures drive consumption spending in both years. Export growth is 2.5% and 5.3% over the same two years, while import growth is 4.7% in 2016 and 9.1% in 2017. Total government expenditures rise by 2.2% in 2016 and by 0.4% in 2017.

This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the U.S. Department of Energy or other federal agencies.

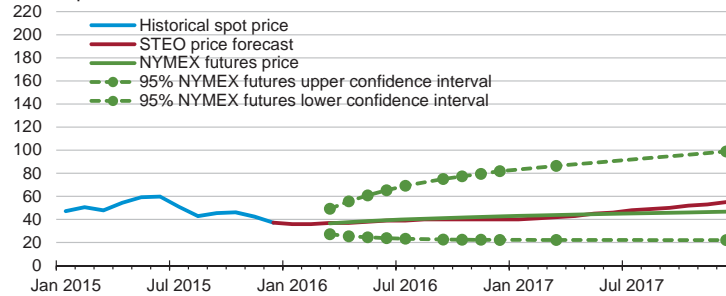


Short-Term Energy Outlook

Chart Gallery for January 2016

West Texas Intermediate (WTI) Crude Oil Price

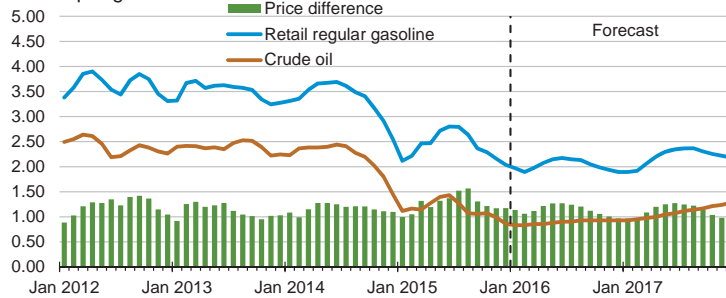
dollars per barrel



Note: Confidence interval derived from options market information for the 5 trading days ending Jan. 7, 2016. Intervals not calculated for months with sparse trading in near-the-money options contracts.
Source: Short-Term Energy Outlook, January 2016.

U.S. Gasoline and Crude Oil Prices

dollars per gallon

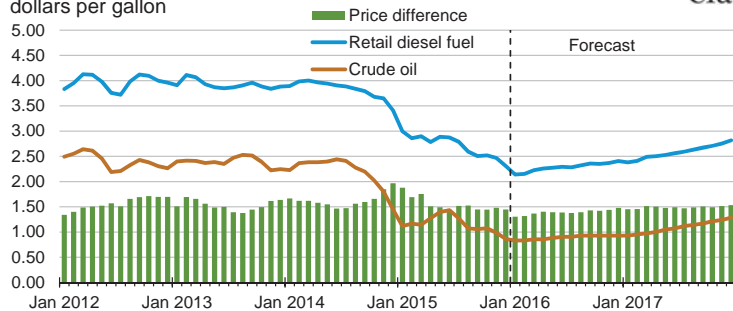


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, January 2016.

U.S. Diesel Fuel and Crude Oil Prices

dollars per gallon

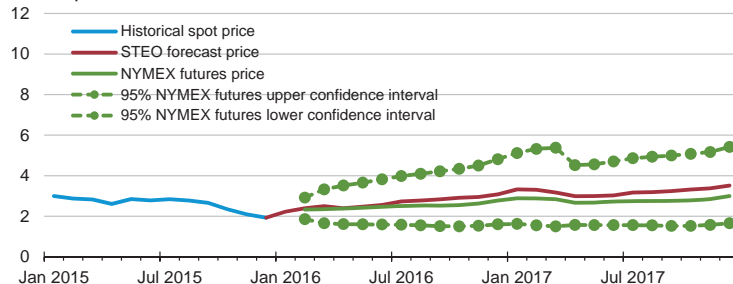


Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.

Source: Short-Term Energy Outlook, January 2016.

Henry Hub Natural Gas Price

dollars per million Btu

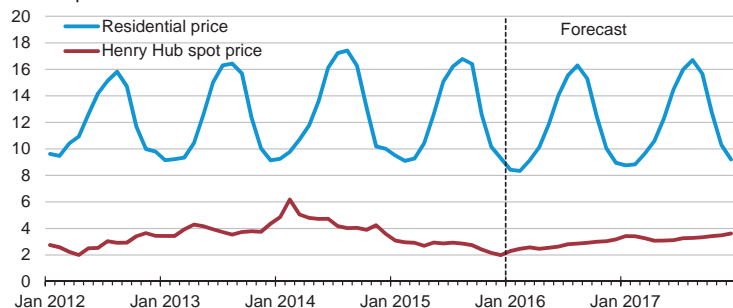


Note: Confidence interval derived from options market information for the 5 trading days ending Jan. 7, 2016. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, January 2016.

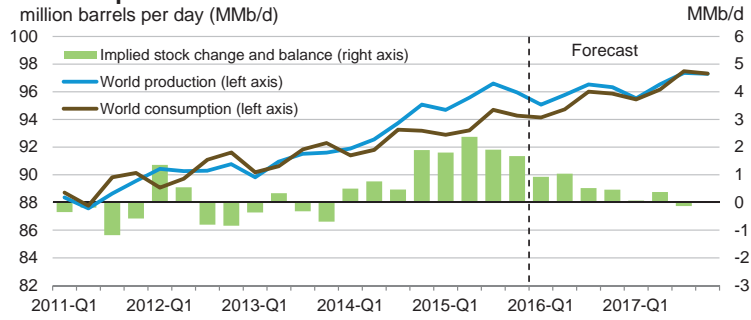
U.S. Natural Gas Prices

dollars per thousand cubic feet



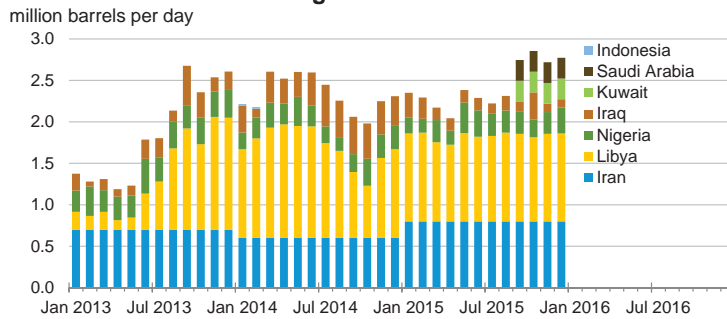
Source: Short-Term Energy Outlook, January 2016.

World Liquid Fuels Production and Consumption Balance



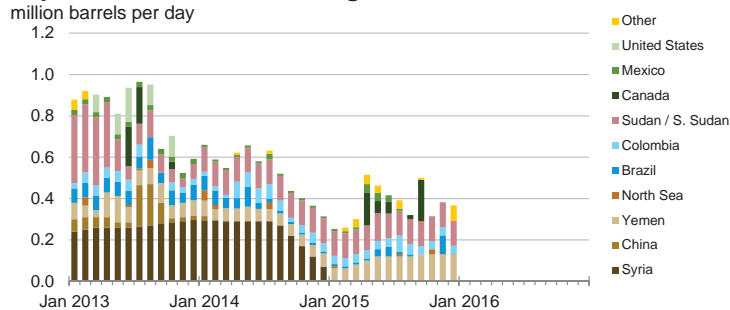
Source: Short-Term Energy Outlook, January 2016.

Estimated Historical Unplanned OPEC Crude Oil Production Outages



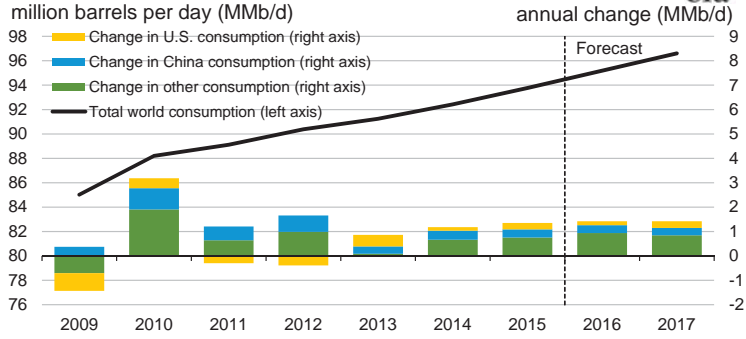
Source: Short-Term Energy Outlook, January 2016.

Estimated Historical Unplanned Non-OPEC Liquid Fuels Production Outages



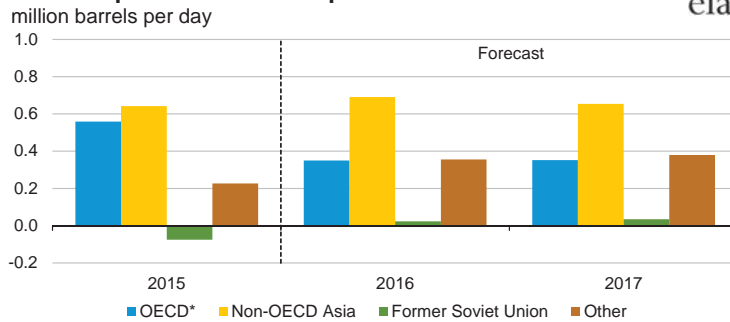
Source: Short-Term Energy Outlook, January 2016.

World Liquid Fuels Consumption



Source: Short-Term Energy Outlook, January 2016.

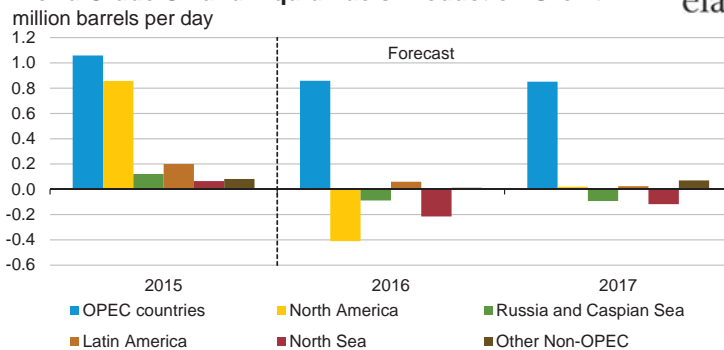
World Liquid Fuels Consumption Growth



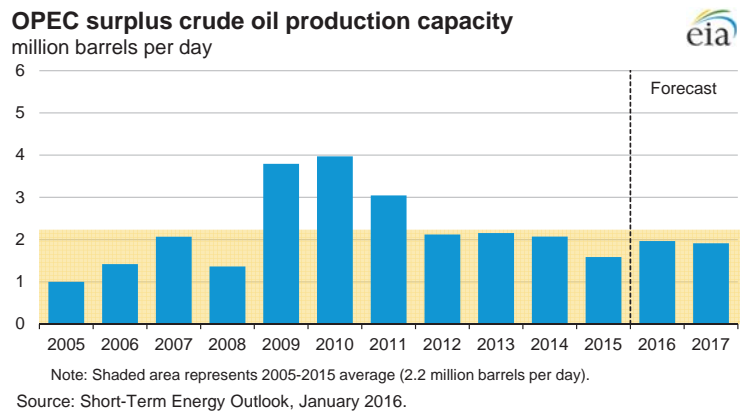
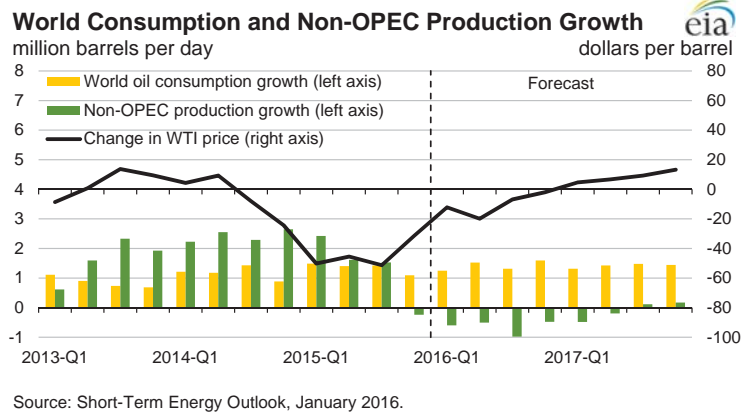
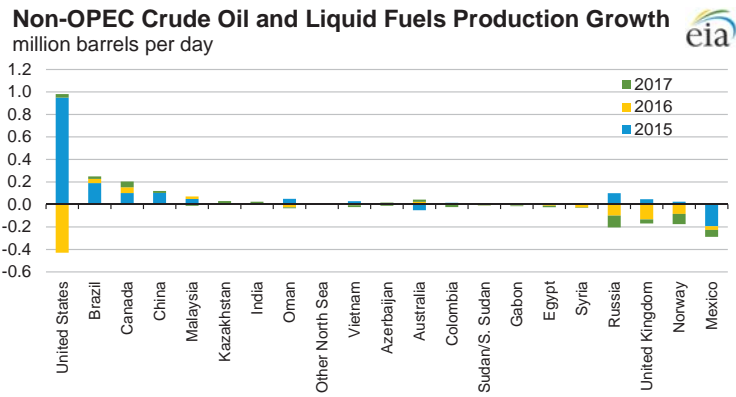
* Countries belonging to the Organization for Economic Cooperation and Development

Source: Short-Term Energy Outlook, January 2016.

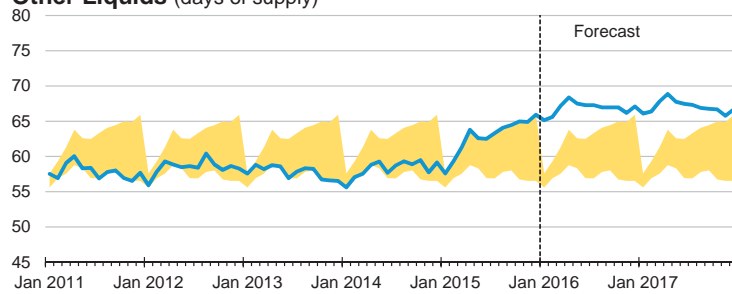
World Crude Oil and Liquid Fuels Production Growth



Source: Short-Term Energy Outlook, January 2016.

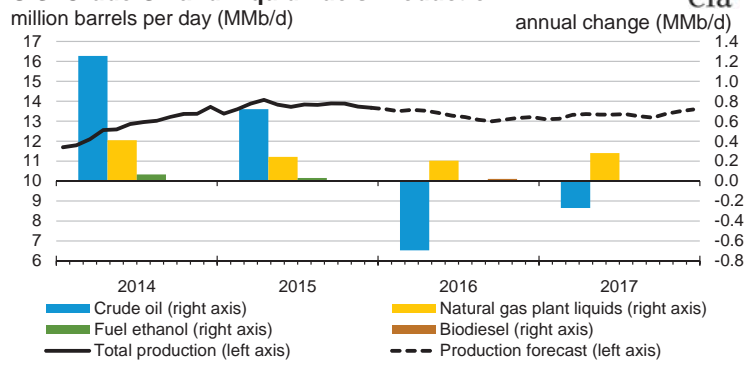


OECD Commercial Stocks of Crude Oil and Other Liquids (days of supply)



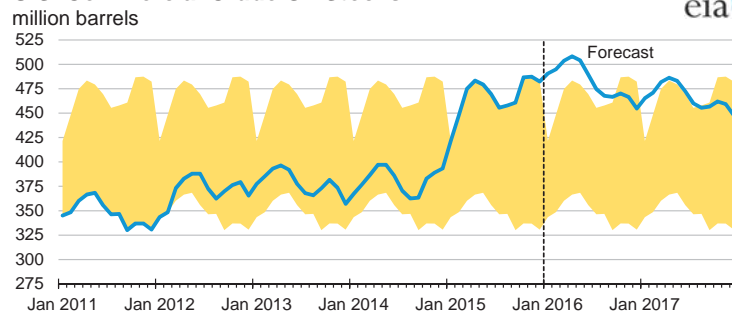
Note: Colored band around days of supply of crude oil and other liquids stocks represents the range between the minimum and maximum from Jan. 2011 - Dec. 2015.
Source: Short-Term Energy Outlook, January 2016.

U.S. Crude Oil and Liquid Fuels Production



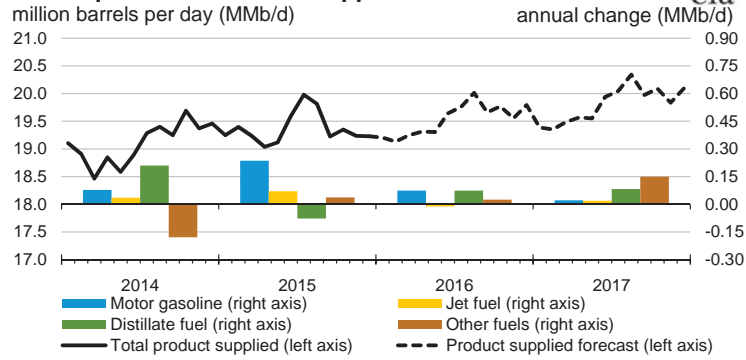
Source: Short-Term Energy Outlook, January 2016.

U.S. Commercial Crude Oil Stocks



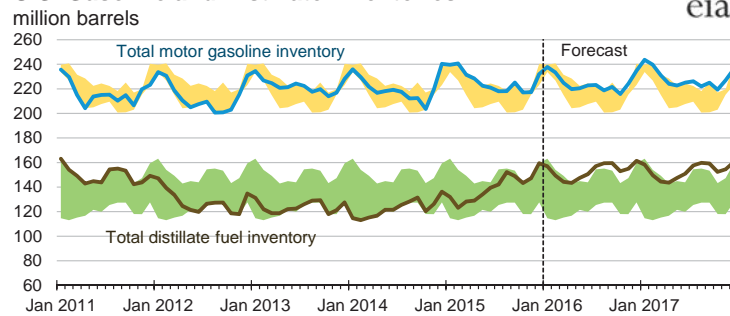
Note: Colored band around storage levels represents the range between the minimum and maximum from Jan. 2011 - Dec. 2015.
Source: Short-Term Energy Outlook, January 2016.

U.S. Liquid Fuels Product Supplied



Source: Short-Term Energy Outlook, January 2016.

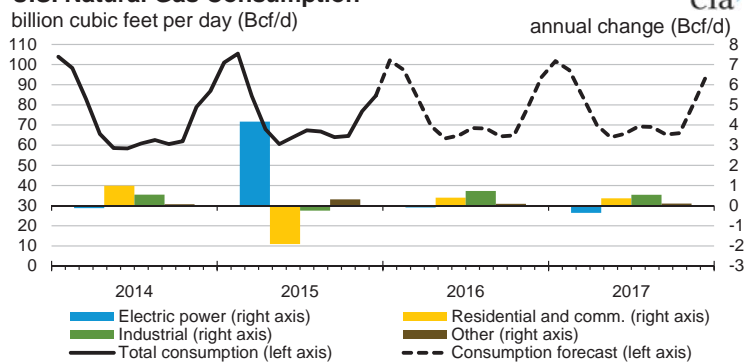
U.S. Gasoline and Distillate Inventories



Note: Colored bands around storage levels represent the range between the minimum and maximum from Jan. 2011 - Dec. 2015.

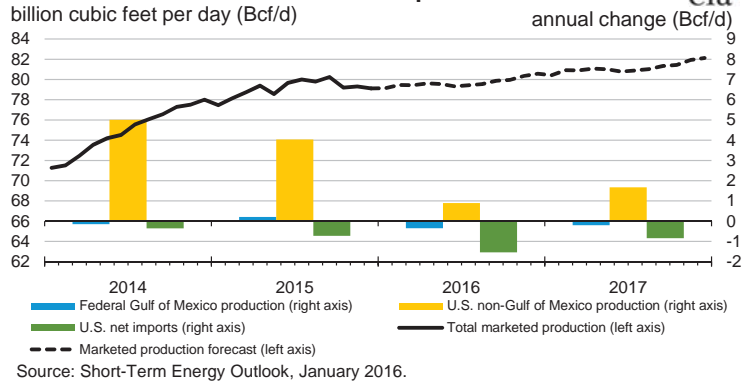
Source: Short-Term Energy Outlook, January 2016.

U.S. Natural Gas Consumption

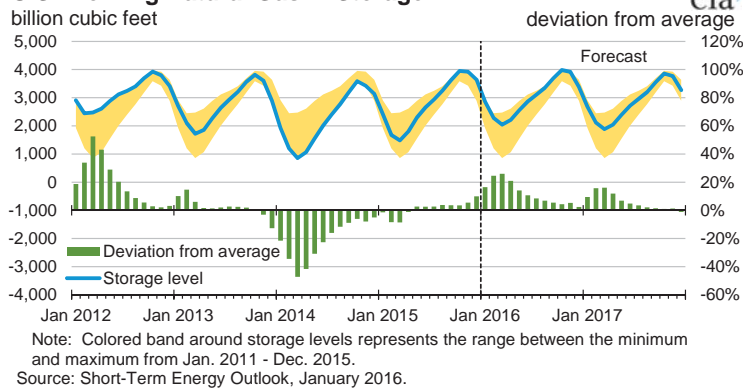


Source: Short-Term Energy Outlook, January 2016.

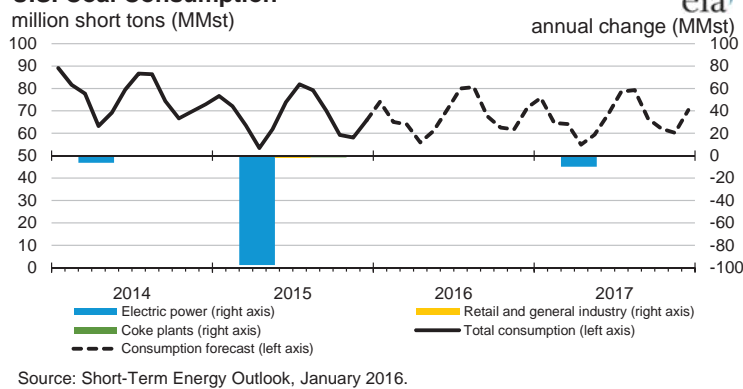
U.S. Natural Gas Production and Imports



U.S. Working Natural Gas in Storage




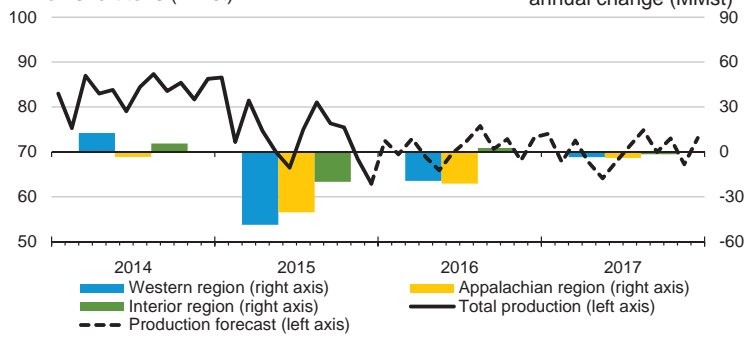
U.S. Coal Consumption



U.S. Coal Production

million short tons (MMst)

annual change (MMst) 

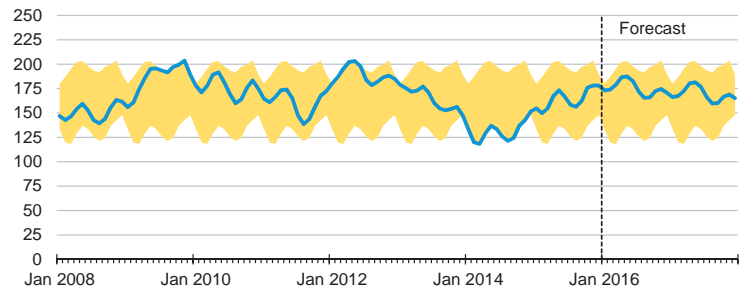


Source: Short-Term Energy Outlook, January 2016.

U.S. Electric Power Coal Stocks

million short tons






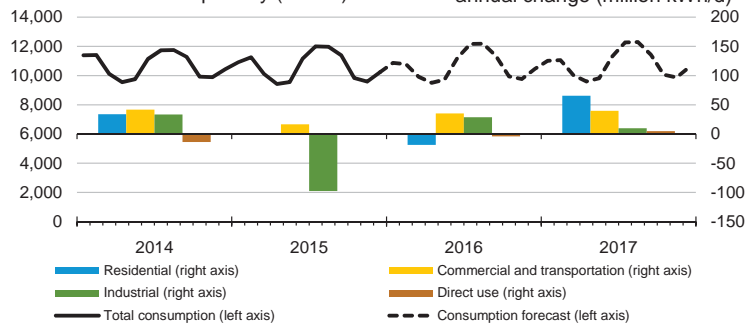
Note: Colored band around stock levels represents the range between the minimum and maximum from Jan. 2008 - Dec. 2015.

Source: Short-Term Energy Outlook, January 2016.

U.S. Electricity Consumption

million kilowatthours per day (kWh/d)

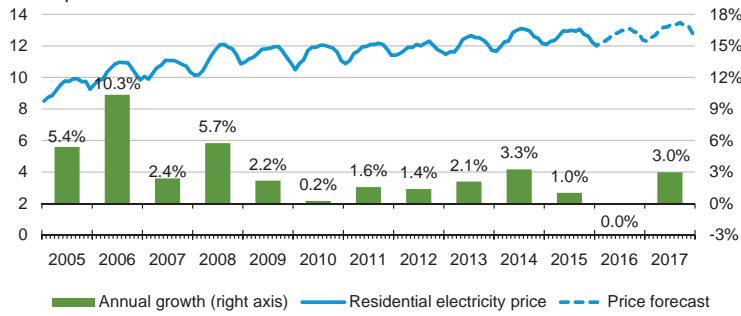
annual change (million kWh/d) 



Source: Short-Term Energy Outlook, January 2016.

U.S. Residential Electricity Price

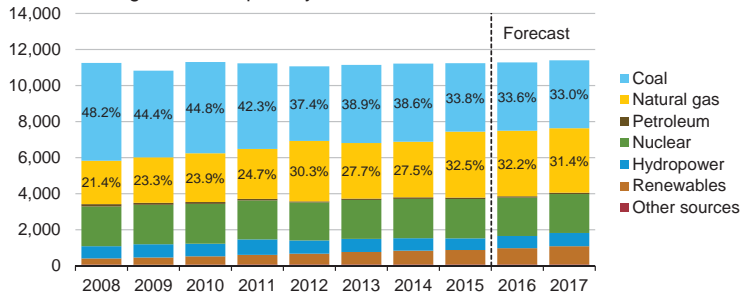
cents per kilowatthour



Source: Short-Term Energy Outlook, January 2016.

U.S. Electricity Generation by Fuel, All Sectors

thousand megawatthours per day

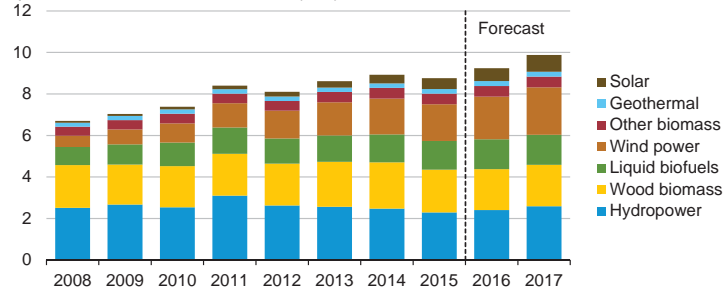


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, January 2016.

U.S. Renewable Energy Supply

quadrillion British thermal units (Btu)

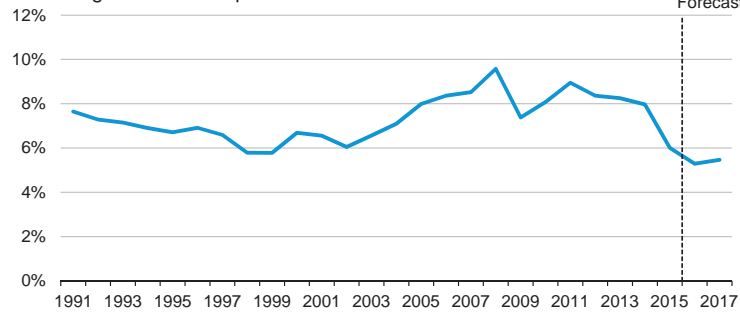


Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: Short-Term Energy Outlook, January 2016.

U.S. Annual Energy Expenditures

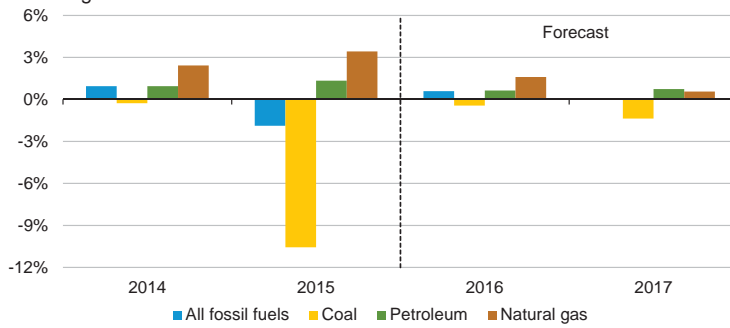
share of gross domestic product



Source: Short-Term Energy Outlook, January 2016.

U.S. Energy-Related Carbon Dioxide Emissions

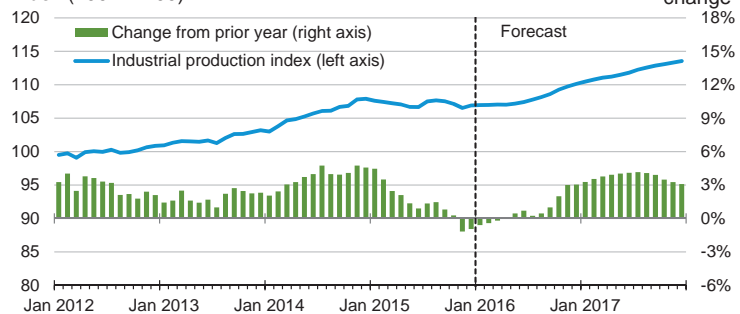
annual growth



Source: Short-Term Energy Outlook, January 2016.

U.S. Total Industrial Production Index

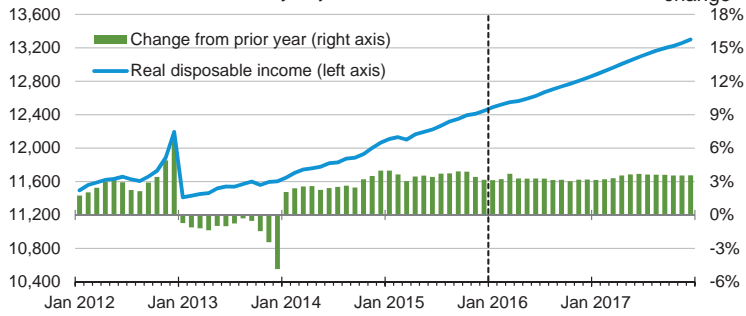
index (2007 = 100)



Source: Short-Term Energy Outlook, January 2016.

U.S. Disposable Income

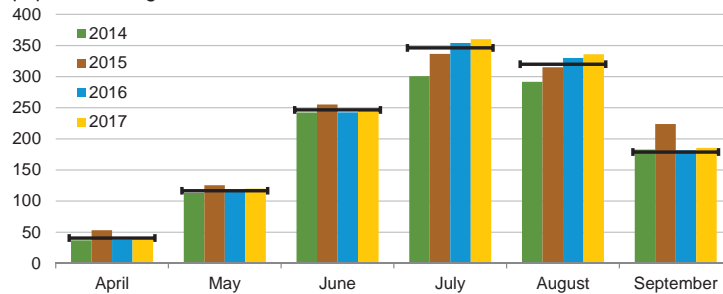
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, January 2016.

U.S. Summer Cooling Degree Days

population-weighted

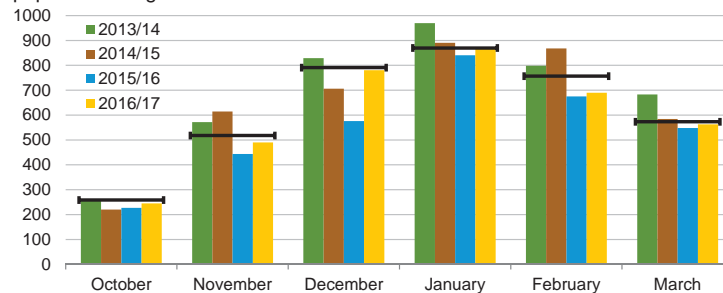


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2006-2015). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, January 2016.

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, January 2016.

U.S. Census Regions and Divisions



Source: Short-Term Energy Outlook, January 2016.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - January 2016

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	84.0	84.7	69.9	-17.5
Price (\$/mcf)	15.83	13.31	12.66	12.21	11.71	11.53	10.85	10.76	-0.9
Expenditures (\$)	1,272	1,007	1,022	812	891	969	919	752	-18.2
Midwest									
Consumption (Mcf)	80.7	78.6	80.2	65.4	77.6	88.1	83.1	69.6	-16.3
Price (\$/mcf)	11.47	9.44	9.23	8.99	8.36	8.69	8.55	7.75	-9.4
Expenditures (\$)	926	742	740	587	648	766	711	539	-24.2
South									
Consumption (Mcf)	47.3	53.3	49.3	40.9	46.5	52.1	50.5	42.6	-15.7
Price (\$/mcf)	14.07	11.52	11.02	11.45	10.71	10.77	10.84	11.10	2.4
Expenditures (\$)	665	614	544	468	498	562	548	473	-13.6
West									
Consumption (Mcf)	47.8	49.9	49.4	49.1	48.6	46.3	41.4	45.7	10.4
Price (\$/mcf)	10.86	9.91	9.67	9.35	9.13	9.96	10.67	9.06	-15.1
Expenditures (\$)	519	494	478	459	443	462	441	414	-6.2
U.S. Average									
Consumption (Mcf)	64.2	64.4	65.0	55.7	62.5	68.0	64.8	57.1	-11.8
Price (\$/mcf)	12.87	10.83	10.46	10.25	9.72	9.97	9.91	9.32	-6.0
Expenditures (\$)	826	698	680	571	607	677	642	532	-17.1
Heating Oil									
U.S. Average									
Consumption (gallons)	576.7	544.8	580.7	471.2	545.5	606.9	608.8	500.5	-17.8
Price (\$/gallon)	2.65	2.85	3.38	3.73	3.87	3.88	3.04	2.17	-28.5
Expenditures (\$)	1,530	1,552	1,966	1,757	2,113	2,352	1,851	1,088	-41.2
Electricity									
Northeast									
Consumption (kWh***)	7,063	6,847	7,076	6,436	6,862	7,221	7,250	6,590	-9.1
Price (\$/kwh)	0.152	0.152	0.154	0.154	0.152	0.163	0.168	0.169	0.6
Expenditures (\$)	1,071	1,039	1,091	993	1,046	1,177	1,221	1,116	-8.6
Midwest									
Consumption (kWh)	8,751	8,660	8,733	7,897	8,588	9,168	8,858	8,143	-8.1
Price (\$/kwh)	0.097	0.099	0.105	0.111	0.112	0.112	0.118	0.119	1.3
Expenditures (\$)	851	856	914	875	958	1,031	1,043	971	-6.9
South									
Consumption (kWh)	8,057	8,486	8,224	7,470	7,977	8,385	8,291	7,601	-8.3
Price (\$/kwh)	0.109	0.103	0.104	0.107	0.107	0.109	0.111	0.109	-2.0
Expenditures (\$)	878	873	856	798	851	914	920	827	-10.2
West									
Consumption (kWh)	7,084	7,239	7,216	7,190	7,150	6,979	6,591	6,928	5.1
Price (\$/kwh)	0.107	0.110	0.112	0.115	0.119	0.123	0.126	0.131	3.6
Expenditures (\$)	755	799	809	825	848	860	833	907	8.9
U.S. Average									
Consumption (kWh)	7,725	7,937	7,844	7,253	7,672	7,983	7,805	7,336	-6.0
Price (\$/kwh)	0.112	0.110	0.113	0.116	0.117	0.120	0.123	0.123	0.1
Expenditures (\$)	866	873	884	843	895	956	960	904	-5.9

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

U.S. Energy Information Administration | Short-Term Energy Outlook - January 2016

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	745.1	751.3	627.7	-16.5
Price* (\$/gallon)	2.84	2.98	3.24	3.34	3.00	3.56	3.00	2.73	-9.0
Expenditures (\$)	2,031	2,004	2,321	1,990	2,031	2,653	2,254	1,714	-24.0
Midwest									
Consumption (gallons)	795.0	779.6	791.8	644.3	766.4	868.6	813.3	687.8	-15.4
Price* (\$/gallon)	2.11	1.99	2.11	2.23	1.74	2.61	1.91	1.56	-18.3
Expenditures (\$)	1,678	1,548	1,674	1,437	1,333	2,267	1,553	1,073	-30.9

Number of households by primary space heating fuel (thousands)

Northeast									
Natural gas	10,889	10,992	11,118	11,236	11,345	11,484	11,612	11,681	0.6
Heating oil	6,280	6,016	5,858	5,701	5,458	5,218	5,084	4,931	-3.0
Propane	713	733	744	761	813	844	839	845	0.8
Electricity	2,563	2,645	2,776	2,894	3,011	3,028	3,064	3,149	2.8
Wood	474	501	512	548	582	579	581	596	2.6
Other/None	307	311	315	324	377	434	432	433	0.3
Midwest									
Natural gas	18,288	18,050	17,977	18,019	18,054	18,098	18,176	18,095	-0.4
Heating oil	491	451	419	393	360	337	316	291	-8.0
Propane	2,131	2,098	2,073	2,037	2,063	2,096	2,056	2,012	-2.2
Electricity	4,570	4,715	4,922	5,119	5,333	5,430	5,516	5,710	3.5
Wood	584	616	618	631	640	630	630	635	0.8
Other/None	264	283	289	282	319	354	348	348	0.0
South									
Natural gas	13,958	13,731	13,657	13,636	13,681	13,775	13,897	13,881	-0.1
Heating oil	956	906	853	790	738	700	662	614	-7.3
Propane	2,220	2,165	2,098	2,024	1,982	1,946	1,887	1,802	-4.5
Electricity	25,258	25,791	26,555	27,283	27,857	28,203	28,655	29,225	2.0
Wood	593	586	599	609	612	611	612	627	2.4
Other/None	314	314	309	304	367	420	395	387	-2.0
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
Other/None	837	850	850	829	903	1,023	1,018	985	-3.2
U.S. Totals									
Natural gas	58,162	57,713	57,771	57,912	58,088	58,400	58,882	58,908	0.0
Heating oil	8,021	7,662	7,408	7,145	6,803	6,489	6,288	6,054	-3.7
Propane	5,999	5,936	5,829	5,707	5,766	5,816	5,682	5,538	-2.5
Electricity	40,159	41,029	42,380	43,734	44,872	45,405	46,139	47,264	2.4
Wood	2,353	2,424	2,454	2,524	2,563	2,561	2,583	2,616	1.3
Other/None	1,723	1,758	1,763	1,739	1,965	2,231	2,192	2,153	-1.8

Heating degree days

Northeast	5,313	4,933	5,337	4,217	4,964	5,593	5,646	4,494	-20.4
Midwest	5,810	5,639	5,773	4,484	5,544	6,451	6,004	4,854	-19.2
South	2,493	2,870	2,632	2,023	2,430	2,787	2,697	2,135	-20.8
West	3,116	3,285	3,258	3,229	3,181	2,987	2,563	2,935	14.5
U.S. Average	3,869	3,937	3,939	3,224	3,721	4,109	3,883	3,310	-14.8

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

*** kilowatt-hour

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Energy Supply															
Crude Oil Production (a) (million barrels per day)	9.49	9.50	9.43	9.30	<i>9.11</i>	<i>8.86</i>	<i>8.48</i>	<i>8.49</i>	<i>8.52</i>	<i>8.48</i>	<i>8.34</i>	<i>8.52</i>	9.43	<i>8.73</i>	<i>8.46</i>
Dry Natural Gas Production (billion cubic feet per day)	73.67	74.50	75.26	74.36	<i>74.50</i>	<i>74.65</i>	<i>74.75</i>	<i>75.39</i>	<i>75.82</i>	<i>76.02</i>	<i>76.14</i>	<i>76.84</i>	74.45	<i>74.82</i>	<i>76.21</i>
Coal Production (million short tons)	240	211	232	207	<i>215</i>	<i>205</i>	<i>219</i>	<i>214</i>	<i>214</i>	<i>200</i>	<i>216</i>	<i>213</i>	890	<i>852</i>	<i>843</i>
Energy Consumption															
Liquid Fuels (million barrels per day)	19.29	19.25	19.68	19.27	<i>19.19</i>	<i>19.42</i>	<i>19.81</i>	<i>19.71</i>	<i>19.41</i>	<i>19.68</i>	<i>20.12</i>	<i>20.01</i>	19.37	<i>19.53</i>	<i>19.81</i>
Natural Gas (billion cubic feet per day)	96.67	64.09	66.07	75.34	<i>94.30</i>	<i>65.87</i>	<i>67.05</i>	<i>79.15</i>	<i>94.14</i>	<i>66.47</i>	<i>67.88</i>	<i>80.61</i>	75.46	<i>76.57</i>	<i>77.21</i>
Coal (b) (million short tons)	212	189	231	183	<i>203</i>	<i>187</i>	<i>228</i>	<i>196</i>	<i>205</i>	<i>183</i>	<i>224</i>	<i>193</i>	816	<i>815</i>	<i>804</i>
Electricity (billion kilowatt hours per day)	10.74	10.04	11.79	9.88	<i>10.52</i>	<i>10.14</i>	<i>11.90</i>	<i>10.06</i>	<i>10.68</i>	<i>10.23</i>	<i>12.00</i>	<i>10.17</i>	10.61	<i>10.66</i>	<i>10.78</i>
Renewables (c) (quadrillion Btu)	2.43	2.43	2.34	2.31	<i>2.43</i>	<i>2.65</i>	<i>2.50</i>	<i>2.47</i>	<i>2.60</i>	<i>2.86</i>	<i>2.65</i>	<i>2.58</i>	9.51	<i>10.06</i>	<i>10.69</i>
Total Energy Consumption (d) (quadrillion Btu)	26.38	23.01	24.49	23.77	<i>25.72</i>	<i>23.00</i>	<i>24.38</i>	<i>24.61</i>	<i>25.83</i>	<i>23.30</i>	<i>24.65</i>	<i>24.90</i>	97.65	<i>97.71</i>	<i>98.68</i>
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	48.48	57.85	46.55	41.94	<i>36.36</i>	<i>38.02</i>	<i>39.69</i>	<i>40.00</i>	<i>41.03</i>	<i>44.72</i>	<i>49.00</i>	<i>53.29</i>	48.67	<i>38.54</i>	<i>47.00</i>
Natural Gas Henry Hub Spot (dollars per million Btu)	2.90	2.75	2.76	2.12	<i>2.37</i>	<i>2.47</i>	<i>2.78</i>	<i>2.98</i>	<i>3.27</i>	<i>3.00</i>	<i>3.20</i>	<i>3.41</i>	2.63	<i>2.65</i>	<i>3.22</i>
Coal (dollars per million Btu)	2.27	2.25	2.22	2.18	<i>2.18</i>	<i>2.21</i>	<i>2.21</i>	<i>2.17</i>	<i>2.17</i>	<i>2.22</i>	<i>2.23</i>	<i>2.19</i>	2.23	<i>2.19</i>	<i>2.20</i>
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,177	16,334	16,418	16,483	<i>16,595</i>	<i>16,707</i>	<i>16,849</i>	<i>17,009</i>	<i>17,141</i>	<i>17,288</i>	<i>17,419</i>	<i>17,521</i>	16,353	<i>16,790</i>	<i>17,342</i>
Percent change from prior year	2.9	2.7	2.2	2.1	<i>2.6</i>	<i>2.3</i>	<i>2.6</i>	<i>3.2</i>	<i>3.3</i>	<i>3.5</i>	<i>3.4</i>	<i>3.0</i>	2.5	<i>2.7</i>	<i>3.3</i>
GDP Implicit Price Deflator (Index, 2009=100)	109.1	109.7	110.0	110.5	<i>111.2</i>	<i>111.7</i>	<i>112.2</i>	<i>112.7</i>	<i>113.4</i>	<i>113.9</i>	<i>114.3</i>	<i>114.9</i>	109.8	<i>111.9</i>	<i>114.1</i>
Percent change from prior year	1.0	1.0	0.9	1.3	<i>1.9</i>	<i>1.9</i>	<i>1.9</i>	<i>2.0</i>	<i>2.0</i>	<i>1.9</i>	<i>1.9</i>	<i>2.0</i>	1.1	<i>1.9</i>	<i>2.0</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,115	12,194	12,312	12,417	<i>12,520</i>	<i>12,593</i>	<i>12,704</i>	<i>12,806</i>	<i>12,923</i>	<i>13,049</i>	<i>13,164</i>	<i>13,260</i>	12,259	<i>12,656</i>	<i>13,099</i>
Percent change from prior year	3.6	3.5	3.8	3.5	<i>3.3</i>	<i>3.3</i>	<i>3.2</i>	<i>3.1</i>	<i>3.2</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	3.6	<i>3.2</i>	<i>3.5</i>
Manufacturing Production Index (Index, 2012=100)	105.5	105.8	106.7	107.0	<i>106.9</i>	<i>106.9</i>	<i>107.9</i>	<i>109.8</i>	<i>110.9</i>	<i>111.6</i>	<i>112.7</i>	<i>113.5</i>	106.2	<i>107.9</i>	<i>112.2</i>
Percent change from prior year	3.5	2.3	2.0	1.3	<i>1.3</i>	<i>1.0</i>	<i>1.1</i>	<i>2.6</i>	<i>3.8</i>	<i>4.3</i>	<i>4.4</i>	<i>3.4</i>	2.3	<i>1.5</i>	<i>4.0</i>
Weather															
U.S. Heating Degree-Days	2,343	443	49	1,247	<i>2,063</i>	<i>453</i>	<i>69</i>	<i>1,516</i>	<i>2,121</i>	<i>477</i>	<i>76</i>	<i>1,550</i>	4,082	<i>4,101</i>	<i>4,223</i>
U.S. Cooling Degree-Days	46	434	876	130	<i>39</i>	<i>399</i>	<i>866</i>	<i>98</i>	<i>40</i>	<i>404</i>	<i>882</i>	<i>100</i>	1,486	<i>1,402</i>	<i>1,426</i>

- = 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).

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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	48.48	57.85	46.55	41.94	36.36	38.02	39.69	40.00	41.03	44.72	49.00	53.29	48.67	38.54	47.00
Brent Spot Average	53.91	61.65	50.43	43.53	36.36	40.02	41.69	42.34	44.03	47.72	52.00	56.29	52.32	40.15	50.00
U.S. Imported Average	46.40	56.12	45.59	37.95	32.85	34.50	36.17	36.50	37.51	41.17	45.49	49.84	46.41	35.09	43.61
U.S. Refiner Average Acquisition Cost	47.98	57.47	47.70	40.82	35.34	37.01	38.66	39.00	40.01	43.69	47.98	52.36	48.52	37.53	46.11
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	159	201	184	144	121	141	139	122	127	157	162	148	172	131	149
Diesel Fuel	176	189	161	141	121	131	138	142	146	154	167	179	167	133	162
Heating Oil	178	180	151	126	117	123	130	139	143	145	158	175	156	127	156
Refiner Prices to End Users															
Jet Fuel	172	186	156	135	119	126	132	137	141	149	161	173	162	128	156
No. 6 Residual Fuel Oil (a)	137	154	123	106	92	91	96	98	101	106	117	128	128	94	113
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	227	267	260	216	195	213	211	194	196	228	235	222	243	203	221
Gasoline All Grades (b)	236	275	269	226	204	222	220	203	205	237	244	231	252	212	230
On-highway Diesel Fuel	292	285	263	244	217	228	232	237	243	253	263	276	271	229	259
Heating Oil	288	276	247	224	213	212	213	223	235	234	242	258	265	216	243
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	2.99	2.83	2.84	2.18	2.44	2.55	2.86	3.07	3.37	3.09	3.30	3.51	2.71	2.73	3.32
Henry Hub Spot (dollars per million Btu)	2.90	2.75	2.76	2.12	2.37	2.47	2.78	2.98	3.27	3.00	3.20	3.41	2.63	2.65	3.22
U.S. End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	4.57	3.68	3.65	3.44	3.57	3.36	3.74	4.16	4.55	3.97	4.21	4.62	3.85	3.72	4.35
Commercial Sector	7.94	8.13	8.41	7.43	7.24	7.65	8.40	7.78	7.95	8.34	8.92	8.25	7.89	7.59	8.21
Residential Sector	9.30	11.96	16.46	10.16	8.59	11.39	15.69	9.82	9.02	11.83	16.09	10.08	10.37	9.85	10.23
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.27	2.25	2.22	2.18	2.18	2.21	2.21	2.17	2.17	2.22	2.23	2.19	2.23	2.19	2.20
Natural Gas	4.09	3.11	3.09	2.99	3.52	3.25	3.36	4.07	4.43	3.74	3.74	4.45	3.29	3.53	4.05
Residual Fuel Oil (c)	10.82	11.64	10.48	8.97	7.86	8.41	8.44	8.48	8.58	9.63	9.87	10.37	10.56	8.29	9.59
Distillate Fuel Oil	15.61	15.16	13.18	11.63	10.74	11.40	11.84	12.61	13.00	13.43	14.20	15.43	14.49	11.59	13.95
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.78	6.81	7.31	6.66	6.75	6.80	7.33	6.74	6.87	6.88	7.42	6.83	6.90	6.91	7.01
Commercial Sector	10.47	10.53	10.95	10.52	10.61	10.70	11.15	10.76	10.86	10.93	11.38	11.00	10.63	10.82	11.05
Residential Sector	12.23	12.85	12.99	12.50	12.16	12.70	13.00	12.68	12.48	13.14	13.40	13.04	12.65	12.65	13.02

- = 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Supply (million barrels per day) (a)															
OECD	26.65	26.48	26.79	26.59	26.30	26.05	25.80	25.98	25.88	25.88	25.91	26.16	26.63	26.03	25.96
U.S. (50 States)	14.81	15.10	15.14	15.05	14.82	14.69	14.40	14.48	14.45	14.64	14.59	14.83	15.03	14.60	14.63
Canada	4.69	4.22	4.55	4.52	4.50	4.50	4.58	4.60	4.58	4.55	4.62	4.64	4.50	4.55	4.60
Mexico	2.68	2.58	2.62	2.63	2.62	2.60	2.59	2.57	2.55	2.54	2.53	2.51	2.63	2.59	2.53
North Sea (b)	3.00	3.10	2.92	2.84	2.83	2.72	2.69	2.77	2.75	2.59	2.60	2.60	2.97	2.75	2.63
Other OECD	1.47	1.47	1.55	1.54	1.53	1.53	1.54	1.55	1.55	1.56	1.58	1.58	1.51	1.54	1.57
Non-OECD	68.04	69.11	69.81	69.36	68.77	69.73	70.73	70.36	69.65	70.66	71.45	71.14	69.09	69.90	70.73
OPEC	37.53	38.24	38.75	38.67	38.50	38.94	39.66	39.52	39.44	39.90	40.38	40.32	38.30	39.16	40.01
Crude Oil Portion	30.98	31.67	32.03	31.90	31.60	31.97	32.62	32.43	32.23	32.65	33.05	32.94	31.65	32.16	32.72
Other Liquids (c)	6.55	6.57	6.72	6.77	6.90	6.97	7.04	7.10	7.21	7.25	7.32	7.38	6.65	7.00	7.29
Eurasia	14.09	14.01	14.01	13.93	13.88	13.90	13.93	13.95	13.79	13.81	13.82	13.83	14.01	13.92	13.81
China	4.66	4.73	4.72	4.69	4.67	4.70	4.71	4.71	4.69	4.72	4.73	4.73	4.70	4.70	4.72
Other Non-OECD	11.76	12.13	12.33	12.07	11.72	12.18	12.43	12.17	11.73	12.23	12.52	12.26	12.07	12.13	12.19
Total World Supply	94.69	95.58	96.60	95.95	95.07	95.78	96.53	96.33	95.52	96.54	97.36	97.30	95.71	95.93	96.69
Non-OPEC Supply	57.16	57.34	57.85	57.29	56.57	56.84	56.87	56.81	56.08	56.64	56.98	56.98	57.41	56.77	56.68
Consumption (million barrels per day) (d)															
OECD	46.62	45.36	46.51	46.65	46.83	45.80	46.73	47.17	47.12	46.15	47.12	47.55	46.28	46.63	46.99
U.S. (50 States)	19.29	19.25	19.68	19.27	19.19	19.42	19.81	19.71	19.41	19.68	20.12	20.01	19.37	19.53	19.81
U.S. Territories	0.37	0.37	0.37	0.37	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.37	0.40	0.42
Canada	2.36	2.27	2.43	2.41	2.38	2.32	2.43	2.41	2.38	2.32	2.43	2.41	2.37	2.38	2.38
Europe	13.53	13.43	13.91	13.86	13.74	13.47	13.92	13.87	13.76	13.50	13.95	13.89	13.68	13.75	13.78
Japan	4.80	3.92	3.91	4.28	4.58	3.85	3.88	4.25	4.54	3.82	3.85	4.22	4.23	4.14	4.11
Other OECD	6.26	6.13	6.21	6.45	6.54	6.34	6.29	6.53	6.60	6.40	6.34	6.59	6.26	6.42	6.48
Non-OECD	46.27	47.85	48.19	47.63	47.31	48.93	49.28	48.70	48.34	50.01	50.37	49.77	47.49	48.56	49.63
Eurasia	4.71	4.65	4.92	4.90	4.73	4.66	4.93	4.92	4.75	4.68	4.96	4.94	4.80	4.81	4.83
Europe	0.71	0.72	0.74	0.74	0.72	0.73	0.75	0.75	0.73	0.74	0.76	0.76	0.73	0.73	0.74
China	10.77	11.36	11.32	11.27	11.08	11.69	11.64	11.59	11.37	11.99	11.94	11.89	11.18	11.50	11.80
Other Asia	12.11	12.33	11.87	12.19	12.49	12.71	12.23	12.56	12.84	13.07	12.57	12.92	12.13	12.50	12.85
Other Non-OECD	17.96	18.79	19.35	18.53	18.30	19.15	19.73	18.89	18.65	19.53	20.14	19.26	18.66	19.02	19.40
Total World Consumption	92.89	93.21	94.69	94.28	94.14	94.73	96.01	95.87	95.45	96.16	97.49	97.31	93.77	95.19	96.61
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	-0.54	-0.69	-0.32	-0.10	0.20	-0.32	-0.01	0.55	0.05	-0.38	-0.08	0.61	-0.41	0.11	0.05
Other OECD	-0.35	-0.65	-0.57	-0.57	-0.42	-0.25	-0.18	-0.36	-0.05	0.00	0.07	-0.21	-0.53	-0.30	-0.05
Other Stock Draws and Balance	-0.91	-1.04	-1.02	-1.00	-0.71	-0.47	-0.33	-0.65	-0.08	0.00	0.14	-0.38	-0.99	-0.54	-0.08
Total Stock Draw	-1.80	-2.37	-1.91	-1.68	-0.93	-1.04	-0.52	-0.46	-0.07	-0.38	0.13	0.02	-1.94	-0.74	-0.08
End-of-period Commercial Crude Oil and Other Liquids Inventories															
U.S. Commercial Inventory	1,217	1,277	1,306	1,315	1,297	1,326	1,327	1,276	1,271	1,306	1,313	1,258	1,315	1,276	1,258
OECD Commercial Inventory	2,800	2,918	2,998	3,061	3,080	3,132	3,149	3,132	3,132	3,166	3,167	3,131	3,061	3,132	3,131

- = 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) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

 (d) 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
North America	22.18	21.90	22.31	22.20	<i>21.94</i>	<i>21.79</i>	<i>21.57</i>	<i>21.66</i>	<i>21.58</i>	<i>21.74</i>	<i>21.73</i>	<i>21.98</i>	22.15	<i>21.74</i>	<i>21.76</i>
Canada	4.69	4.22	4.55	4.52	<i>4.50</i>	<i>4.50</i>	<i>4.58</i>	<i>4.60</i>	<i>4.58</i>	<i>4.55</i>	<i>4.62</i>	<i>4.64</i>	4.50	<i>4.55</i>	<i>4.60</i>
Mexico	2.68	2.58	2.62	2.63	<i>2.62</i>	<i>2.60</i>	<i>2.59</i>	<i>2.57</i>	<i>2.55</i>	<i>2.54</i>	<i>2.53</i>	<i>2.51</i>	2.63	<i>2.59</i>	<i>2.53</i>
United States	14.81	15.10	15.14	15.05	<i>14.82</i>	<i>14.69</i>	<i>14.40</i>	<i>14.48</i>	<i>14.45</i>	<i>14.64</i>	<i>14.59</i>	<i>14.83</i>	15.03	<i>14.60</i>	<i>14.63</i>
Central and South America	4.95	5.43	5.69	5.38	<i>4.99</i>	<i>5.50</i>	<i>5.75</i>	<i>5.47</i>	<i>5.01</i>	<i>5.52</i>	<i>5.77</i>	<i>5.49</i>	5.37	<i>5.43</i>	<i>5.45</i>
Argentina	0.70	0.72	0.74	0.75	<i>0.70</i>	<i>0.72</i>	<i>0.76</i>	<i>0.76</i>	<i>0.72</i>	<i>0.74</i>	<i>0.77</i>	<i>0.77</i>	0.73	<i>0.74</i>	<i>0.75</i>
Brazil	2.75	3.23	3.49	3.14	<i>2.77</i>	<i>3.27</i>	<i>3.53</i>	<i>3.21</i>	<i>2.78</i>	<i>3.29</i>	<i>3.55</i>	<i>3.23</i>	3.16	<i>3.19</i>	<i>3.22</i>
Colombia	1.05	1.05	0.99	1.03	<i>1.05</i>	<i>1.04</i>	<i>0.99</i>	<i>1.02</i>	<i>1.03</i>	<i>1.02</i>	<i>0.97</i>	<i>1.00</i>	1.03	<i>1.03</i>	<i>1.01</i>
Other Central and S. America	0.46	0.43	0.46	0.47	<i>0.47</i>	<i>0.47</i>	<i>0.47</i>	<i>0.48</i>	<i>0.48</i>	<i>0.47</i>	<i>0.48</i>	<i>0.49</i>	0.45	<i>0.47</i>	<i>0.48</i>
Europe	3.95	4.05	3.88	3.79	<i>3.77</i>	<i>3.66</i>	<i>3.63</i>	<i>3.72</i>	<i>3.69</i>	<i>3.53</i>	<i>3.55</i>	<i>3.55</i>	3.92	<i>3.70</i>	<i>3.58</i>
Norway	1.94	1.94	1.93	1.88	<i>1.88</i>	<i>1.80</i>	<i>1.84</i>	<i>1.84</i>	<i>1.81</i>	<i>1.76</i>	<i>1.73</i>	<i>1.69</i>	1.92	<i>1.84</i>	<i>1.75</i>
United Kingdom (offshore)	0.88	0.98	0.82	0.79	<i>0.77</i>	<i>0.74</i>	<i>0.67</i>	<i>0.75</i>	<i>0.75</i>	<i>0.63</i>	<i>0.68</i>	<i>0.72</i>	0.87	<i>0.73</i>	<i>0.70</i>
Other North Sea	0.18	0.18	0.17	0.17	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	0.18	<i>0.18</i>	<i>0.19</i>
Eurasia	14.11	14.02	14.03	13.94	<i>13.90</i>	<i>13.92</i>	<i>13.94</i>	<i>13.97</i>	<i>13.81</i>	<i>13.82</i>	<i>13.84</i>	<i>13.85</i>	14.03	<i>13.93</i>	<i>13.83</i>
Azerbaijan	0.86	0.87	0.88	0.88	<i>0.88</i>	<i>0.88</i>	<i>0.87</i>	<i>0.87</i>	<i>0.87</i>	<i>0.86</i>	<i>0.86</i>	<i>0.85</i>	0.87	<i>0.87</i>	<i>0.86</i>
Kazakhstan	1.76	1.71	1.69	1.70	<i>1.71</i>	<i>1.71</i>	<i>1.72</i>	<i>1.75</i>	<i>1.76</i>	<i>1.75</i>	<i>1.74</i>	<i>1.73</i>	1.72	<i>1.72</i>	<i>1.75</i>
Russia	10.99	10.98	10.95	10.87	<i>10.83</i>	<i>10.84</i>	<i>10.86</i>	<i>10.87</i>	<i>10.70</i>	<i>10.73</i>	<i>10.76</i>	<i>10.78</i>	10.95	<i>10.85</i>	<i>10.74</i>
Turkmenistan	0.29	0.27	0.28	0.27	<i>0.28</i>	<i>0.29</i>	<i>0.29</i>	<i>0.28</i>	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	<i>0.29</i>	0.28	<i>0.29</i>	<i>0.29</i>
Other Eurasia	0.20	0.19	0.22	0.21	<i>0.21</i>	<i>0.20</i>	<i>0.20</i>	<i>0.20</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	0.21	<i>0.20</i>	<i>0.19</i>
Middle East	1.18	1.13	1.15	1.14	<i>1.14</i>	<i>1.12</i>	<i>1.12</i>	<i>1.12</i>	<i>1.11</i>	<i>1.09</i>	<i>1.09</i>	<i>1.09</i>	1.15	<i>1.13</i>	<i>1.09</i>
Oman	0.97	0.98	1.02	1.02	<i>0.98</i>	<i>0.98</i>	<i>0.97</i>	<i>0.98</i>	<i>0.97</i>	<i>0.97</i>	<i>0.96</i>	<i>0.97</i>	1.00	<i>0.98</i>	<i>0.97</i>
Syria	0.03	0.03	0.03	0.03	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.03	<i>0.01</i>	<i>0.00</i>
Yemen	0.11	0.04	0.02	0.01	<i>0.09</i>	<i>0.07</i>	<i>0.07</i>	<i>0.07</i>	<i>0.06</i>	<i>0.04</i>	<i>0.05</i>	<i>0.04</i>	0.05	<i>0.07</i>	<i>0.05</i>
Asia and Oceania	8.51	8.54	8.49	8.53	<i>8.55</i>	<i>8.56</i>	<i>8.57</i>	<i>8.58</i>	<i>8.58</i>	<i>8.60</i>	<i>8.62</i>	<i>8.62</i>	8.52	<i>8.57</i>	<i>8.61</i>
Australia	0.39	0.38	0.46	0.45	<i>0.44</i>	<i>0.44</i>	<i>0.44</i>	<i>0.45</i>	<i>0.46</i>	<i>0.46</i>	<i>0.47</i>	<i>0.47</i>	0.42	<i>0.44</i>	<i>0.46</i>
China	4.66	4.73	4.72	4.69	<i>4.67</i>	<i>4.70</i>	<i>4.71</i>	<i>4.71</i>	<i>4.69</i>	<i>4.72</i>	<i>4.73</i>	<i>4.73</i>	4.70	<i>4.70</i>	<i>4.72</i>
India	1.01	1.00	1.01	1.01	<i>1.02</i>	<i>1.02</i>	<i>1.03</i>	<i>1.02</i>	<i>1.03</i>	<i>1.03</i>	<i>1.04</i>	<i>1.03</i>	1.01	<i>1.02</i>	<i>1.03</i>
Malaysia	0.80	0.77	0.68	0.73	<i>0.78</i>	<i>0.77</i>	<i>0.76</i>	<i>0.77</i>	<i>0.77</i>	<i>0.76</i>	<i>0.75</i>	<i>0.75</i>	0.75	<i>0.77</i>	<i>0.76</i>
Vietnam	0.36	0.34	0.35	0.36	<i>0.35</i>	<i>0.35</i>	<i>0.34</i>	<i>0.34</i>	<i>0.34</i>	<i>0.33</i>	<i>0.33</i>	<i>0.33</i>	0.35	<i>0.35</i>	<i>0.33</i>
Africa	2.28	2.26	2.29	2.29	<i>2.27</i>	<i>2.28</i>	<i>2.28</i>	<i>2.30</i>	<i>2.31</i>	<i>2.35</i>	<i>2.38</i>	<i>2.41</i>	2.28	<i>2.28</i>	<i>2.36</i>
Egypt	0.71	0.70	0.71	0.70	<i>0.70</i>	<i>0.70</i>	<i>0.69</i>	<i>0.69</i>	<i>0.69</i>	<i>0.68</i>	<i>0.68</i>	<i>0.68</i>	0.71	<i>0.69</i>	<i>0.68</i>
Equatorial Guinea	0.27	0.27	0.27	0.27	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.24</i>	<i>0.24</i>	<i>0.25</i>	<i>0.25</i>	0.27	<i>0.25</i>	<i>0.24</i>
Gabon	0.21	0.21	0.21	0.21	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.20</i>	<i>0.20</i>	<i>0.20</i>	<i>0.20</i>	0.21	<i>0.21</i>	<i>0.20</i>
Sudan and South Sudan	0.26	0.25	0.26	0.26	<i>0.26</i>	<i>0.26</i>	<i>0.26</i>	<i>0.26</i>	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	0.26	<i>0.26</i>	<i>0.25</i>
Total non-OPEC liquids	57.16	57.34	57.85	57.29	<i>56.57</i>	<i>56.84</i>	<i>56.87</i>	<i>56.81</i>	<i>56.08</i>	<i>56.64</i>	<i>56.98</i>	<i>56.98</i>	57.41	<i>56.77</i>	<i>56.68</i>
OPEC non-crude liquids	6.55	6.57	6.72	6.77	<i>6.90</i>	<i>6.97</i>	<i>7.04</i>	<i>7.10</i>	<i>7.21</i>	<i>7.25</i>	<i>7.32</i>	<i>7.38</i>	6.65	<i>7.00</i>	<i>7.29</i>
Non-OPEC + OPEC non-crude	63.71	63.91	64.57	64.06	<i>63.46</i>	<i>63.81</i>	<i>63.91</i>	<i>63.90</i>	<i>63.29</i>	<i>63.89</i>	<i>64.31</i>	<i>64.36</i>	64.07	<i>63.77</i>	<i>63.97</i>
Unplanned non-OPEC Production Outages	0.27	0.46	0.40	0.35	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	0.37	<i>n/a</i>	<i>n/a</i>

- = no data available

OPEC = Organization of Petroleum Exporting Countries: Algeria, Angola, Ecuador, Indonesia, 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Crude Oil															
Algeria	1.10	1.10	1.10	1.10	-	-	-	-	-	-	-	-	1.10	-	-
Angola	1.77	1.78	1.81	1.77	-	-	-	-	-	-	-	-	1.78	-	-
Ecuador	0.55	0.54	0.55	0.57	-	-	-	-	-	-	-	-	0.55	-	-
Indonesia	0.66	0.71	0.69	0.71	-	-	-	-	-	-	-	-	0.69	-	-
Iran	2.80	2.80	2.80	2.80	-	-	-	-	-	-	-	-	2.80	-	-
Iraq	3.57	4.03	4.33	4.37	-	-	-	-	-	-	-	-	4.08	-	-
Kuwait	2.57	2.53	2.50	2.45	-	-	-	-	-	-	-	-	2.51	-	-
Libya	0.40	0.45	0.38	0.39	-	-	-	-	-	-	-	-	0.40	-	-
Nigeria	2.03	1.88	1.88	1.90	-	-	-	-	-	-	-	-	1.92	-	-
Qatar	0.68	0.68	0.68	0.68	-	-	-	-	-	-	-	-	0.68	-	-
Saudi Arabia	9.73	10.07	10.22	10.07	-	-	-	-	-	-	-	-	10.02	-	-
United Arab Emirates	2.70	2.70	2.70	2.70	-	-	-	-	-	-	-	-	2.70	-	-
Venezuela	2.40	2.40	2.40	2.40	-	-	-	-	-	-	-	-	2.40	-	-
OPEC Total	30.98	31.67	32.03	31.90	<i>31.60</i>	<i>31.97</i>	<i>32.62</i>	<i>32.43</i>	<i>32.23</i>	<i>32.65</i>	<i>33.05</i>	<i>32.94</i>	31.65	<i>32.16</i>	<i>32.72</i>
Other Liquids (a)	6.55	6.57	6.72	6.77	<i>6.90</i>	<i>6.97</i>	<i>7.04</i>	<i>7.10</i>	<i>7.21</i>	<i>7.25</i>	<i>7.32</i>	<i>7.38</i>	6.65	<i>7.00</i>	<i>7.29</i>
Total OPEC Supply	37.53	38.24	38.75	38.67	<i>38.50</i>	<i>38.94</i>	<i>39.66</i>	<i>39.52</i>	<i>39.44</i>	<i>39.90</i>	<i>40.38</i>	<i>40.32</i>	38.30	<i>39.16</i>	<i>40.01</i>
Crude Oil Production Capacity															
Africa	5.31	5.21	5.17	5.16	5.08	5.13	5.18	5.26	5.28	5.35	5.43	5.49	5.21	5.16	5.39
South America	2.95	2.94	2.95	2.97	2.87	2.85	2.86	2.89	2.77	2.76	2.66	2.68	2.95	2.87	2.72
Middle East	23.97	24.34	24.56	24.60	24.75	25.42	25.65	25.57	25.62	25.74	25.94	25.92	24.37	25.35	25.81
Asia	0.69	0.71	0.69	0.71	0.71	0.74	0.76	0.76	0.72	0.71	0.71	0.70	0.70	0.74	0.71
OPEC Total	32.92	33.21	33.37	33.43	<i>33.41</i>	<i>34.14</i>	<i>34.45</i>	<i>34.48</i>	<i>34.40</i>	<i>34.57</i>	<i>34.74</i>	<i>34.80</i>	33.23	<i>34.12</i>	<i>34.63</i>
Surplus Crude Oil Production Capacity															
Africa	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
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	1.92	1.53	1.33	1.53	1.81	2.18	1.83	2.05	2.17	1.92	1.69	1.88	1.58	1.97	1.91
Asia	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
OPEC Total	1.94	1.54	1.33	1.53	<i>1.81</i>	<i>2.18</i>	<i>1.83</i>	<i>2.05</i>	<i>2.17</i>	<i>1.92</i>	<i>1.69</i>	<i>1.88</i>	1.59	<i>1.97</i>	<i>1.91</i>
Unplanned OPEC Production Outages	2.57	2.64	2.76	2.78	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	2.69	<i>n/a</i>	<i>n/a</i>

- = 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); Indonesia (Asia).

(a) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

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 - January 2016

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
North America	23.57	23.47	24.04	23.62	<i>23.52</i>	<i>23.70</i>	<i>24.17</i>	<i>24.06</i>	<i>23.73</i>	<i>23.96</i>	<i>24.49</i>	<i>24.36</i>	23.68	<i>23.86</i>	<i>24.14</i>
Canada	2.36	2.27	2.43	2.41	<i>2.38</i>	<i>2.32</i>	<i>2.43</i>	<i>2.41</i>	<i>2.38</i>	<i>2.32</i>	<i>2.43</i>	<i>2.41</i>	2.37	<i>2.38</i>	<i>2.38</i>
Mexico	1.91	1.95	1.92	1.93	<i>1.93</i>	<i>1.95</i>	<i>1.92</i>	<i>1.93</i>	<i>1.93</i>	<i>1.95</i>	<i>1.92</i>	<i>1.93</i>	1.93	<i>1.93</i>	<i>1.93</i>
United States	19.29	19.25	19.68	19.27	<i>19.19</i>	<i>19.42</i>	<i>19.81</i>	<i>19.71</i>	<i>19.41</i>	<i>19.68</i>	<i>20.12</i>	<i>20.01</i>	19.37	<i>19.53</i>	<i>19.81</i>
Central and South America	7.08	7.35	7.41	7.38	<i>7.17</i>	<i>7.44</i>	<i>7.47</i>	<i>7.45</i>	<i>7.24</i>	<i>7.51</i>	<i>7.55</i>	<i>7.53</i>	7.31	<i>7.38</i>	<i>7.46</i>
Brazil	3.03	3.14	3.21	3.20	<i>3.06</i>	<i>3.18</i>	<i>3.24</i>	<i>3.23</i>	<i>3.09</i>	<i>3.21</i>	<i>3.28</i>	<i>3.26</i>	3.15	<i>3.18</i>	<i>3.21</i>
Europe	14.24	14.14	14.64	14.59	<i>14.46</i>	<i>14.20</i>	<i>14.67</i>	<i>14.62</i>	<i>14.49</i>	<i>14.24</i>	<i>14.71</i>	<i>14.65</i>	14.41	<i>14.49</i>	<i>14.52</i>
Eurasia	4.74	4.68	4.95	4.93	<i>4.76</i>	<i>4.69</i>	<i>4.97</i>	<i>4.95</i>	<i>4.79</i>	<i>4.71</i>	<i>4.99</i>	<i>4.98</i>	4.83	<i>4.84</i>	<i>4.87</i>
Russia	3.39	3.34	3.54	3.53	<i>3.35</i>	<i>3.30</i>	<i>3.50</i>	<i>3.48</i>	<i>3.31</i>	<i>3.26</i>	<i>3.45</i>	<i>3.44</i>	3.45	<i>3.41</i>	<i>3.37</i>
Middle East	7.93	8.53	9.13	8.29	<i>8.12</i>	<i>8.73</i>	<i>9.33</i>	<i>8.45</i>	<i>8.27</i>	<i>8.91</i>	<i>9.53</i>	<i>8.62</i>	8.47	<i>8.66</i>	<i>8.84</i>
Asia and Oceania	31.43	31.16	30.68	31.60	<i>32.07</i>	<i>31.95</i>	<i>31.41</i>	<i>32.33</i>	<i>32.73</i>	<i>32.64</i>	<i>32.08</i>	<i>33.01</i>	31.22	<i>31.94</i>	<i>32.61</i>
China	10.77	11.36	11.32	11.27	<i>11.08</i>	<i>11.69</i>	<i>11.64</i>	<i>11.59</i>	<i>11.37</i>	<i>11.99</i>	<i>11.94</i>	<i>11.89</i>	11.18	<i>11.50</i>	<i>11.80</i>
Japan	4.80	3.92	3.91	4.28	<i>4.58</i>	<i>3.85</i>	<i>3.88</i>	<i>4.25</i>	<i>4.54</i>	<i>3.82</i>	<i>3.85</i>	<i>4.22</i>	4.23	<i>4.14</i>	<i>4.11</i>
India	4.08	4.06	3.72	4.02	<i>4.25</i>	<i>4.23</i>	<i>3.88</i>	<i>4.19</i>	<i>4.42</i>	<i>4.41</i>	<i>4.04</i>	<i>4.37</i>	3.97	<i>4.14</i>	<i>4.31</i>
Africa	3.89	3.88	3.84	3.86	<i>4.04</i>	<i>4.03</i>	<i>3.99</i>	<i>4.01</i>	<i>4.20</i>	<i>4.19</i>	<i>4.14</i>	<i>4.17</i>	3.86	<i>4.02</i>	<i>4.17</i>
Total OECD Liquid Fuels Consumption	46.62	45.36	46.51	46.65	<i>46.83</i>	<i>45.80</i>	<i>46.73</i>	<i>47.17</i>	<i>47.12</i>	<i>46.15</i>	<i>47.12</i>	<i>47.55</i>	46.28	<i>46.63</i>	<i>46.99</i>
Total non-OECD Liquid Fuels Consumption	46.27	47.85	48.19	47.63	<i>47.31</i>	<i>48.93</i>	<i>49.28</i>	<i>48.70</i>	<i>48.34</i>	<i>50.01</i>	<i>50.37</i>	<i>49.77</i>	47.49	<i>48.56</i>	<i>49.63</i>
Total World Liquid Fuels Consumption	92.89	93.21	94.69	94.28	<i>94.14</i>	<i>94.73</i>	<i>96.01</i>	<i>95.87</i>	<i>95.45</i>	<i>96.16</i>	<i>97.49</i>	<i>97.31</i>	93.77	<i>95.19</i>	<i>96.61</i>
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	116.1	116.9	117.5	118.1	<i>118.9</i>	<i>119.8</i>	<i>120.6</i>	<i>121.6</i>	<i>122.6</i>	<i>123.6</i>	<i>124.5</i>	<i>125.6</i>	117.1	<i>120.3</i>	<i>124.1</i>
Percent change from prior year	2.6	2.5	2.3	2.1	<i>2.4</i>	<i>2.6</i>	<i>2.7</i>	<i>3.0</i>	<i>3.1</i>	<i>3.1</i>	<i>3.2</i>	<i>3.2</i>	2.4	<i>2.7</i>	<i>3.2</i>
OECD Index, 2010 Q1 = 100	109.2	109.8	110.4	110.8	<i>111.4</i>	<i>112.0</i>	<i>112.7</i>	<i>113.5</i>	<i>114.3</i>	<i>114.9</i>	<i>115.5</i>	<i>116.2</i>	110.0	<i>112.4</i>	<i>115.2</i>
Percent change from prior year	2.0	2.1	2.0	1.9	<i>2.0</i>	<i>2.0</i>	<i>2.2</i>	<i>2.5</i>	<i>2.6</i>	<i>2.6</i>	<i>2.5</i>	<i>2.3</i>	2.0	<i>2.2</i>	<i>2.5</i>
Non-OECD Index, 2010 Q1 = 100	125.0	125.8	126.5	127.5	<i>128.5</i>	<i>129.9</i>	<i>130.8</i>	<i>132.1</i>	<i>133.3</i>	<i>134.9</i>	<i>136.2</i>	<i>137.8</i>	126.2	<i>130.3</i>	<i>135.6</i>
Percent change from prior year	3.3	2.9	2.7	2.4	<i>2.8</i>	<i>3.2</i>	<i>3.4</i>	<i>3.6</i>	<i>3.7</i>	<i>3.8</i>	<i>4.1</i>	<i>4.4</i>	2.8	<i>3.2</i>	<i>4.0</i>
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100	119.29	119.54	122.98	124.93	<i>128.49</i>	<i>129.01</i>	<i>128.72</i>	<i>128.06</i>	<i>127.69</i>	<i>127.09</i>	<i>126.77</i>	<i>126.42</i>	121.69	<i>128.57</i>	<i>126.99</i>
Percent change from prior year	10.4	10.8	12.8	9.9	<i>7.7</i>	<i>7.9</i>	<i>4.7</i>	<i>2.5</i>	<i>-0.6</i>	<i>-1.5</i>	<i>-1.5</i>	<i>-1.3</i>	11.0	<i>5.7</i>	<i>-1.2</i>

- = 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	9.49	9.50	9.43	9.30	<i>9.11</i>	<i>8.86</i>	<i>8.48</i>	<i>8.49</i>	<i>8.52</i>	<i>8.48</i>	<i>8.34</i>	<i>8.52</i>	9.43	<i>8.73</i>	<i>8.46</i>
Alaska	0.50	0.48	0.44	0.50	<i>0.49</i>	<i>0.48</i>	<i>0.43</i>	<i>0.48</i>	<i>0.47</i>	<i>0.45</i>	<i>0.42</i>	<i>0.46</i>	0.48	<i>0.47</i>	<i>0.45</i>
Federal Gulf of Mexico (b)	1.46	1.47	1.64	1.64	<i>1.67</i>	<i>1.70</i>	<i>1.61</i>	<i>1.73</i>	<i>1.81</i>	<i>1.83</i>	<i>1.73</i>	<i>1.85</i>	1.55	<i>1.68</i>	<i>1.81</i>
Lower 48 States (excl GOM)	7.52	7.55	7.35	7.16	<i>6.94</i>	<i>6.68</i>	<i>6.45</i>	<i>6.28</i>	<i>6.23</i>	<i>6.20</i>	<i>6.19</i>	<i>6.20</i>	7.39	<i>6.59</i>	<i>6.21</i>
Crude Oil Net Imports (c)	6.84	6.74	6.93	6.97	<i>6.57</i>	<i>7.26</i>	<i>7.66</i>	<i>7.42</i>	<i>7.22</i>	<i>7.79</i>	<i>8.01</i>	<i>7.51</i>	6.87	<i>7.23</i>	<i>7.63</i>
SPR Net Withdrawals	0.00	-0.03	-0.01	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.01</i>	-0.01	<i>0.00</i>	<i>0.00</i>
Commercial Inventory Net Withdrawals	-0.91	0.06	0.10	-0.23	<i>-0.23</i>	<i>0.15</i>	<i>0.25</i>	<i>0.13</i>	<i>-0.30</i>	<i>0.10</i>	<i>0.17</i>	<i>0.10</i>	-0.24	<i>0.08</i>	<i>0.02</i>
Crude Oil Adjustment (d)	0.11	0.22	0.13	0.09	<i>0.19</i>	<i>0.19</i>	<i>0.21</i>	<i>0.15</i>	<i>0.19</i>	<i>0.19</i>	<i>0.21</i>	<i>0.15</i>	0.14	<i>0.19</i>	<i>0.19</i>
Total Crude Oil Input to Refineries	15.53	16.48	16.58	16.13	<i>15.63</i>	<i>16.46</i>	<i>16.60</i>	<i>16.19</i>	<i>15.62</i>	<i>16.56</i>	<i>16.72</i>	<i>16.29</i>	16.18	<i>16.22</i>	<i>16.30</i>
Other Supply															
Refinery Processing Gain	0.99	1.02	1.08	1.07	<i>1.05</i>	<i>1.05</i>	<i>1.09</i>	<i>1.10</i>	<i>1.04</i>	<i>1.07</i>	<i>1.09</i>	<i>1.10</i>	1.04	<i>1.07</i>	<i>1.08</i>
Natural Gas Plant Liquids Production	3.09	3.27	3.31	3.35	<i>3.35</i>	<i>3.44</i>	<i>3.49</i>	<i>3.56</i>	<i>3.56</i>	<i>3.75</i>	<i>3.80</i>	<i>3.86</i>	3.26	<i>3.46</i>	<i>3.74</i>
Renewables and Oxygenate Production (e)	1.05	1.10	1.10	1.11	<i>1.10</i>	<i>1.10</i>	<i>1.12</i>	<i>1.10</i>	<i>1.11</i>	<i>1.11</i>	<i>1.12</i>	<i>1.11</i>	1.09	<i>1.11</i>	<i>1.11</i>
Fuel Ethanol Production	0.96	0.96	0.96	0.98	<i>0.97</i>	<i>0.96</i>	<i>0.98</i>	<i>0.96</i>	<i>0.98</i>	<i>0.96</i>	<i>0.98</i>	<i>0.96</i>	0.96	<i>0.97</i>	<i>0.97</i>
Petroleum Products Adjustment (f)	0.20	0.21	0.21	0.22	<i>0.21</i>	<i>0.23</i>	<i>0.23</i>	<i>0.23</i>	<i>0.22</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	0.21	<i>0.22</i>	<i>0.24</i>
Product Net Imports (c)	-1.89	-2.12	-2.20	-2.73	<i>-2.59</i>	<i>-2.40</i>	<i>-2.45</i>	<i>-2.89</i>	<i>-2.50</i>	<i>-2.56</i>	<i>-2.61</i>	<i>-3.10</i>	-2.24	<i>-2.58</i>	<i>-2.69</i>
Hydrocarbon Gas Liquids	-0.68	-0.80	-0.93	-0.94	<i>-1.06</i>	<i>-1.09</i>	<i>-1.18</i>	<i>-1.19</i>	<i>-1.21</i>	<i>-1.25</i>	<i>-1.35</i>	<i>-1.35</i>	-0.84	<i>-1.13</i>	<i>-1.29</i>
Unfinished Oils	0.26	0.28	0.38	0.29	<i>0.34</i>	<i>0.22</i>	<i>0.34</i>	<i>0.32</i>	<i>0.37</i>	<i>0.29</i>	<i>0.38</i>	<i>0.36</i>	0.30	<i>0.31</i>	<i>0.35</i>
Other HC/Oxygenates	-0.08	-0.09	-0.06	-0.07	<i>-0.07</i>	<i>-0.05</i>	<i>-0.03</i>	<i>-0.03</i>	<i>-0.07</i>	<i>-0.05</i>	<i>-0.03</i>	<i>-0.03</i>	-0.07	<i>-0.04</i>	<i>-0.04</i>
Motor Gasoline Blend Comp.	0.41	0.52	0.60	0.34	<i>0.38</i>	<i>0.68</i>	<i>0.52</i>	<i>0.44</i>	<i>0.42</i>	<i>0.64</i>	<i>0.53</i>	<i>0.42</i>	0.47	<i>0.50</i>	<i>0.50</i>
Finished Motor Gasoline	-0.44	-0.32	-0.40	-0.47	<i>-0.45</i>	<i>-0.41</i>	<i>-0.30</i>	<i>-0.52</i>	<i>-0.41</i>	<i>-0.47</i>	<i>-0.36</i>	<i>-0.55</i>	-0.41	<i>-0.42</i>	<i>-0.45</i>
Jet Fuel	-0.06	0.01	-0.05	-0.06	<i>-0.05</i>	<i>-0.02</i>	<i>-0.02</i>	<i>-0.09</i>	<i>-0.02</i>	<i>-0.03</i>	<i>-0.03</i>	<i>-0.09</i>	-0.04	<i>-0.05</i>	<i>-0.04</i>
Distillate Fuel Oil	-0.67	-1.05	-1.12	-1.12	<i>-0.94</i>	<i>-1.03</i>	<i>-1.09</i>	<i>-1.03</i>	<i>-0.88</i>	<i>-0.96</i>	<i>-1.05</i>	<i>-1.08</i>	-0.99	<i>-1.02</i>	<i>-0.99</i>
Residual Fuel Oil	-0.13	-0.21	-0.11	-0.14	<i>-0.23</i>	<i>-0.25</i>	<i>-0.22</i>	<i>-0.19</i>	<i>-0.22</i>	<i>-0.29</i>	<i>-0.22</i>	<i>-0.21</i>	-0.15	<i>-0.22</i>	<i>-0.24</i>
Other Oils (g)	-0.50	-0.46	-0.50	-0.57	<i>-0.51</i>	<i>-0.45</i>	<i>-0.48</i>	<i>-0.59</i>	<i>-0.48</i>	<i>-0.45</i>	<i>-0.48</i>	<i>-0.58</i>	-0.50	<i>-0.51</i>	<i>-0.49</i>
Product Inventory Net Withdrawals	0.36	-0.72	-0.41	0.13	<i>0.44</i>	<i>-0.47</i>	<i>-0.26</i>	<i>0.42</i>	<i>0.36</i>	<i>-0.48</i>	<i>-0.25</i>	<i>0.50</i>	-0.16	<i>0.03</i>	<i>0.03</i>
Total Supply	19.32	19.25	19.68	19.27	<i>19.19</i>	<i>19.42</i>	<i>19.81</i>	<i>19.71</i>	<i>19.41</i>	<i>19.68</i>	<i>20.12</i>	<i>20.01</i>	19.38	<i>19.53</i>	<i>19.81</i>
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	2.72	2.27	2.29	2.52	<i>2.61</i>	<i>2.24</i>	<i>2.31</i>	<i>2.66</i>	<i>2.64</i>	<i>2.36</i>	<i>2.49</i>	<i>2.86</i>	2.45	<i>2.46</i>	<i>2.59</i>
Unfinished Oils	-0.05	0.05	-0.03	0.02	<i>0.00</i>	<i>0.00</i>	<i>0.01</i>	<i>0.02</i>	<i>-0.01</i>	<i>0.00</i>	<i>0.01</i>	<i>0.02</i>	0.00	<i>0.01</i>	<i>0.01</i>
Motor Gasoline	8.81	9.26	9.39	9.15	<i>8.89</i>	<i>9.33</i>	<i>9.49</i>	<i>9.21</i>	<i>8.95</i>	<i>9.35</i>	<i>9.49</i>	<i>9.22</i>	9.16	<i>9.23</i>	<i>9.25</i>
Fuel Ethanol blended into Motor Gasoline	0.87	0.92	0.93	0.91	<i>0.89</i>	<i>0.93</i>	<i>0.95</i>	<i>0.93</i>	<i>0.89</i>	<i>0.93</i>	<i>0.95</i>	<i>0.92</i>	0.91	<i>0.93</i>	<i>0.93</i>
Jet Fuel	1.45	1.54	1.59	1.58	<i>1.47</i>	<i>1.55</i>	<i>1.56</i>	<i>1.52</i>	<i>1.49</i>	<i>1.58</i>	<i>1.59</i>	<i>1.54</i>	1.54	<i>1.53</i>	<i>1.55</i>
Distillate Fuel Oil	4.27	3.88	3.93	3.77	<i>4.11</i>	<i>3.98</i>	<i>3.95</i>	<i>4.08</i>	<i>4.21</i>	<i>4.08</i>	<i>4.05</i>	<i>4.13</i>	3.96	<i>4.03</i>	<i>4.12</i>
Residual Fuel Oil	0.24	0.19	0.31	0.26	<i>0.22</i>	<i>0.20</i>	<i>0.23</i>	<i>0.21</i>	<i>0.21</i>	<i>0.19</i>	<i>0.22</i>	<i>0.20</i>	0.25	<i>0.22</i>	<i>0.20</i>
Other Oils (g)	1.85	2.06	2.20	1.97	<i>1.88</i>	<i>2.10</i>	<i>2.25</i>	<i>2.00</i>	<i>1.92</i>	<i>2.12</i>	<i>2.28</i>	<i>2.03</i>	2.02	<i>2.06</i>	<i>2.09</i>
Total Consumption	19.29	19.25	19.68	19.27	<i>19.19</i>	<i>19.42</i>	<i>19.81</i>	<i>19.71</i>	<i>19.41</i>	<i>19.68</i>	<i>20.12</i>	<i>20.01</i>	19.37	<i>19.53</i>	<i>19.81</i>
Total Petroleum and Other Liquids Net Imports	4.95	4.61	4.74	4.23	<i>3.98</i>	<i>4.86</i>	<i>5.20</i>	<i>4.53</i>	<i>4.71</i>	<i>5.23</i>	<i>5.40</i>	<i>4.41</i>	4.63	<i>4.64</i>	<i>4.94</i>
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	474.8	469.5	460.8	482.3	<i>503.6</i>	<i>489.7</i>	<i>466.7</i>	<i>454.7</i>	<i>481.8</i>	<i>472.3</i>	<i>456.7</i>	<i>447.7</i>	482.3	<i>454.7</i>	<i>447.7</i>
Hydrocarbon Gas Liquids	138.8	196.3	228.7	195.1	<i>161.9</i>	<i>207.0</i>	<i>232.8</i>	<i>186.4</i>	<i>156.3</i>	<i>204.0</i>	<i>226.7</i>	<i>175.3</i>	195.1	<i>186.4</i>	<i>175.3</i>
Unfinished Oils	84.7	86.0	88.8	84.6	<i>93.6</i>	<i>90.1</i>	<i>87.6</i>	<i>82.0</i>	<i>92.3</i>	<i>89.8</i>	<i>87.7</i>	<i>82.1</i>	84.6	<i>82.0</i>	<i>82.1</i>
Other HC/Oxygenates	26.7	25.0	23.8	25.9	<i>28.1</i>	<i>26.8</i>	<i>26.1</i>	<i>26.4</i>	<i>28.5</i>	<i>27.3</i>	<i>26.5</i>	<i>26.8</i>	25.9	<i>26.4</i>	<i>26.8</i>
Total Motor Gasoline	231.5	221.0	225.1	232.0	<i>224.8</i>	<i>222.8</i>	<i>221.5</i>	<i>234.7</i>	<i>231.1</i>	<i>225.1</i>	<i>224.9</i>	<i>236.2</i>	232.0	<i>234.7</i>	<i>236.2</i>
Finished Motor Gasoline	26.9	25.7	29.0	28.8	<i>25.9</i>	<i>24.9</i>	<i>25.7</i>	<i>27.3</i>	<i>26.7</i>	<i>25.2</i>	<i>26.3</i>	<i>27.6</i>	28.8	<i>27.3</i>	<i>27.6</i>
Motor Gasoline Blend Comp.	204.6	195.4	196.1	203.2	<i>199.0</i>	<i>197.9</i>	<i>195.8</i>	<i>207.4</i>	<i>204.4</i>	<i>199.9</i>	<i>198.7</i>	<i>208.5</i>	203.2	<i>207.4</i>	<i>208.5</i>
Jet Fuel	37.2	43.7	40.4	40.2	<i>39.7</i>	<i>40.9</i>	<i>43.3</i>	<i>39.7</i>	<i>39.5</i>	<i>40.8</i>	<i>43.2</i>	<i>39.6</i>	40.2	<i>39.7</i>	<i>39.6</i>
Distillate Fuel Oil	128.3	139.4	148.8	159.4	<i>144.3</i>	<i>150.5</i>	<i>159.6</i>	<i>161.4</i>	<i>144.5</i>	<i>150.9</i>	<i>159.2</i>	<i>160.5</i>	159.4	<i>161.4</i>	<i>160.5</i>
Residual Fuel Oil	38.1	41.8	41.3	42.1	<i>41.6</i>	<i>41.1</i>	<i>38.4</i>	<i>38.7</i>	<i>39.3</i>	<i>39.7</i>	<i>38.0</i>	<i>38.5</i>	42.1	<i>38.7</i>	<i>38.5</i>
Other Oils (g)	57.3	54.6	48.3	53.8	<i>59.3</i>	<i>56.7</i>	<i>50.5</i>	<i>52.1</i>	<i>57.9</i>	<i>55.7</i>	<i>49.7</i>	<i>51.5</i>	53.8	<i>52.1</i>	<i>51.5</i>
Total Commercial Inventory	1,217	1,277	1,306	1,315	<i>1,297</i>	<i>1,326</i>	<i>1,327</i>	<i>1,276</i>	<i>1,271</i>	<i>1,306</i>	<i>1,313</i>	<i>1,258</i>	1,315	<i>1,276</i>	<i>1,258</i>
Crude Oil in SPR	691	694	695	695	<i>695</i>	<i>695</i>	<i>695</i>	<i>695</i>	<i>695</i>	<i>695</i>	<i>695</i>	<i>694</i>	695	<i>695</i>	<i>694</i>

- = no data available

(a) Includes lease condensate.

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

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

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

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

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

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

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

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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
HGL Production															
Natural Gas Processing Plants															
Ethane	1.05	1.10	1.09	1.13	1.21	1.22	1.25	1.31	1.32	1.43	1.46	1.51	1.09	1.25	1.43
Propane	1.07	1.12	1.13	1.13	1.11	1.14	1.14	1.16	1.16	1.19	1.19	1.20	1.11	1.14	1.19
Butanes	0.58	0.62	0.64	0.64	0.62	0.64	0.63	0.65	0.65	0.67	0.66	0.68	0.62	0.63	0.67
Natural Gasoline (Pentanes Plus)	0.39	0.44	0.46	0.44	0.41	0.44	0.46	0.44	0.43	0.46	0.48	0.46	0.43	0.44	0.46
Refinery and Blender Net Production															
Ethane/Ethylene	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00
Propane/Propylene	0.54	0.58	0.56	0.56	0.55	0.57	0.56	0.56	0.55	0.58	0.57	0.57	0.56	0.56	0.57
Butanes/Butylenes	-0.08	0.27	0.19	-0.18	-0.06	0.25	0.19	-0.17	-0.06	0.25	0.19	-0.17	0.05	0.05	0.05
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	-0.06	-0.07	-0.06	-0.07	-0.11	-0.12	-0.16	-0.19	-0.21	-0.22	-0.24	-0.26	-0.07	-0.14	-0.23
Propane/Propylene	-0.40	-0.49	-0.56	-0.59	-0.63	-0.61	-0.64	-0.66	-0.67	-0.65	-0.71	-0.72	-0.51	-0.64	-0.69
Butanes/Butylenes	-0.06	-0.09	-0.11	-0.10	-0.13	-0.18	-0.16	-0.14	-0.12	-0.18	-0.17	-0.15	-0.09	-0.15	-0.15
Natural Gasoline (Pentanes Plus)	-0.17	-0.15	-0.21	-0.18	-0.20	-0.18	-0.22	-0.20	-0.22	-0.20	-0.24	-0.22	-0.18	-0.20	-0.22
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.40	0.27	0.32	0.46	0.36	0.27	0.30	0.42	0.36	0.27	0.30	0.43	0.36	0.34	0.34
Natural Gasoline (Pentanes Plus)	0.15	0.14	0.16	0.16	0.15	0.15	0.16	0.16	0.15	0.15	0.16	0.16	0.15	0.16	0.16
HGL Consumption															
Ethane/Ethylene	1.03	1.02	1.02	1.09	1.09	1.06	1.10	1.16	1.11	1.17	1.24	1.30	1.04	1.10	1.20
Propane/Propylene	1.43	0.92	0.96	1.14	1.31	0.90	0.93	1.20	1.30	0.90	0.96	1.24	1.11	1.09	1.10
Butanes/Butylenes	0.16	0.24	0.22	0.21	0.16	0.22	0.21	0.23	0.18	0.24	0.23	0.25	0.21	0.21	0.22
Natural Gasoline (Pentanes Plus)	0.10	0.09	0.09	0.09	0.05	0.06	0.06	0.07	0.05	0.06	0.06	0.07	0.09	0.06	0.06
HGL Inventories (million barrels)															
Ethane/Ethylene	31.38	31.65	31.86	32.53	31.64	36.04	36.77	34.29	32.83	36.70	37.32	34.50	31.86	34.69	35.35
Propane/Propylene	58.10	84.20	100.20	97.34	72.09	90.68	103.01	90.18	66.82	86.73	95.14	77.10	97.34	90.18	77.10
Butanes/Butylenes	32.46	59.42	76.52	47.83	39.43	59.45	72.85	43.87	37.58	59.12	73.27	44.72	47.83	43.87	44.72
Natural Gasoline (Pentanes Plus)	17.16	20.51	19.00	18.68	17.50	19.82	20.47	19.39	18.14	20.56	21.30	20.49	18.68	19.39	20.49
Refinery and Blender Net Inputs															
Crude Oil	15.53	16.48	16.58	16.13	15.63	16.46	16.60	16.19	15.62	16.56	16.72	16.29	16.18	16.22	16.30
Hydrocarbon Gas Liquids	0.54	0.40	0.47	0.62	0.51	0.42	0.45	0.58	0.51	0.43	0.46	0.59	0.51	0.49	0.50
Other Hydrocarbons/Oxygenates	1.12	1.18	1.19	1.17	1.19	1.24	1.28	1.25	1.20	1.25	1.30	1.26	1.17	1.24	1.25
Unfinished Oils	0.24	0.22	0.38	0.32	0.25	0.25	0.36	0.36	0.27	0.32	0.39	0.40	0.29	0.31	0.34
Motor Gasoline Blend Components	0.72	0.91	0.75	0.46	0.63	0.92	0.74	0.51	0.67	0.91	0.74	0.51	0.71	0.70	0.71
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	18.14	19.18	19.38	18.70	18.22	19.30	19.43	18.90	18.26	19.47	19.60	19.05	18.85	18.96	19.10
Refinery Processing Gain															
.....	0.99	1.02	1.08	1.07	1.05	1.05	1.09	1.10	1.04	1.07	1.09	1.10	1.04	1.07	1.08
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.47	0.86	0.76	0.39	0.50	0.83	0.75	0.39	0.49	0.83	0.76	0.40	0.62	0.62	0.62
Finished Motor Gasoline	9.48	9.83	9.97	9.79	9.52	9.95	9.99	9.93	9.56	10.01	10.04	9.97	9.77	9.85	9.90
Jet Fuel	1.50	1.61	1.60	1.64	1.52	1.59	1.61	1.58	1.51	1.62	1.64	1.59	1.59	1.57	1.59
Distillate Fuel	4.82	4.99	5.08	4.94	4.83	5.02	5.08	5.07	4.85	5.05	5.13	5.16	4.96	5.00	5.05
Residual Fuel	0.43	0.44	0.41	0.41	0.44	0.45	0.42	0.41	0.43	0.49	0.42	0.41	0.42	0.43	0.44
Other Oils (a)	2.44	2.48	2.63	2.60	2.46	2.52	2.67	2.61	2.46	2.54	2.70	2.63	2.54	2.57	2.58
Total Refinery and Blender Net Production	19.13	20.20	20.45	19.76	19.26	20.35	20.51	19.99	19.31	20.54	20.69	20.16	19.89	20.03	20.18
Refinery Distillation Inputs															
.....	15.78	16.69	16.85	16.33	15.94	16.66	16.87	16.47	15.93	16.76	16.99	16.56	16.42	16.49	16.56
Refinery Operable Distillation Capacity															
.....	17.88	17.98	18.08	18.11	18.14	18.15	18.31	18.40	18.43	18.43	18.43	18.43	18.01	18.25	18.43
Refinery Distillation Utilization Factor															
.....	0.88	0.93	0.93	0.90	0.88	0.92	0.92	0.90	0.86	0.91	0.92	0.90	0.91	0.90	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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Prices (cents per gallon)															
Refiner Wholesale Price	159	201	184	144	<i>121</i>	<i>141</i>	<i>139</i>	<i>122</i>	<i>127</i>	<i>157</i>	<i>162</i>	<i>148</i>	172	<i>131</i>	<i>149</i>
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	228	259	247	211	<i>195</i>	<i>210</i>	<i>208</i>	<i>197</i>	<i>199</i>	<i>226</i>	<i>232</i>	<i>225</i>	236	<i>203</i>	<i>221</i>
PADD 2	216	256	253	209	<i>182</i>	<i>210</i>	<i>207</i>	<i>188</i>	<i>190</i>	<i>226</i>	<i>232</i>	<i>216</i>	234	<i>197</i>	<i>217</i>
PADD 3	204	240	228	190	<i>172</i>	<i>191</i>	<i>188</i>	<i>171</i>	<i>176</i>	<i>206</i>	<i>211</i>	<i>198</i>	216	<i>181</i>	<i>198</i>
PADD 4	207	261	277	218	<i>181</i>	<i>203</i>	<i>211</i>	<i>191</i>	<i>181</i>	<i>216</i>	<i>233</i>	<i>218</i>	241	<i>197</i>	<i>213</i>
PADD 5	271	328	327	264	<i>239</i>	<i>251</i>	<i>245</i>	<i>222</i>	<i>223</i>	<i>259</i>	<i>267</i>	<i>250</i>	298	<i>239</i>	<i>250</i>
U.S. Average	227	267	260	216	<i>195</i>	<i>213</i>	<i>211</i>	<i>194</i>	<i>196</i>	<i>228</i>	<i>235</i>	<i>222</i>	243	<i>203</i>	<i>221</i>
Gasoline All Grades Including Taxes	236	275	269	226	<i>204</i>	<i>222</i>	<i>220</i>	<i>203</i>	<i>205</i>	<i>237</i>	<i>244</i>	<i>231</i>	252	<i>212</i>	<i>230</i>
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	64.5	61.3	62.6	59.8	<i>60.7</i>	<i>62.0</i>	<i>58.8</i>	<i>61.2</i>	<i>61.3</i>	<i>62.9</i>	<i>60.9</i>	<i>63.4</i>	59.8	<i>61.2</i>	<i>63.4</i>
PADD 2	52.9	50.4	47.0	54.0	<i>51.4</i>	<i>49.0</i>	<i>49.5</i>	<i>51.2</i>	<i>51.2</i>	<i>48.3</i>	<i>49.1</i>	<i>51.0</i>	54.0	<i>51.2</i>	<i>51.0</i>
PADD 3	78.4	74.6	78.1	83.1	<i>78.7</i>	<i>77.9</i>	<i>78.3</i>	<i>82.6</i>	<i>81.3</i>	<i>79.1</i>	<i>80.2</i>	<i>82.5</i>	83.1	<i>82.6</i>	<i>82.5</i>
PADD 4	6.5	6.8	7.1	7.7	<i>7.0</i>	<i>6.9</i>	<i>6.9</i>	<i>7.7</i>	<i>7.1</i>	<i>7.1</i>	<i>7.1</i>	<i>7.8</i>	7.7	<i>7.7</i>	<i>7.8</i>
PADD 5	29.2	28.0	30.3	27.4	<i>26.9</i>	<i>27.0</i>	<i>28.0</i>	<i>32.0</i>	<i>30.1</i>	<i>27.7</i>	<i>27.8</i>	<i>31.4</i>	27.4	<i>32.0</i>	<i>31.4</i>
U.S. Total	231.5	221.0	225.1	232.0	<i>224.8</i>	<i>222.8</i>	<i>221.5</i>	<i>234.7</i>	<i>231.1</i>	<i>225.1</i>	<i>224.9</i>	<i>236.2</i>	232.0	<i>234.7</i>	<i>236.2</i>
Finished Gasoline Inventories															
U.S. Total	26.9	25.7	29.0	28.8	<i>25.9</i>	<i>24.9</i>	<i>25.7</i>	<i>27.3</i>	<i>26.7</i>	<i>25.2</i>	<i>26.3</i>	<i>27.6</i>	28.8	<i>27.3</i>	<i>27.6</i>
Gasoline Blending Components Inventories															
U.S. Total	204.6	195.4	196.1	203.2	<i>199.0</i>	<i>197.9</i>	<i>195.8</i>	<i>207.4</i>	<i>204.4</i>	<i>199.9</i>	<i>198.7</i>	<i>208.5</i>	203.2	<i>207.4</i>	<i>208.5</i>

- = 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Supply (billion cubic feet per day)															
Total Marketed Production	78.11	79.20	80.01	79.21	<i>79.34</i>	<i>79.50</i>	<i>79.61</i>	<i>80.29</i>	<i>80.75</i>	<i>80.96</i>	<i>81.08</i>	<i>81.83</i>	79.14	<i>79.68</i>	<i>81.16</i>
Alaska	0.99	0.93	0.86	0.96	<i>0.99</i>	<i>0.84</i>	<i>0.76</i>	<i>0.92</i>	<i>0.97</i>	<i>0.82</i>	<i>0.75</i>	<i>0.91</i>	0.94	<i>0.88</i>	<i>0.86</i>
Federal GOM (a)	3.37	3.68	3.95	3.58	<i>3.43</i>	<i>3.38</i>	<i>3.21</i>	<i>3.17</i>	<i>3.22</i>	<i>3.17</i>	<i>3.00</i>	<i>3.03</i>	3.65	<i>3.30</i>	<i>3.10</i>
Lower 48 States (excl GOM)	73.75	74.58	75.20	74.67	<i>74.91</i>	<i>75.27</i>	<i>75.64</i>	<i>76.19</i>	<i>76.56</i>	<i>76.97</i>	<i>77.34</i>	<i>77.89</i>	74.55	<i>75.51</i>	<i>77.19</i>
Total Dry Gas Production	73.67	74.50	75.26	74.36	<i>74.50</i>	<i>74.65</i>	<i>74.75</i>	<i>75.39</i>	<i>75.82</i>	<i>76.02</i>	<i>76.14</i>	<i>76.84</i>	74.45	<i>74.82</i>	<i>76.21</i>
LNG Gross Imports	0.43	0.08	0.26	0.20	<i>0.14</i>	<i>0.16</i>	<i>0.17</i>	<i>0.15</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	0.24	<i>0.15</i>	<i>0.12</i>
LNG Gross Exports	0.06	0.06	0.09	0.03	<i>0.16</i>	<i>0.52</i>	<i>0.96</i>	<i>1.04</i>	<i>1.04</i>	<i>1.28</i>	<i>1.48</i>	<i>1.89</i>	0.06	<i>0.67</i>	<i>1.42</i>
Pipeline Gross Imports	8.36	6.69	6.69	6.75	<i>7.21</i>	<i>6.21</i>	<i>6.53</i>	<i>6.71</i>	<i>7.24</i>	<i>6.20</i>	<i>6.51</i>	<i>6.76</i>	7.12	<i>6.66</i>	<i>6.68</i>
Pipeline Gross Exports	4.86	4.36	4.81	5.10	<i>5.22</i>	<i>4.99</i>	<i>5.15</i>	<i>5.31</i>	<i>5.26</i>	<i>5.06</i>	<i>5.23</i>	<i>5.38</i>	4.78	<i>5.17</i>	<i>5.23</i>
Supplemental Gaseous Fuels	0.17	0.16	0.14	0.16	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	0.16	<i>0.16</i>	<i>0.17</i>
Net Inventory Withdrawals	18.48	-12.99	-10.48	-0.14	<i>17.51</i>	<i>-9.06</i>	<i>-8.93</i>	<i>3.26</i>	<i>16.73</i>	<i>-9.15</i>	<i>-9.05</i>	<i>3.00</i>	-1.36	<i>0.68</i>	<i>0.32</i>
Total Supply	96.19	64.00	66.97	76.21	<i>94.15</i>	<i>66.61</i>	<i>66.58</i>	<i>79.32</i>	<i>93.78</i>	<i>67.02</i>	<i>67.17</i>	<i>79.62</i>	75.76	<i>76.64</i>	<i>76.83</i>
Balancing Item (b)	0.48	0.09	-0.91	-0.87	<i>0.15</i>	<i>-0.74</i>	<i>0.47</i>	<i>-0.17</i>	<i>0.36</i>	<i>-0.54</i>	<i>0.71</i>	<i>0.99</i>	-0.31	<i>-0.07</i>	<i>0.38</i>
Total Primary Supply	96.67	64.09	66.07	75.34	<i>94.30</i>	<i>65.87</i>	<i>67.05</i>	<i>79.15</i>	<i>94.14</i>	<i>66.47</i>	<i>67.88</i>	<i>80.61</i>	75.46	<i>76.57</i>	<i>77.21</i>
Consumption (billion cubic feet per day)															
Residential	27.52	6.90	3.46	13.24	<i>25.38</i>	<i>7.32</i>	<i>3.63</i>	<i>15.88</i>	<i>25.94</i>	<i>7.56</i>	<i>3.63</i>	<i>16.02</i>	12.72	<i>13.03</i>	<i>13.23</i>
Commercial	16.01	5.85	4.44	9.06	<i>14.51</i>	<i>5.94</i>	<i>4.57</i>	<i>10.56</i>	<i>14.90</i>	<i>6.06</i>	<i>4.61</i>	<i>10.71</i>	8.81	<i>8.89</i>	<i>9.05</i>
Industrial	22.69	19.62	19.19	21.09	<i>22.76</i>	<i>20.35</i>	<i>20.14</i>	<i>22.21</i>	<i>23.25</i>	<i>20.89</i>	<i>20.72</i>	<i>22.76</i>	20.64	<i>21.36</i>	<i>21.90</i>
Electric Power (c)	23.05	25.28	32.41	25.12	<i>24.19</i>	<i>25.72</i>	<i>32.14</i>	<i>23.50</i>	<i>22.50</i>	<i>25.34</i>	<i>32.24</i>	<i>23.97</i>	26.49	<i>26.40</i>	<i>26.04</i>
Lease and Plant Fuel	4.29	4.35	4.39	4.35	<i>4.35</i>	<i>4.36</i>	<i>4.37</i>	<i>4.41</i>	<i>4.43</i>	<i>4.44</i>	<i>4.45</i>	<i>4.49</i>	4.34	<i>4.37</i>	<i>4.45</i>
Pipeline and Distribution Use	3.03	2.01	2.07	2.38	<i>3.02</i>	<i>2.06</i>	<i>2.10</i>	<i>2.51</i>	<i>3.01</i>	<i>2.08</i>	<i>2.13</i>	<i>2.56</i>	2.37	<i>2.42</i>	<i>2.44</i>
Vehicle Use	0.09	0.09	0.10	0.10	<i>0.10</i>	<i>0.10</i>	<i>0.10</i>	<i>0.10</i>	<i>0.10</i>	<i>0.10</i>	<i>0.10</i>	<i>0.10</i>	0.09	<i>0.10</i>	<i>0.10</i>
Total Consumption	96.67	64.09	66.07	75.34	<i>94.30</i>	<i>65.87</i>	<i>67.05</i>	<i>79.15</i>	<i>94.14</i>	<i>66.47</i>	<i>67.88</i>	<i>80.61</i>	75.46	<i>76.57</i>	<i>77.21</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	1,483	2,658	3,625	3,637	<i>2,043</i>	<i>2,867</i>	<i>3,688</i>	<i>3,389</i>	<i>1,883</i>	<i>2,715</i>	<i>3,548</i>	<i>3,272</i>	3,637	<i>3,389</i>	<i>3,272</i>
East Region (d)	242	576	859	840	<i>384</i>	<i>652</i>	<i>888</i>	<i>723</i>	<i>295</i>	<i>563</i>	<i>817</i>	<i>671</i>	840	<i>723</i>	<i>671</i>
Midwest Region (d)	252	565	972	978	<i>472</i>	<i>687</i>	<i>1,026</i>	<i>889</i>	<i>400</i>	<i>637</i>	<i>989</i>	<i>854</i>	978	<i>889</i>	<i>854</i>
South Central Region (d)	575	1,002	1,206	1,284	<i>785</i>	<i>990</i>	<i>1,139</i>	<i>1,191</i>	<i>789</i>	<i>982</i>	<i>1,109</i>	<i>1,180</i>	1,284	<i>1,191</i>	<i>1,180</i>
Mountain Region (d)	113	155	203	187	<i>129</i>	<i>168</i>	<i>222</i>	<i>199</i>	<i>126</i>	<i>161</i>	<i>214</i>	<i>191</i>	187	<i>199</i>	<i>191</i>
Pacific Region (d)	276	336	359	322	<i>248</i>	<i>346</i>	<i>389</i>	<i>361</i>	<i>248</i>	<i>348</i>	<i>394</i>	<i>350</i>	322	<i>361</i>	<i>350</i>
Alaska	24	24	25	26	<i>24</i>	<i>24</i>	<i>25</i>	<i>26</i>	<i>24</i>	<i>24</i>	<i>25</i>	<i>26</i>	26	<i>26</i>	<i>26</i>

- = 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 *Weekly Natural Gas Storage Report, Notes and Definitions* (<http://ir.eia.gov/ngs/notes.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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Wholesale/Spot															
Henry Hub Spot Price	2.99	2.83	2.84	2.18	<i>2.44</i>	<i>2.55</i>	<i>2.86</i>	<i>3.07</i>	<i>3.37</i>	<i>3.09</i>	<i>3.30</i>	<i>3.51</i>	2.71	<i>2.73</i>	<i>3.32</i>
Residential															
New England	13.09	13.33	16.09	12.17	<i>11.41</i>	<i>13.39</i>	<i>16.42</i>	<i>12.92</i>	<i>12.46</i>	<i>13.89</i>	<i>16.64</i>	<i>13.16</i>	13.10	<i>12.52</i>	<i>13.18</i>
Middle Atlantic	9.53	11.20	16.32	11.08	<i>10.12</i>	<i>12.73</i>	<i>17.23</i>	<i>11.67</i>	<i>10.50</i>	<i>12.87</i>	<i>17.13</i>	<i>11.58</i>	10.54	<i>11.42</i>	<i>11.58</i>
E. N. Central	7.78	10.58	16.71	8.36	<i>6.91</i>	<i>10.53</i>	<i>16.30</i>	<i>8.20</i>	<i>7.65</i>	<i>11.12</i>	<i>16.63</i>	<i>8.47</i>	8.75	<i>8.30</i>	<i>8.85</i>
W. N. Central	8.66	11.85	17.60	9.80	<i>7.24</i>	<i>9.44</i>	<i>16.28</i>	<i>8.74</i>	<i>7.88</i>	<i>10.51</i>	<i>17.27</i>	<i>9.54</i>	9.85	<i>8.49</i>	<i>9.21</i>
S. Atlantic	10.74	16.68	22.69	13.44	<i>11.07</i>	<i>16.02</i>	<i>22.17</i>	<i>12.48</i>	<i>11.06</i>	<i>15.89</i>	<i>21.92</i>	<i>12.33</i>	12.81	<i>12.80</i>	<i>12.68</i>
E. S. Central	9.34	14.36	19.21	12.11	<i>9.16</i>	<i>12.76</i>	<i>17.97</i>	<i>10.75</i>	<i>9.17</i>	<i>13.33</i>	<i>18.49</i>	<i>11.23</i>	11.02	<i>10.54</i>	<i>10.72</i>
W. S. Central	8.45	13.94	19.88	12.54	<i>8.75</i>	<i>12.56</i>	<i>18.05</i>	<i>10.57</i>	<i>8.58</i>	<i>13.03</i>	<i>18.64</i>	<i>11.42</i>	10.88	<i>10.47</i>	<i>10.68</i>
Mountain	9.57	10.87	14.50	9.15	<i>8.09</i>	<i>8.95</i>	<i>12.75</i>	<i>8.15</i>	<i>7.79</i>	<i>9.13</i>	<i>13.28</i>	<i>8.62</i>	10.01	<i>8.60</i>	<i>8.67</i>
Pacific	11.46	11.40	12.05	9.74	<i>8.93</i>	<i>9.70</i>	<i>10.42</i>	<i>9.74</i>	<i>9.63</i>	<i>10.27</i>	<i>10.91</i>	<i>9.98</i>	10.95	<i>9.51</i>	<i>10.01</i>
U.S. Average	9.30	11.96	16.46	10.16	<i>8.59</i>	<i>11.39</i>	<i>15.69</i>	<i>9.82</i>	<i>9.02</i>	<i>11.83</i>	<i>16.09</i>	<i>10.08</i>	10.37	<i>9.85</i>	<i>10.23</i>
Commercial															
New England	10.77	10.11	9.65	8.85	<i>10.03</i>	<i>9.63</i>	<i>9.68</i>	<i>10.07</i>	<i>10.67</i>	<i>10.71</i>	<i>10.73</i>	<i>11.02</i>	10.11	<i>9.95</i>	<i>10.78</i>
Middle Atlantic	7.91	7.48	6.65	6.95	<i>7.19</i>	<i>6.99</i>	<i>7.06</i>	<i>7.85</i>	<i>8.36</i>	<i>7.99</i>	<i>7.90</i>	<i>8.56</i>	7.49	<i>7.32</i>	<i>8.30</i>
E. N. Central	6.95	7.51	8.80	6.48	<i>6.49</i>	<i>7.53</i>	<i>8.58</i>	<i>6.88</i>	<i>7.10</i>	<i>8.34</i>	<i>9.20</i>	<i>7.39</i>	7.04	<i>6.92</i>	<i>7.51</i>
W. N. Central	7.65	7.98	8.99	7.06	<i>6.73</i>	<i>7.19</i>	<i>8.46</i>	<i>7.15</i>	<i>7.46</i>	<i>7.87</i>	<i>8.97</i>	<i>7.58</i>	7.62	<i>7.06</i>	<i>7.66</i>
S. Atlantic	8.48	9.21	9.66	8.63	<i>8.35</i>	<i>9.15</i>	<i>9.97</i>	<i>9.12</i>	<i>9.13</i>	<i>9.21</i>	<i>9.88</i>	<i>9.19</i>	8.77	<i>8.90</i>	<i>9.26</i>
E. S. Central	8.54	9.62	9.89	8.81	<i>7.88</i>	<i>8.62</i>	<i>9.43</i>	<i>8.76</i>	<i>8.37</i>	<i>9.26</i>	<i>9.98</i>	<i>9.24</i>	8.90	<i>8.42</i>	<i>8.93</i>
W. S. Central	7.15	7.21	8.00	7.30	<i>6.40</i>	<i>6.91</i>	<i>7.69</i>	<i>7.16</i>	<i>7.14</i>	<i>7.69</i>	<i>8.23</i>	<i>7.64</i>	7.32	<i>6.87</i>	<i>7.52</i>
Mountain	8.27	8.34	9.03	7.34	<i>6.67</i>	<i>6.79</i>	<i>7.99</i>	<i>7.03</i>	<i>6.70</i>	<i>6.98</i>	<i>8.32</i>	<i>7.38</i>	8.05	<i>6.94</i>	<i>7.13</i>
Pacific	9.20	8.43	8.69	8.20	<i>8.19</i>	<i>8.19</i>	<i>8.77</i>	<i>8.54</i>	<i>8.73</i>	<i>8.81</i>	<i>9.30</i>	<i>8.87</i>	8.63	<i>8.39</i>	<i>8.88</i>
U.S. Average	7.94	8.13	8.41	7.43	<i>7.24</i>	<i>7.65</i>	<i>8.40</i>	<i>7.78</i>	<i>7.95</i>	<i>8.34</i>	<i>8.92</i>	<i>8.25</i>	7.89	<i>7.59</i>	<i>8.21</i>
Industrial															
New England	9.10	7.61	6.10	6.64	<i>7.56</i>	<i>7.46</i>	<i>7.63</i>	<i>8.65</i>	<i>8.81</i>	<i>8.00</i>	<i>7.87</i>	<i>8.76</i>	7.75	<i>7.83</i>	<i>8.47</i>
Middle Atlantic	8.31	7.56	7.53	6.82	<i>6.99</i>	<i>6.47</i>	<i>7.08</i>	<i>7.86</i>	<i>8.16</i>	<i>7.35</i>	<i>7.68</i>	<i>8.34</i>	7.77	<i>7.11</i>	<i>8.00</i>
E. N. Central	6.41	5.65	5.54	5.42	<i>5.65</i>	<i>5.39</i>	<i>5.74</i>	<i>5.96</i>	<i>6.53</i>	<i>6.20</i>	<i>6.38</i>	<i>6.51</i>	5.93	<i>5.71</i>	<i>6.46</i>
W. N. Central	5.81	4.59	4.41	4.54	<i>4.53</i>	<i>3.88</i>	<i>4.20</i>	<i>4.82</i>	<i>5.32</i>	<i>4.62</i>	<i>4.78</i>	<i>5.31</i>	4.92	<i>4.39</i>	<i>5.05</i>
S. Atlantic	5.46	4.50	4.50	4.44	<i>4.45</i>	<i>4.53</i>	<i>4.87</i>	<i>5.21</i>	<i>5.40</i>	<i>5.06</i>	<i>5.25</i>	<i>5.58</i>	4.75	<i>4.77</i>	<i>5.33</i>
E. S. Central	5.15	4.28	4.02	3.98	<i>4.23</i>	<i>4.13</i>	<i>4.47</i>	<i>4.84</i>	<i>5.24</i>	<i>4.73</i>	<i>4.90</i>	<i>5.24</i>	4.39	<i>4.42</i>	<i>5.04</i>
W. S. Central	3.21	2.92	3.07	2.55	<i>2.48</i>	<i>2.67</i>	<i>3.15</i>	<i>3.29</i>	<i>3.47</i>	<i>3.25</i>	<i>3.59</i>	<i>3.74</i>	2.93	<i>2.90</i>	<i>3.51</i>
Mountain	6.61	6.22	6.11	5.65	<i>4.91</i>	<i>4.59</i>	<i>5.25</i>	<i>5.41</i>	<i>5.24</i>	<i>5.09</i>	<i>5.77</i>	<i>5.91</i>	6.16	<i>5.04</i>	<i>5.50</i>
Pacific	7.32	6.57	6.62	6.17	<i>5.40</i>	<i>5.33</i>	<i>5.98</i>	<i>6.22</i>	<i>6.08</i>	<i>5.99</i>	<i>6.51</i>	<i>6.64</i>	6.68	<i>5.73</i>	<i>6.31</i>
U.S. Average	4.57	3.68	3.65	3.44	<i>3.57</i>	<i>3.36</i>	<i>3.74</i>	<i>4.16</i>	<i>4.55</i>	<i>3.97</i>	<i>4.21</i>	<i>4.62</i>	3.85	<i>3.72</i>	<i>4.35</i>

- = 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Supply (million short tons)															
Production	240.2	211.1	232.4	206.8	<i>214.8</i>	<i>204.6</i>	<i>218.8</i>	<i>214.2</i>	<i>214.3</i>	<i>199.5</i>	<i>216.1</i>	<i>213.3</i>	890.5	<i>852.4</i>	<i>843.3</i>
Appalachia	62.3	54.6	60.3	50.6	<i>54.1</i>	<i>53.4</i>	<i>50.5</i>	<i>48.6</i>	<i>53.1</i>	<i>51.4</i>	<i>49.7</i>	<i>48.3</i>	227.8	<i>206.6</i>	<i>202.6</i>
Interior	45.2	38.9	44.8	39.7	<i>43.9</i>	<i>41.7</i>	<i>43.3</i>	<i>42.3</i>	<i>41.5</i>	<i>41.1</i>	<i>43.7</i>	<i>43.3</i>	168.7	<i>171.2</i>	<i>169.6</i>
Western	132.7	117.6	127.2	116.5	<i>116.8</i>	<i>109.4</i>	<i>125.0</i>	<i>123.4</i>	<i>119.7</i>	<i>107.0</i>	<i>122.7</i>	<i>121.7</i>	494.0	<i>474.6</i>	<i>471.1</i>
Primary Inventory Withdrawals	-0.7	0.3	3.1	-1.6	<i>-1.0</i>	<i>0.7</i>	<i>2.9</i>	<i>-1.6</i>	<i>-1.9</i>	<i>0.7</i>	<i>2.9</i>	<i>-1.6</i>	1.1	<i>1.0</i>	<i>0.0</i>
Imports	3.0	2.6	3.0	2.7	<i>2.2</i>	<i>2.4</i>	<i>3.3</i>	<i>2.9</i>	<i>2.2</i>	<i>2.4</i>	<i>3.3</i>	<i>2.9</i>	11.3	<i>10.7</i>	<i>10.8</i>
Exports	22.0	19.8	16.9	18.3	<i>15.9</i>	<i>18.5</i>	<i>15.7</i>	<i>17.4</i>	<i>11.8</i>	<i>17.7</i>	<i>16.5</i>	<i>19.1</i>	76.9	<i>67.6</i>	<i>65.1</i>
Metallurgical Coal	13.5	12.7	10.3	10.7	<i>10.9</i>	<i>10.9</i>	<i>8.8</i>	<i>10.3</i>	<i>9.1</i>	<i>10.9</i>	<i>9.7</i>	<i>11.7</i>	47.3	<i>41.0</i>	<i>41.4</i>
Steam Coal	8.5	7.0	6.6	7.5	<i>5.0</i>	<i>7.6</i>	<i>6.9</i>	<i>7.2</i>	<i>2.7</i>	<i>6.8</i>	<i>6.8</i>	<i>7.4</i>	29.6	<i>26.7</i>	<i>23.7</i>
Total Primary Supply	220.5	194.3	221.5	189.6	<i>200.1</i>	<i>189.1</i>	<i>209.2</i>	<i>198.0</i>	<i>202.8</i>	<i>185.0</i>	<i>205.7</i>	<i>195.4</i>	825.9	<i>796.5</i>	<i>788.9</i>
Secondary Inventory Withdrawals	-2.4	-12.7	3.9	-16.1	<i>0.2</i>	<i>-4.5</i>	<i>16.3</i>	<i>-5.0</i>	<i>-0.7</i>	<i>-4.9</i>	<i>16.2</i>	<i>-5.3</i>	-27.3	<i>7.0</i>	<i>5.3</i>
Waste Coal (a)	2.7	2.7	2.7	2.7	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	<i>2.8</i>	<i>2.5</i>	<i>2.5</i>	<i>2.5</i>	<i>2.5</i>	10.8	<i>11.1</i>	<i>10.0</i>
Total Supply	220.8	184.3	228.1	176.2	<i>203.1</i>	<i>187.4</i>	<i>228.3</i>	<i>195.8</i>	<i>204.5</i>	<i>182.6</i>	<i>224.4</i>	<i>192.6</i>	809.4	<i>814.5</i>	<i>804.2</i>
Consumption (million short tons)															
Coke Plants	4.4	4.4	5.1	5.0	<i>4.2</i>	<i>3.9</i>	<i>4.9</i>	<i>4.7</i>	<i>4.1</i>	<i>4.0</i>	<i>4.7</i>	<i>4.4</i>	18.9	<i>17.7</i>	<i>17.2</i>
Electric Power Sector (b)	196.4	174.7	215.6	167.3	<i>187.4</i>	<i>172.8</i>	<i>212.9</i>	<i>180.1</i>	<i>189.0</i>	<i>167.9</i>	<i>209.2</i>	<i>177.3</i>	754.0	<i>753.3</i>	<i>743.4</i>
Retail and Other Industry	11.4	10.4	10.5	10.8	<i>11.4</i>	<i>10.6</i>	<i>10.5</i>	<i>11.0</i>	<i>11.4</i>	<i>10.7</i>	<i>10.5</i>	<i>11.0</i>	43.0	<i>43.5</i>	<i>43.5</i>
Residential and Commercial	0.8	0.6	0.6	0.7	<i>0.8</i>	<i>0.5</i>	<i>0.4</i>	<i>0.6</i>	<i>0.7</i>	<i>0.4</i>	<i>0.4</i>	<i>0.6</i>	2.7	<i>2.3</i>	<i>2.1</i>
Other Industrial	10.6	9.8	9.9	10.1	<i>10.6</i>	<i>10.1</i>	<i>10.1</i>	<i>10.4</i>	<i>10.6</i>	<i>10.2</i>	<i>10.2</i>	<i>10.4</i>	40.3	<i>41.2</i>	<i>41.5</i>
Total Consumption	212.2	189.4	231.1	183.1	<i>203.1</i>	<i>187.4</i>	<i>228.3</i>	<i>195.8</i>	<i>204.5</i>	<i>182.6</i>	<i>224.4</i>	<i>192.6</i>	815.8	<i>814.5</i>	<i>804.2</i>
Discrepancy (c)	8.6	-5.1	-3.1	-6.9	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	-6.4	<i>0.0</i>	<i>0.0</i>
End-of-period Inventories (million short tons)															
Primary Inventories (d)	45.5	45.2	42.1	43.7	<i>44.7</i>	<i>44.0</i>	<i>41.1</i>	<i>42.7</i>	<i>44.7</i>	<i>44.0</i>	<i>41.1</i>	<i>42.7</i>	43.7	<i>42.7</i>	<i>42.7</i>
Secondary Inventories	161.0	173.7	169.8	185.9	<i>185.7</i>	<i>190.2</i>	<i>174.0</i>	<i>178.9</i>	<i>179.7</i>	<i>184.6</i>	<i>168.4</i>	<i>173.7</i>	185.9	<i>178.9</i>	<i>173.7</i>
Electric Power Sector	154.8	166.8	162.4	178.1	<i>178.9</i>	<i>182.8</i>	<i>166.0</i>	<i>170.7</i>	<i>172.5</i>	<i>176.8</i>	<i>160.2</i>	<i>165.2</i>	178.1	<i>170.7</i>	<i>165.2</i>
Retail and General Industry	4.1	4.5	5.1	5.5	<i>4.8</i>	<i>5.0</i>	<i>5.6</i>	<i>5.9</i>	<i>5.1</i>	<i>5.4</i>	<i>5.9</i>	<i>6.2</i>	5.5	<i>5.9</i>	<i>6.2</i>
Coke Plants	1.6	1.9	1.9	1.8	<i>1.6</i>	<i>1.9</i>	<i>1.8</i>	<i>1.8</i>	<i>1.5</i>	<i>1.9</i>	<i>1.8</i>	<i>1.8</i>	1.8	<i>1.8</i>	<i>1.8</i>
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.61	5.61	5.61	5.61	<i>5.46</i>	<i>5.46</i>	<i>5.46</i>	<i>5.46</i>	<i>5.32</i>	<i>5.32</i>	<i>5.32</i>	<i>5.32</i>	5.61	<i>5.46</i>	<i>5.32</i>
Total Raw Steel Production															
(Million short tons per day)	0.247	0.242	0.248	0.227	<i>0.235</i>	<i>0.229</i>	<i>0.231</i>	<i>0.207</i>	<i>0.206</i>	<i>0.214</i>	<i>0.194</i>	<i>0.166</i>	0.241	<i>0.225</i>	<i>0.195</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.27	2.25	2.22	2.18	<i>2.18</i>	<i>2.21</i>	<i>2.21</i>	<i>2.17</i>	<i>2.17</i>	<i>2.22</i>	<i>2.23</i>	<i>2.19</i>	2.23	<i>2.19</i>	<i>2.20</i>

- = no data available

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

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

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

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

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121; and *Electric Power Monthly*, DOE/EIA-0226.

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

Projections: EIA Regional Short-Term Energy Model.

Table 7a. U.S. Electricity Industry Overview

U.S. Energy Information Administration | Short-Term Energy Outlook - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Electricity Supply (billion kilowatthours per day)															
Electricity Generation	11.36	10.77	12.44	10.37	<i>11.03</i>	<i>10.91</i>	<i>12.52</i>	<i>10.65</i>	<i>11.15</i>	<i>11.02</i>	<i>12.63</i>	<i>10.78</i>	11.23	<i>11.28</i>	<i>11.40</i>
Electric Power Sector (a)	10.93	10.36	11.99	9.94	<i>10.60</i>	<i>10.51</i>	<i>12.07</i>	<i>10.22</i>	<i>10.73</i>	<i>10.61</i>	<i>12.18</i>	<i>10.34</i>	10.80	<i>10.85</i>	<i>10.97</i>
Comm. and Indus. Sectors (b)	0.43	0.41	0.45	0.43	<i>0.42</i>	<i>0.40</i>	<i>0.44</i>	<i>0.43</i>	<i>0.42</i>	<i>0.41</i>	<i>0.45</i>	<i>0.44</i>	0.43	<i>0.42</i>	<i>0.43</i>
Net Imports	0.17	0.20	0.20	0.16	<i>0.16</i>	<i>0.16</i>	<i>0.18</i>	<i>0.13</i>	<i>0.15</i>	<i>0.15</i>	<i>0.18</i>	<i>0.13</i>	0.18	<i>0.16</i>	<i>0.15</i>
Total Supply	11.52	10.96	12.65	10.52	<i>11.18</i>	<i>11.07</i>	<i>12.70</i>	<i>10.79</i>	<i>11.30</i>	<i>11.17</i>	<i>12.81</i>	<i>10.91</i>	11.41	<i>11.44</i>	<i>11.55</i>
Losses and Unaccounted for (c)	0.78	0.93	0.86	0.64	<i>0.67</i>	<i>0.93</i>	<i>0.80</i>	<i>0.73</i>	<i>0.61</i>	<i>0.94</i>	<i>0.81</i>	<i>0.73</i>	0.80	<i>0.78</i>	<i>0.77</i>
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	10.36	9.68	11.39	9.51	<i>10.14</i>	<i>9.78</i>	<i>11.51</i>	<i>9.68</i>	<i>10.31</i>	<i>9.87</i>	<i>11.60</i>	<i>9.79</i>	10.23	<i>10.28</i>	<i>10.39</i>
Residential Sector	4.20	3.35	4.51	3.37	<i>3.96</i>	<i>3.40</i>	<i>4.53</i>	<i>3.46</i>	<i>4.07</i>	<i>3.45</i>	<i>4.57</i>	<i>3.52</i>	3.86	<i>3.84</i>	<i>3.90</i>
Commercial Sector	3.60	3.65	4.11	3.52	<i>3.61</i>	<i>3.67</i>	<i>4.17</i>	<i>3.57</i>	<i>3.64</i>	<i>3.71</i>	<i>4.22</i>	<i>3.61</i>	3.72	<i>3.76</i>	<i>3.80</i>
Industrial Sector	2.54	2.66	2.75	2.59	<i>2.56</i>	<i>2.68</i>	<i>2.79</i>	<i>2.63</i>	<i>2.57</i>	<i>2.69</i>	<i>2.80</i>	<i>2.63</i>	2.64	<i>2.66</i>	<i>2.67</i>
Transportation Sector	0.02	0.02	0.02	0.02	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	0.02	<i>0.02</i>	<i>0.02</i>
Direct Use (d)	0.38	0.36	0.40	0.38	<i>0.37</i>	<i>0.36</i>	<i>0.39</i>	<i>0.38</i>	<i>0.37</i>	<i>0.36</i>	<i>0.40</i>	<i>0.39</i>	0.38	<i>0.38</i>	<i>0.38</i>
Total Consumption	10.74	10.04	11.79	9.88	<i>10.52</i>	<i>10.14</i>	<i>11.90</i>	<i>10.06</i>	<i>10.68</i>	<i>10.23</i>	<i>12.00</i>	<i>10.17</i>	10.61	<i>10.66</i>	<i>10.78</i>
Average residential electricity usage per customer (kWh)	2,924	2,351	3,191	2,383	<i>2,760</i>	<i>2,370</i>	<i>3,179</i>	<i>2,422</i>	<i>2,783</i>	<i>2,379</i>	<i>3,179</i>	<i>2,446</i>	10,849	<i>10,731</i>	<i>10,787</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.27	2.25	2.22	2.18	<i>2.18</i>	<i>2.21</i>	<i>2.21</i>	<i>2.17</i>	<i>2.17</i>	<i>2.22</i>	<i>2.23</i>	<i>2.19</i>	2.23	<i>2.19</i>	<i>2.20</i>
Natural Gas	4.09	3.11	3.09	2.99	<i>3.52</i>	<i>3.25</i>	<i>3.36</i>	<i>4.07</i>	<i>4.43</i>	<i>3.74</i>	<i>3.74</i>	<i>4.45</i>	3.29	<i>3.53</i>	<i>4.05</i>
Residual Fuel Oil	10.82	11.64	10.48	8.97	<i>7.86</i>	<i>8.41</i>	<i>8.44</i>	<i>8.48</i>	<i>8.58</i>	<i>9.63</i>	<i>9.87</i>	<i>10.37</i>	10.56	<i>8.29</i>	<i>9.59</i>
Distillate Fuel Oil	15.61	15.16	13.18	11.63	<i>10.74</i>	<i>11.40</i>	<i>11.84</i>	<i>12.61</i>	<i>13.00</i>	<i>13.43</i>	<i>14.20</i>	<i>15.43</i>	14.49	<i>11.59</i>	<i>13.95</i>
End-Use Prices (cents per kilowatthour)															
Residential Sector	12.23	12.85	12.99	12.50	<i>12.16</i>	<i>12.70</i>	<i>13.00</i>	<i>12.68</i>	<i>12.48</i>	<i>13.14</i>	<i>13.40</i>	<i>13.04</i>	12.65	<i>12.65</i>	<i>13.02</i>
Commercial Sector	10.47	10.53	10.95	10.52	<i>10.61</i>	<i>10.70</i>	<i>11.15</i>	<i>10.76</i>	<i>10.86</i>	<i>10.93</i>	<i>11.38</i>	<i>11.00</i>	10.63	<i>10.82</i>	<i>11.05</i>
Industrial Sector	6.78	6.81	7.31	6.66	<i>6.75</i>	<i>6.80</i>	<i>7.33</i>	<i>6.74</i>	<i>6.87</i>	<i>6.88</i>	<i>7.42</i>	<i>6.83</i>	6.90	<i>6.91</i>	<i>7.01</i>

- = 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 collocated 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Residential Sector															
New England	152	112	144	117	143	113	142	121	144	113	142	121	131	130	130
Middle Atlantic	423	321	423	314	386	322	424	323	394	323	423	326	370	364	366
E. N. Central	587	428	556	454	542	443	583	472	563	444	574	478	506	510	515
W. N. Central	325	232	309	256	313	241	318	264	326	242	313	270	280	284	288
S. Atlantic	1,078	889	1,137	833	995	876	1,148	865	1,033	888	1,157	885	984	971	991
E. S. Central	390	275	384	273	352	283	389	286	364	285	391	290	331	328	332
W. S. Central	602	503	782	491	565	533	756	493	562	549	796	507	595	587	604
Mountain	235	240	333	234	243	244	344	237	250	248	348	242	261	267	272
Pacific contiguous	396	337	425	387	403	336	409	383	422	344	414	392	386	383	393
AK and HI	13	12	13	13	13	12	12	13	13	12	12	13	13	13	13
Total	4,202	3,348	4,505	3,372	3,957	3,405	4,527	3,458	4,070	3,449	4,569	3,524	3,856	3,838	3,903
Commercial Sector															
New England	147	139	159	137	144	140	158	140	144	140	158	140	146	146	146
Middle Atlantic	443	417	477	402	437	416	479	409	440	417	481	411	435	435	437
E. N. Central	509	489	543	474	507	498	561	490	516	504	567	497	504	514	521
W. N. Central	281	269	305	265	283	275	314	270	290	279	318	275	280	286	290
S. Atlantic	805	859	939	792	809	853	957	810	815	860	965	815	849	857	864
E. S. Central	235	239	279	229	233	239	283	226	236	242	287	235	246	245	250
W. S. Central	496	530	625	518	503	538	630	519	508	544	641	524	542	547	555
Mountain	240	256	289	246	245	260	295	251	248	264	299	254	258	263	266
Pacific contiguous	424	433	479	445	429	439	476	439	430	442	482	442	445	446	449
AK and HI	16	16	17	16	16	16	17	16	16	16	17	17	16	16	16
Total	3,598	3,646	4,114	3,523	3,606	3,673	4,171	3,569	3,643	3,709	4,215	3,610	3,721	3,756	3,795
Industrial Sector															
New England	49	50	52	50	48	50	52	52	48	50	53	52	50	50	51
Middle Atlantic	198	196	204	190	204	198	205	197	204	200	210	200	197	201	204
E. N. Central	520	525	531	500	520	523	535	513	513	519	530	505	519	523	517
W. N. Central	237	240	252	243	243	250	260	252	247	247	256	248	243	251	250
S. Atlantic	375	406	406	377	368	397	401	379	375	407	411	384	391	387	394
E. S. Central	279	287	290	281	277	291	294	282	283	296	298	284	284	286	290
W. S. Central	427	456	485	469	441	472	495	469	441	461	488	465	460	469	464
Mountain	217	235	251	223	221	241	259	231	228	249	267	239	232	238	246
Pacific contiguous	227	251	266	242	222	247	269	242	221	248	269	242	247	245	245
AK and HI	13	13	15	14	13	13	15	14	13	13	15	14	14	14	14
Total	2,541	2,660	2,751	2,589	2,557	2,683	2,786	2,630	2,573	2,691	2,797	2,634	2,636	2,664	2,674
Total All Sectors (a)															
New England	350	302	357	305	337	305	353	314	338	305	355	314	328	327	328
Middle Atlantic	1,076	944	1,115	918	1,039	947	1,120	940	1,050	952	1,126	948	1,013	1,012	1,019
E. N. Central	1,618	1,444	1,632	1,430	1,571	1,466	1,682	1,476	1,593	1,469	1,672	1,483	1,531	1,549	1,554
W. N. Central	843	742	866	763	840	766	893	786	864	769	888	793	803	821	828
S. Atlantic	2,262	2,158	2,486	2,005	2,176	2,131	2,510	2,058	2,226	2,158	2,537	2,088	2,227	2,219	2,253
E. S. Central	904	801	953	783	862	814	966	794	882	824	976	809	860	859	873
W. S. Central	1,525	1,490	1,892	1,479	1,509	1,544	1,882	1,482	1,512	1,555	1,926	1,497	1,597	1,605	1,623
Mountain	692	731	874	703	710	746	899	720	726	761	914	734	751	769	784
Pacific contiguous	1,050	1,023	1,172	1,076	1,056	1,024	1,157	1,066	1,075	1,037	1,168	1,079	1,081	1,076	1,090
AK and HI	43	41	44	44	43	41	44	43	43	41	44	44	43	43	43
Total	10,364	9,675	11,390	9,505	10,143	9,783	11,506	9,680	10,309	9,870	11,604	9,789	10,234	10,280	10,395

- = 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 Kilowatt-hour)

U.S. Energy Information Administration | Short-Term Energy Outlook - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Residential Sector															
New England	20.41	20.27	18.34	18.89	<i>19.14</i>	<i>18.84</i>	<i>18.56</i>	<i>19.49</i>	<i>20.20</i>	<i>19.88</i>	<i>19.59</i>	<i>20.58</i>	19.47	<i>19.00</i>	<i>20.05</i>
Middle Atlantic	15.76	16.06	16.47	16.19	<i>16.13</i>	<i>16.36</i>	<i>16.88</i>	<i>16.71</i>	<i>16.71</i>	<i>16.99</i>	<i>17.48</i>	<i>17.17</i>	16.12	<i>16.53</i>	<i>17.10</i>
E. N. Central	12.22	13.20	13.15	12.97	<i>12.36</i>	<i>13.29</i>	<i>13.38</i>	<i>13.48</i>	<i>12.75</i>	<i>13.76</i>	<i>13.86</i>	<i>13.93</i>	12.85	<i>13.11</i>	<i>13.56</i>
W. N. Central	10.24	12.16	12.47	10.88	<i>10.45</i>	<i>12.30</i>	<i>12.70</i>	<i>11.14</i>	<i>10.65</i>	<i>12.55</i>	<i>12.99</i>	<i>11.34</i>	11.40	<i>11.64</i>	<i>11.85</i>
S. Atlantic	11.37	11.91	12.14	11.47	<i>11.07</i>	<i>11.52</i>	<i>11.84</i>	<i>11.34</i>	<i>11.13</i>	<i>11.72</i>	<i>12.08</i>	<i>11.55</i>	11.74	<i>11.46</i>	<i>11.64</i>
E. S. Central	10.34	11.16	10.90	10.71	<i>10.51</i>	<i>11.26</i>	<i>11.24</i>	<i>11.19</i>	<i>10.88</i>	<i>11.62</i>	<i>11.59</i>	<i>11.58</i>	10.75	<i>11.04</i>	<i>11.40</i>
W. S. Central	10.67	11.36	11.04	10.67	<i>10.23</i>	<i>10.85</i>	<i>10.92</i>	<i>10.86</i>	<i>10.68</i>	<i>11.37</i>	<i>11.36</i>	<i>11.17</i>	10.94	<i>10.73</i>	<i>11.17</i>
Mountain	11.31	12.21	12.33	11.46	<i>11.53</i>	<i>12.47</i>	<i>12.64</i>	<i>11.80</i>	<i>11.89</i>	<i>12.87</i>	<i>13.02</i>	<i>12.13</i>	11.88	<i>12.16</i>	<i>12.53</i>
Pacific	13.69	13.47	15.76	14.18	<i>13.87</i>	<i>13.71</i>	<i>15.48</i>	<i>13.96</i>	<i>14.09</i>	<i>14.52</i>	<i>16.09</i>	<i>14.50</i>	14.34	<i>14.29</i>	<i>14.82</i>
U.S. Average	12.23	12.85	12.99	12.50	<i>12.16</i>	<i>12.70</i>	<i>13.00</i>	<i>12.68</i>	<i>12.48</i>	<i>13.14</i>	<i>13.40</i>	<i>13.04</i>	12.65	<i>12.65</i>	<i>13.02</i>
Commercial Sector															
New England	16.91	15.19	14.89	15.32	<i>18.01</i>	<i>16.33</i>	<i>16.14</i>	<i>16.61</i>	<i>19.18</i>	<i>17.49</i>	<i>17.21</i>	<i>17.74</i>	15.57	<i>16.76</i>	<i>17.89</i>
Middle Atlantic	13.17	12.99	13.71	13.10	<i>13.39</i>	<i>13.20</i>	<i>13.95</i>	<i>13.52</i>	<i>13.72</i>	<i>13.45</i>	<i>14.21</i>	<i>13.77</i>	13.26	<i>13.53</i>	<i>13.80</i>
E. N. Central	9.75	9.95	10.03	9.96	<i>9.81</i>	<i>9.98</i>	<i>10.08</i>	<i>9.97</i>	<i>9.88</i>	<i>10.04</i>	<i>10.15</i>	<i>10.05</i>	9.92	<i>9.96</i>	<i>10.04</i>
W. N. Central	8.57	9.52	9.95	8.87	<i>8.72</i>	<i>9.73</i>	<i>10.21</i>	<i>9.12</i>	<i>8.92</i>	<i>9.98</i>	<i>10.50</i>	<i>9.39</i>	9.25	<i>9.47</i>	<i>9.72</i>
S. Atlantic	9.66	9.45	9.59	9.54	<i>9.82</i>	<i>9.63</i>	<i>9.78</i>	<i>9.71</i>	<i>9.99</i>	<i>9.81</i>	<i>9.98</i>	<i>9.92</i>	9.56	<i>9.74</i>	<i>9.93</i>
E. S. Central	10.22	10.35	10.27	10.45	<i>10.80</i>	<i>10.72</i>	<i>10.55</i>	<i>10.71</i>	<i>11.14</i>	<i>10.93</i>	<i>10.75</i>	<i>10.91</i>	10.32	<i>10.69</i>	<i>10.92</i>
W. S. Central	8.04	7.89	7.94	7.53	<i>7.56</i>	<i>7.67</i>	<i>7.87</i>	<i>7.64</i>	<i>7.68</i>	<i>7.75</i>	<i>7.94</i>	<i>7.71</i>	7.85	<i>7.69</i>	<i>7.78</i>
Mountain	9.36	9.96	10.21	9.43	<i>9.52</i>	<i>10.19</i>	<i>10.47</i>	<i>9.67</i>	<i>9.77</i>	<i>10.47</i>	<i>10.77</i>	<i>9.95</i>	9.77	<i>9.99</i>	<i>10.27</i>
Pacific	12.22	13.31	15.61	13.73	<i>12.64</i>	<i>13.68</i>	<i>16.06</i>	<i>14.10</i>	<i>13.04</i>	<i>14.08</i>	<i>16.40</i>	<i>14.52</i>	13.78	<i>14.17</i>	<i>14.57</i>
U.S. Average	10.47	10.53	10.95	10.52	<i>10.61</i>	<i>10.70</i>	<i>11.15</i>	<i>10.76</i>	<i>10.86</i>	<i>10.93</i>	<i>11.38</i>	<i>11.00</i>	10.63	<i>10.82</i>	<i>11.05</i>
Industrial Sector															
New England	13.17	11.83	11.85	11.83	<i>13.67</i>	<i>12.18</i>	<i>12.15</i>	<i>12.15</i>	<i>14.11</i>	<i>12.49</i>	<i>12.44</i>	<i>12.42</i>	12.15	<i>12.52</i>	<i>12.84</i>
Middle Atlantic	7.87	7.20	7.36	7.26	<i>7.88</i>	<i>7.24</i>	<i>7.40</i>	<i>7.45</i>	<i>8.12</i>	<i>7.34</i>	<i>7.44</i>	<i>7.52</i>	7.42	<i>7.49</i>	<i>7.60</i>
E. N. Central	6.87	6.77	7.06	6.88	<i>6.98</i>	<i>6.89</i>	<i>7.18</i>	<i>6.99</i>	<i>7.13</i>	<i>7.03</i>	<i>7.32</i>	<i>7.14</i>	6.90	<i>7.01</i>	<i>7.16</i>
W. N. Central	6.49	6.89	7.51	6.53	<i>6.71</i>	<i>7.04</i>	<i>7.65</i>	<i>6.63</i>	<i>6.86</i>	<i>7.20</i>	<i>7.83</i>	<i>6.77</i>	6.86	<i>7.02</i>	<i>7.17</i>
S. Atlantic	6.55	6.38	6.90	6.33	<i>6.54</i>	<i>6.44</i>	<i>6.97</i>	<i>6.42</i>	<i>6.71</i>	<i>6.51</i>	<i>7.02</i>	<i>6.48</i>	6.55	<i>6.60</i>	<i>6.68</i>
E. S. Central	5.77	5.95	6.58	5.77	<i>5.95</i>	<i>5.96</i>	<i>6.58</i>	<i>5.82</i>	<i>6.02</i>	<i>5.97</i>	<i>6.60</i>	<i>5.87</i>	6.03	<i>6.08</i>	<i>6.12</i>
W. S. Central	5.66	5.50	5.70	5.16	<i>5.08</i>	<i>5.15</i>	<i>5.49</i>	<i>5.15</i>	<i>5.05</i>	<i>5.06</i>	<i>5.44</i>	<i>5.15</i>	5.50	<i>5.22</i>	<i>5.18</i>
Mountain	6.17	6.65	7.17	5.91	<i>6.01</i>	<i>6.63</i>	<i>7.23</i>	<i>5.99</i>	<i>6.17</i>	<i>6.81</i>	<i>7.41</i>	<i>6.12</i>	6.50	<i>6.50</i>	<i>6.66</i>
Pacific	7.99	8.95	10.46	9.18	<i>8.28</i>	<i>9.19</i>	<i>10.51</i>	<i>9.27</i>	<i>8.47</i>	<i>9.30</i>	<i>10.65</i>	<i>9.37</i>	9.20	<i>9.37</i>	<i>9.51</i>
U.S. Average	6.78	6.81	7.31	6.66	<i>6.75</i>	<i>6.80</i>	<i>7.33</i>	<i>6.74</i>	<i>6.87</i>	<i>6.88</i>	<i>7.42</i>	<i>6.83</i>	6.90	<i>6.91</i>	<i>7.01</i>
All Sectors (a)															
New England	17.89	16.49	15.82	16.08	<i>17.83</i>	<i>16.55</i>	<i>16.49</i>	<i>16.94</i>	<i>18.83</i>	<i>17.51</i>	<i>17.43</i>	<i>17.91</i>	16.58	<i>16.96</i>	<i>17.92</i>
Middle Atlantic	13.21	12.82	13.58	12.92	<i>13.30</i>	<i>13.01</i>	<i>13.84</i>	<i>13.32</i>	<i>13.73</i>	<i>13.34</i>	<i>14.14</i>	<i>13.59</i>	13.16	<i>13.39</i>	<i>13.72</i>
E. N. Central	9.72	9.75	10.13	9.84	<i>9.75</i>	<i>9.87</i>	<i>10.30</i>	<i>10.05</i>	<i>10.01</i>	<i>10.10</i>	<i>10.53</i>	<i>10.31</i>	9.86	<i>10.00</i>	<i>10.24</i>
W. N. Central	8.63	9.49	10.14	8.80	<i>8.78</i>	<i>9.66</i>	<i>10.35</i>	<i>9.00</i>	<i>8.98</i>	<i>9.90</i>	<i>10.61</i>	<i>9.24</i>	9.28	<i>9.47</i>	<i>9.69</i>
S. Atlantic	9.96	9.88	10.32	9.74	<i>9.84</i>	<i>9.81</i>	<i>10.27</i>	<i>9.79</i>	<i>9.96</i>	<i>9.97</i>	<i>10.46</i>	<i>9.98</i>	9.99	<i>9.94</i>	<i>10.11</i>
E. S. Central	8.90	9.05	9.40	8.86	<i>9.13</i>	<i>9.20</i>	<i>9.62</i>	<i>9.15</i>	<i>9.39</i>	<i>9.39</i>	<i>9.82</i>	<i>9.38</i>	9.07	<i>9.29</i>	<i>9.51</i>
W. S. Central	8.41	8.33	8.65	7.82	<i>7.84</i>	<i>8.00</i>	<i>8.47</i>	<i>7.92</i>	<i>8.03</i>	<i>8.23</i>	<i>8.72</i>	<i>8.08</i>	8.33	<i>8.08</i>	<i>8.30</i>
Mountain	9.03	9.63	10.15	8.99	<i>9.12</i>	<i>9.79</i>	<i>10.37</i>	<i>9.19</i>	<i>9.37</i>	<i>10.05</i>	<i>10.64</i>	<i>9.42</i>	9.49	<i>9.66</i>	<i>9.92</i>
Pacific	11.85	12.28	14.48	12.86	<i>12.19</i>	<i>12.59</i>	<i>14.55</i>	<i>12.94</i>	<i>12.50</i>	<i>13.06</i>	<i>14.95</i>	<i>13.34</i>	12.93	<i>13.11</i>	<i>13.51</i>
U.S. Average	10.28	10.31	10.88	10.17	<i>10.24</i>	<i>10.33</i>	<i>10.95</i>	<i>10.35</i>	<i>10.50</i>	<i>10.60</i>	<i>11.22</i>	<i>10.61</i>	10.43	<i>10.49</i>	<i>10.75</i>

- = 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
United States															
Coal	4,091	3,512	4,276	3,304	3,825	3,509	4,251	3,575	3,915	3,424	4,193	3,528	3,795	3,791	3,765
Natural Gas	3,248	3,476	4,378	3,503	3,390	3,497	4,328	3,304	3,156	3,446	4,339	3,368	3,654	3,631	3,580
Petroleum (a)	123	61	72	61	81	71	78	70	83	71	78	69	79	75	75
Other Gases	37	33	40	32	35	32	40	32	35	32	40	33	36	35	35
Nuclear	2,248	2,133	2,286	2,086	2,140	2,002	2,257	2,126	2,197	2,024	2,266	2,135	2,188	2,132	2,156
Renewable Energy Sources:	1,590	1,525	1,371	1,359	1,534	1,778	1,540	1,522	1,746	1,995	1,689	1,619	1,460	1,593	1,762
Conventional Hydropower	802	690	616	531	647	803	717	594	735	873	761	624	659	690	748
Wind	506	532	441	559	611	654	478	622	694	736	534	673	509	591	659
Wood Biomass	119	112	122	112	116	109	121	115	117	111	124	118	116	115	118
Waste Biomass	58	59	61	60	59	59	61	60	60	59	61	60	59	60	60
Geothermal	48	46	45	46	48	47	48	48	49	47	48	48	46	48	48
Solar	57	87	86	50	53	106	116	83	92	168	161	96	70	89	129
Pumped Storage Hydropower	-15	-10	-18	-15	-14	-12	-16	-14	-13	-12	-16	-14	-15	-14	-14
Other Nonrenewable Fuels (b)	33	37	39	38	34	37	39	38	34	38	39	38	37	37	37
Total Generation	11,355	10,766	12,444	10,367	11,026	10,914	12,517	10,652	11,153	11,018	12,629	10,775	11,234	11,279	11,396
Northeast Census Region															
Coal	292	174	203	129	226	141	176	154	250	155	197	153	199	174	188
Natural Gas	483	534	714	550	547	590	734	552	511	572	715	558	571	606	589
Petroleum (a)	46	2	5	4	9	4	6	6	10	5	6	5	14	6	7
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	545	499	542	499	504	470	526	496	497	458	513	483	521	499	488
Hydropower (c)	93	99	97	81	93	107	100	94	99	115	106	99	92	98	105
Other Renewables (d)	76	65	58	72	73	64	60	73	81	70	65	78	68	68	73
Other Nonrenewable Fuels (b)	11	12	12	12	11	12	12	12	11	12	12	12	12	12	12
Total Generation	1,547	1,387	1,633	1,347	1,466	1,390	1,616	1,388	1,461	1,388	1,615	1,390	1,479	1,465	1,464
South Census Region															
Coal	1,715	1,539	1,908	1,288	1,517	1,543	1,883	1,374	1,570	1,517	1,884	1,379	1,612	1,580	1,588
Natural Gas	1,971	2,074	2,452	1,972	1,960	2,104	2,443	1,844	1,835	2,086	2,458	1,854	2,118	2,088	2,059
Petroleum (a)	42	24	29	24	34	30	32	25	34	29	32	25	30	30	30
Other Gases	14	13	15	14	14	13	15	14	14	13	16	15	14	14	14
Nuclear	974	956	1,001	879	939	883	1,004	946	985	908	1,016	957	953	943	967
Hydropower (c)	122	108	94	88	126	123	104	103	134	132	110	108	103	114	121
Other Renewables (d)	231	265	253	271	299	323	269	322	355	384	313	353	255	304	351
Other Nonrenewable Fuels (b)	14	15	16	17	14	16	16	16	14	16	16	16	16	16	16
Total Generation	5,084	4,995	5,769	4,554	4,903	5,034	5,767	4,645	4,942	5,085	5,846	4,707	5,101	5,088	5,146
Midwest Census Region															
Coal	1,579	1,302	1,578	1,350	1,519	1,337	1,630	1,458	1,523	1,298	1,563	1,401	1,452	1,486	1,446
Natural Gas	299	257	340	264	307	276	354	268	304	290	384	316	290	301	324
Petroleum (a)	12	11	13	9	13	12	13	11	13	11	13	11	11	12	12
Other Gases	15	13	16	9	12	12	16	10	12	12	16	10	13	12	13
Nuclear	553	529	570	554	538	502	562	529	553	509	570	537	552	533	542
Hydropower (c)	44	47	42	30	41	49	42	36	44	52	44	37	41	42	44
Other Renewables (d)	251	218	168	260	266	252	180	271	294	278	198	289	224	242	265
Other Nonrenewable Fuels (b)	4	5	5	5	4	5	5	5	4	5	5	5	5	5	5
Total Generation	2,757	2,381	2,732	2,481	2,701	2,443	2,802	2,587	2,746	2,456	2,794	2,606	2,587	2,634	2,651
West Census Region															
Coal	505	496	587	537	563	488	562	588	572	454	549	594	532	550	542
Natural Gas	494	611	873	717	576	527	797	640	507	498	782	640	675	636	608
Petroleum (a)	23	23	25	23	25	25	26	27	26	26	27	27	23	26	27
Other Gases	7	6	7	6	7	6	7	6	7	6	7	6	7	7	7
Nuclear	176	149	172	153	158	147	165	155	162	149	167	158	163	157	159
Hydropower (c)	527	425	365	318	373	513	456	348	444	562	485	366	408	422	464
Other Renewables (d)	230	287	276	225	248	336	313	262	281	390	352	274	254	290	324
Other Nonrenewable Fuels (b)	4	4	5	5	5	5	6	5	5	5	6	5	5	5	5
Total Generation	1,967	2,002	2,310	1,986	1,956	2,047	2,332	2,032	2,004	2,089	2,374	2,072	2,067	2,092	2,136

(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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Fuel Consumption for Electricity Generation, All Sectors															
United States															
Coal (thousand st/d)	2,187	1,923	2,349	1,824	<i>2,064</i>	<i>1,904</i>	<i>2,321</i>	<i>1,964</i>	<i>2,105</i>	<i>1,851</i>	<i>2,281</i>	<i>1,933</i>	2,071	<i>2,064</i>	<i>2,043</i>
Natural Gas (million cf/d)	24,028	26,271	33,510	26,188	<i>25,166</i>	<i>26,639</i>	<i>33,144</i>	<i>24,526</i>	<i>23,458</i>	<i>26,279</i>	<i>33,275</i>	<i>25,037</i>	27,522	<i>27,377</i>	<i>27,034</i>
Petroleum (thousand b/d)	215	108	126	107	<i>146</i>	<i>126</i>	<i>137</i>	<i>125</i>	<i>150</i>	<i>126</i>	<i>138</i>	<i>123</i>	139	<i>133</i>	<i>134</i>
Residual Fuel Oil	76	26	33	28	<i>36</i>	<i>31</i>	<i>34</i>	<i>32</i>	<i>38</i>	<i>32</i>	<i>34</i>	<i>31</i>	41	<i>33</i>	<i>34</i>
Distillate Fuel Oil	66	26	24	21	<i>36</i>	<i>29</i>	<i>30</i>	<i>29</i>	<i>37</i>	<i>28</i>	<i>30</i>	<i>29</i>	34	<i>31</i>	<i>31</i>
Petroleum Coke (a)	61	52	65	53	<i>66</i>	<i>62</i>	<i>68</i>	<i>59</i>	<i>67</i>	<i>62</i>	<i>69</i>	<i>58</i>	58	<i>64</i>	<i>64</i>
Other Petroleum Liquids (b)	12	4	4	4	<i>8</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>8</i>	<i>5</i>	<i>5</i>	<i>5</i>	6	<i>6</i>	<i>6</i>
Northeast Census Region															
Coal (thousand st/d)	134	82	100	62	<i>105</i>	<i>66</i>	<i>85</i>	<i>73</i>	<i>116</i>	<i>72</i>	<i>94</i>	<i>72</i>	94	<i>82</i>	<i>89</i>
Natural Gas (million cf/d)	3,638	4,102	5,595	4,150	<i>4,147</i>	<i>4,520</i>	<i>5,715</i>	<i>4,168</i>	<i>3,869</i>	<i>4,376</i>	<i>5,564</i>	<i>4,212</i>	4,376	<i>4,639</i>	<i>4,509</i>
Petroleum (thousand b/d)	75	5	9	7	<i>17</i>	<i>8</i>	<i>11</i>	<i>9</i>	<i>18</i>	<i>8</i>	<i>12</i>	<i>9</i>	24	<i>11</i>	<i>12</i>
South Census Region															
Coal (thousand st/d)	888	819	1,023	696	<i>789</i>	<i>813</i>	<i>1,000</i>	<i>735</i>	<i>815</i>	<i>797</i>	<i>997</i>	<i>735</i>	856	<i>835</i>	<i>836</i>
Natural Gas (million cf/d)	14,410	15,633	18,665	14,734	<i>14,446</i>	<i>15,976</i>	<i>18,612</i>	<i>13,617</i>	<i>13,536</i>	<i>15,858</i>	<i>18,742</i>	<i>13,702</i>	15,869	<i>15,665</i>	<i>15,469</i>
Petroleum (thousand b/d)	79	45	53	45	<i>66</i>	<i>57</i>	<i>60</i>	<i>49</i>	<i>67</i>	<i>56</i>	<i>60</i>	<i>48</i>	55	<i>58</i>	<i>58</i>
Midwest Census Region															
Coal (thousand st/d)	881	742	896	762	<i>852</i>	<i>752</i>	<i>921</i>	<i>823</i>	<i>852</i>	<i>729</i>	<i>881</i>	<i>790</i>	820	<i>837</i>	<i>813</i>
Natural Gas (million cf/d)	2,329	2,010	2,725	2,035	<i>2,334</i>	<i>2,170</i>	<i>2,864</i>	<i>2,054</i>	<i>2,322</i>	<i>2,291</i>	<i>3,129</i>	<i>2,428</i>	2,275	<i>2,356</i>	<i>2,544</i>
Petroleum (thousand b/d)	24	23	26	18	<i>23</i>	<i>21</i>	<i>23</i>	<i>22</i>	<i>23</i>	<i>21</i>	<i>22</i>	<i>22</i>	23	<i>22</i>	<i>22</i>
West Census Region															
Coal (thousand st/d)	285	280	331	303	<i>318</i>	<i>273</i>	<i>316</i>	<i>333</i>	<i>322</i>	<i>253</i>	<i>308</i>	<i>336</i>	300	<i>310</i>	<i>305</i>
Natural Gas (million cf/d)	3,650	4,526	6,526	5,269	<i>4,238</i>	<i>3,972</i>	<i>5,952</i>	<i>4,687</i>	<i>3,731</i>	<i>3,755</i>	<i>5,841</i>	<i>4,695</i>	5,001	<i>4,716</i>	<i>4,512</i>
Petroleum (thousand b/d)	37	36	39	37	<i>40</i>	<i>41</i>	<i>42</i>	<i>44</i>	<i>42</i>	<i>41</i>	<i>44</i>	<i>44</i>	37	<i>42</i>	<i>43</i>
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	154.8	166.8	162.4	178.1	<i>178.9</i>	<i>182.8</i>	<i>166.0</i>	<i>170.7</i>	<i>172.5</i>	<i>176.8</i>	<i>160.2</i>	<i>165.2</i>	178.1	<i>170.7</i>	<i>165.2</i>
Residual Fuel Oil (mmb)	10.2	10.5	10.6	13.0	<i>13.2</i>	<i>12.9</i>	<i>12.4</i>	<i>12.7</i>	<i>12.7</i>	<i>12.4</i>	<i>12.0</i>	<i>12.2</i>	13.0	<i>12.7</i>	<i>12.2</i>
Distillate Fuel Oil (mmb)	16.6	16.7	17.1	17.6	<i>17.7</i>	<i>17.5</i>	<i>17.4</i>	<i>17.7</i>	<i>17.7</i>	<i>17.5</i>	<i>17.4</i>	<i>17.7</i>	17.6	<i>17.7</i>	<i>17.7</i>
Petroleum Coke (mmb)	4.1	5.2	5.5	5.7	<i>5.6</i>	<i>5.5</i>	<i>5.4</i>	<i>5.3</i>	<i>5.2</i>	<i>5.1</i>	<i>5.0</i>	<i>4.9</i>	5.7	<i>5.3</i>	<i>4.9</i>

(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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Electric Power Sector															
Hydroelectric Power (a)	0.685	0.596	0.539	0.462	<i>0.557</i>	<i>0.692</i>	<i>0.625</i>	<i>0.517</i>	<i>0.619</i>	<i>0.752</i>	<i>0.663</i>	<i>0.543</i>	2.282	2.391	2.578
Wood Biomass (b)	0.063	0.058	0.067	0.058	<i>0.060</i>	<i>0.055</i>	<i>0.067</i>	<i>0.061</i>	<i>0.062</i>	<i>0.057</i>	<i>0.070</i>	<i>0.063</i>	0.246	0.243	0.252
Waste Biomass (c)	0.067	0.066	0.070	0.069	<i>0.067</i>	<i>0.068</i>	<i>0.071</i>	<i>0.069</i>	<i>0.067</i>	<i>0.068</i>	<i>0.071</i>	<i>0.068</i>	0.272	0.275	0.274
Wind	0.433	0.460	0.385	0.489	<i>0.528</i>	<i>0.566</i>	<i>0.418</i>	<i>0.544</i>	<i>0.594</i>	<i>0.637</i>	<i>0.468</i>	<i>0.588</i>	1.768	2.056	2.287
Geothermal	0.041	0.040	0.040	0.040	<i>0.042</i>	<i>0.041</i>	<i>0.042</i>	<i>0.042</i>	<i>0.042</i>	<i>0.041</i>	<i>0.042</i>	<i>0.042</i>	0.161	0.167	0.167
Solar	0.047	0.073	0.074	0.043	<i>0.045</i>	<i>0.090</i>	<i>0.100</i>	<i>0.072</i>	<i>0.077</i>	<i>0.144</i>	<i>0.139</i>	<i>0.083</i>	0.238	0.306	0.444
Subtotal	1.337	1.293	1.174	1.161	<i>1.299</i>	<i>1.512</i>	<i>1.323</i>	<i>1.304</i>	<i>1.461</i>	<i>1.699</i>	<i>1.453</i>	<i>1.389</i>	4.966	5.438	6.002
Industrial Sector															
Hydroelectric Power (a)	0.004	0.003	0.002	0.003	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	0.013	0.012	0.012
Wood Biomass (b)	0.324	0.320	0.324	0.319	<i>0.306</i>	<i>0.302</i>	<i>0.312</i>	<i>0.315</i>	<i>0.307</i>	<i>0.303</i>	<i>0.314</i>	<i>0.316</i>	1.287	1.234	1.240
Waste Biomass (c)	0.046	0.049	0.050	0.050	<i>0.048</i>	<i>0.048</i>	<i>0.050</i>	<i>0.049</i>	<i>0.049</i>	<i>0.049</i>	<i>0.051</i>	<i>0.050</i>	0.195	0.196	0.199
Geothermal	0.001	0.001	0.001	0.001	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	0.004	0.004	0.004
Biofuel Losses and Co-products (f)	0.189	0.192	0.195	0.193	<i>0.196</i>	<i>0.194</i>	<i>0.199</i>	<i>0.196</i>	<i>0.194</i>	<i>0.194</i>	<i>0.199</i>	<i>0.195</i>	0.770	0.784	0.782
Subtotal	0.569	0.571	0.577	0.571	<i>0.558</i>	<i>0.552</i>	<i>0.570</i>	<i>0.569</i>	<i>0.558</i>	<i>0.554</i>	<i>0.572</i>	<i>0.570</i>	2.287	2.249	2.255
Commercial Sector															
Wood Biomass (b)	0.019	0.019	0.019	0.019	<i>0.019</i>	<i>0.019</i>	<i>0.019</i>	<i>0.019</i>	<i>0.019</i>	<i>0.019</i>	<i>0.020</i>	<i>0.020</i>	0.076	0.077	0.078
Waste Biomass (c)	0.013	0.010	0.010	0.011	<i>0.011</i>	<i>0.010</i>	<i>0.011</i>	<i>0.011</i>	<i>0.010</i>	<i>0.010</i>	<i>0.011</i>	<i>0.011</i>	0.044	0.043	0.043
Geothermal	0.005	0.005	0.005	0.005	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	0.020	0.020	0.020
Subtotal	0.038	0.036	0.037	0.036	<i>0.035</i>	<i>0.035</i>	<i>0.036</i>	<i>0.036</i>	<i>0.036</i>	<i>0.035</i>	<i>0.037</i>	<i>0.036</i>	0.148	0.142	0.144
Residential Sector															
Wood Biomass (b)	0.110	0.111	0.113	0.113	<i>0.103</i>	<i>0.104</i>	<i>0.105</i>	<i>0.105</i>	<i>0.106</i>	<i>0.106</i>	<i>0.106</i>	<i>0.106</i>	0.447	0.418	0.426
Geothermal	0.010	0.010	0.010	0.010	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	<i>0.011</i>	0.040	0.044	0.045
Solar (d)	0.069	0.070	0.071	0.071	<i>0.077</i>	<i>0.077</i>	<i>0.078</i>	<i>0.078</i>	<i>0.088</i>	<i>0.089</i>	<i>0.090</i>	<i>0.090</i>	0.281	0.311	0.356
Subtotal	0.189	0.191	0.194	0.194	<i>0.191</i>	<i>0.193</i>	<i>0.195</i>	<i>0.195</i>	<i>0.206</i>	<i>0.207</i>	<i>0.208</i>	<i>0.208</i>	0.768	0.773	0.827
Transportation Sector															
Ethanol (e)	0.266	0.284	0.292	0.281	<i>0.275</i>	<i>0.289</i>	<i>0.299</i>	<i>0.290</i>	<i>0.273</i>	<i>0.289</i>	<i>0.298</i>	<i>0.289</i>	1.122	1.153	1.149
Biomass-based Diesel (e)	0.034	0.058	0.064	0.063	<i>0.068</i>	<i>0.072</i>	<i>0.081</i>	<i>0.081</i>	<i>0.070</i>	<i>0.074</i>	<i>0.084</i>	<i>0.083</i>	0.219	0.302	0.310
Subtotal	0.300	0.341	0.356	0.346	<i>0.343</i>	<i>0.361</i>	<i>0.380</i>	<i>0.370</i>	<i>0.343</i>	<i>0.363</i>	<i>0.382</i>	<i>0.372</i>	1.344	1.454	1.459
All Sectors Total															
Hydroelectric Power (a)	0.689	0.599	0.541	0.465	<i>0.560</i>	<i>0.695</i>	<i>0.629</i>	<i>0.520</i>	<i>0.622</i>	<i>0.755</i>	<i>0.667</i>	<i>0.546</i>	2.295	2.403	2.591
Wood Biomass (b)	0.517	0.508	0.523	0.508	<i>0.488</i>	<i>0.480</i>	<i>0.504</i>	<i>0.500</i>	<i>0.494</i>	<i>0.486</i>	<i>0.510</i>	<i>0.506</i>	2.056	1.972	1.996
Waste Biomass (c)	0.126	0.125	0.129	0.129	<i>0.126</i>	<i>0.126</i>	<i>0.132</i>	<i>0.129</i>	<i>0.126</i>	<i>0.127</i>	<i>0.133</i>	<i>0.130</i>	0.510	0.513	0.516
Wind	0.433	0.460	0.385	0.489	<i>0.528</i>	<i>0.566</i>	<i>0.418</i>	<i>0.544</i>	<i>0.594</i>	<i>0.637</i>	<i>0.468</i>	<i>0.588</i>	1.768	2.056	2.287
Geothermal	0.057	0.056	0.056	0.056	<i>0.059</i>	<i>0.058</i>	<i>0.059</i>	<i>0.059</i>	<i>0.059</i>	<i>0.058</i>	<i>0.059</i>	<i>0.060</i>	0.225	0.235	0.236
Solar	0.118	0.145	0.146	0.114	<i>0.123</i>	<i>0.169</i>	<i>0.179</i>	<i>0.152</i>	<i>0.167</i>	<i>0.234</i>	<i>0.230</i>	<i>0.174</i>	0.523	0.622	0.806
Ethanol (e)	0.271	0.289	0.298	0.289	<i>0.280</i>	<i>0.295</i>	<i>0.305</i>	<i>0.295</i>	<i>0.278</i>	<i>0.294</i>	<i>0.304</i>	<i>0.295</i>	1.146	1.175	1.171
Biomass-based Diesel (e)	0.034	0.058	0.064	0.063	<i>0.068</i>	<i>0.072</i>	<i>0.081</i>	<i>0.081</i>	<i>0.070</i>	<i>0.074</i>	<i>0.084</i>	<i>0.083</i>	0.219	0.302	0.310
Biofuel Losses and Co-products (f)	0.189	0.192	0.195	0.193	<i>0.196</i>	<i>0.194</i>	<i>0.199</i>	<i>0.196</i>	<i>0.194</i>	<i>0.194</i>	<i>0.199</i>	<i>0.195</i>	0.770	0.784	0.782
Total Consumption	2.434	2.433	2.338	2.307	<i>2.427</i>	<i>2.652</i>	<i>2.504</i>	<i>2.474</i>	<i>2.603</i>	<i>2.859</i>	<i>2.651</i>	<i>2.575</i>	9.512	10.057	10.688

- = 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 biomass-based diesel consumption in the transportation sector includes production, stock change, and imports less exports. Some biomass-based diesel may be consumed in the residential sector in heating oil.

(f) Losses and co-products from the production of fuel ethanol and biomass-based diesel

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 CO₂ Emissions

U.S. Energy Information Administration | Short-Term Energy Outlook - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,177	16,334	16,418	16,483	16,595	16,707	16,849	17,009	17,141	17,288	17,419	17,521	16,353	16,790	17,342
Real Personal Consumption Expend. (billion chained 2009 dollars - SAAR)	11,081	11,179	11,263	11,334	11,415	11,495	11,597	11,715	11,827	11,932	12,037	12,131	11,214	11,556	11,982
Real Fixed Investment (billion chained 2009 dollars - SAAR)	2,701	2,736	2,758	2,796	2,841	2,885	2,927	2,981	3,040	3,098	3,150	3,196	2,748	2,909	3,121
Business Inventory Change (billion chained 2009 dollars - SAAR)	127	128	101	49	33	28	39	53	66	78	76	68	101	38	72
Real Government Expenditures (billion chained 2009 dollars - SAAR)	2,839	2,857	2,869	2,875	2,914	2,922	2,927	2,931	2,927	2,935	2,944	2,935	2,860	2,924	2,935
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR)	2,091	2,118	2,122	2,097	2,117	2,143	2,173	2,203	2,233	2,261	2,287	2,313	2,107	2,159	2,274
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR)	2,633	2,652	2,666	2,652	2,703	2,745	2,795	2,857	2,935	3,002	3,064	3,113	2,651	2,775	3,028
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,115	12,194	12,312	12,417	12,520	12,593	12,704	12,806	12,923	13,049	13,164	13,260	12,259	12,656	13,099
Non-Farm Employment (millions)	141.0	141.6	142.2	142.9	143.4	143.9	144.3	144.8	145.4	145.9	146.5	147.0	141.9	144.1	146.2
Civilian Unemployment Rate (percent)	5.6	5.4	5.2	5.0	5.0	5.0	4.9	4.8	4.8	4.7	4.7	4.7	5.3	4.9	4.7
Housing Starts (millions - SAAR)	0.98	1.16	1.16	1.11	1.14	1.18	1.26	1.33	1.40	1.45	1.48	1.50	1.10	1.23	1.46
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	107.4	106.8	107.6	106.9	107.0	107.2	108.2	109.7	110.8	111.5	112.6	113.3	107.2	108.0	112.0
Manufacturing	105.5	105.8	106.7	107.0	106.9	106.9	107.9	109.8	110.9	111.6	112.7	113.5	106.2	107.9	112.2
Food	104.7	104.7	105.9	106.0	106.6	107.0	107.4	108.1	108.8	109.3	110.0	110.6	105.3	107.3	109.7
Paper	97.2	97.1	95.9	96.2	95.4	95.1	95.0	95.5	95.7	95.6	95.8	96.1	96.6	95.2	95.8
Petroleum and Coal Products	107.9	108.9	109.3	110.3	109.9	110.1	110.7	111.6	112.2	112.6	113.2	113.5	109.1	110.6	112.9
Chemicals	102.8	103.1	103.4	104.1	104.3	104.6	105.2	106.4	107.5	108.5	110.0	111.7	103.4	105.1	109.4
Nonmetallic Mineral Products	111.3	111.1	112.2	114.9	113.6	114.5	115.8	117.3	118.9	120.5	122.1	123.6	112.4	115.3	121.3
Primary Metals	100.7	100.1	100.0	98.6	97.4	96.4	96.5	98.3	98.9	98.6	99.6	100.0	99.8	97.1	99.3
Coal-weighted Manufacturing (a)	103.6	103.8	104.0	104.3	103.6	103.5	104.0	105.3	106.1	106.5	107.7	108.6	103.9	104.1	107.2
Distillate-weighted Manufacturing (a)	106.6	106.5	107.5	108.3	107.9	108.3	109.2	110.7	111.9	112.8	113.9	114.8	107.2	109.0	113.3
Electricity-weighted Manufacturing (a)	104.7	105.0	105.6	105.6	105.2	105.2	105.9	107.6	108.7	109.3	110.6	111.7	105.2	106.0	110.1
Natural Gas-weighted Manufacturing (a)	104.5	105.4	105.8	105.9	105.5	105.6	106.3	108.0	109.1	109.9	111.5	112.9	105.4	106.4	110.9
Price Indexes															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	2.35	2.37	2.38	2.38	2.38	2.39	2.41	2.42	2.44	2.45	2.46	2.48	2.37	2.40	2.46
Producer Price Index: All Commodities (index, 1982=1.00)	1.92	1.92	1.91	1.89	1.89	1.90	1.91	1.92	1.94	1.94	1.96	1.98	1.91	1.90	1.96
Producer Price Index: Petroleum (index, 1982=1.00)	1.71	1.95	1.80	1.58	1.40	1.50	1.53	1.46	1.49	1.66	1.75	1.74	1.76	1.47	1.66
GDP Implicit Price Deflator (index, 2009=100)	109.1	109.7	110.0	110.5	111.2	111.7	112.2	112.7	113.4	113.9	114.3	114.9	109.8	111.9	114.1
Miscellaneous															
Vehicle Miles Traveled (b) (million miles/day)	7,990	8,982	8,920	8,541	8,213	9,149	9,082	8,693	8,359	9,251	9,168	8,796	8,611	8,785	8,895
Air Travel Capacity (Available ton-miles/day, thousands)	517	574	584	545	534	567	564	546	537	572	569	549	555	553	557
Aircraft Utilization (Revenue ton-miles/day, thousands)	322	356	365	338	333	353	357	345	337	359	363	348	345	347	352
Airline Ticket Price Index (index, 1982-1984=100)	286.4	313.0	283.3	288.8	287.4	305.4	288.7	295.5	299.4	319.9	303.2	311.7	292.9	294.2	308.5
Raw Steel Production (million short tons per day)	0.247	0.242	0.248	0.227	0.235	0.229	0.231	0.207	0.206	0.214	0.194	0.166	0.241	0.225	0.195
Carbon Dioxide (CO₂) Emissions (million metric tons)															
Petroleum	562	568	584	569	562	571	584	579	563	577	590	584	2,282	2,297	2,314
Natural Gas	469	313	327	375	463	322	331	391	457	325	336	399	1,483	1,507	1,516
Coal	397	354	432	350	381	351	427	367	383	342	420	360	1,532	1,525	1,505
Total Energy (c)	1,429	1,236	1,344	1,295	1,407	1,245	1,345	1,339	1,404	1,245	1,347	1,344	5,304	5,336	5,340

- = 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Real Gross State Product (Billion \$2009)															
New England	863	871	875	877	883	888	895	903	909	915	921	925	872	893	918
Middle Atlantic	2,417	2,445	2,456	2,469	2,482	2,497	2,514	2,534	2,549	2,567	2,581	2,592	2,447	2,507	2,572
E. N. Central	2,219	2,240	2,249	2,257	2,268	2,280	2,296	2,316	2,332	2,349	2,363	2,373	2,241	2,290	2,354
W. N. Central	1,048	1,056	1,061	1,065	1,072	1,079	1,088	1,098	1,105	1,114	1,122	1,128	1,058	1,084	1,117
S. Atlantic	2,851	2,884	2,901	2,915	2,940	2,962	2,989	3,019	3,043	3,070	3,093	3,112	2,888	2,977	3,080
E. S. Central	735	741	745	749	754	758	764	771	776	783	788	792	742	762	785
W. S. Central	2,025	2,036	2,047	2,051	2,064	2,077	2,098	2,120	2,140	2,163	2,185	2,205	2,040	2,090	2,173
Mountain	1,033	1,042	1,048	1,053	1,062	1,072	1,082	1,094	1,105	1,117	1,128	1,137	1,044	1,078	1,121
Pacific	2,897	2,926	2,943	2,954	2,978	3,001	3,028	3,059	3,086	3,114	3,139	3,159	2,930	3,016	3,125
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	101.7	102.4	103.8	103.9	103.8	103.9	104.8	106.5	107.6	108.1	109.1	109.7	102.9	104.8	108.6
Middle Atlantic	102.1	102.7	103.3	103.4	103.2	103.1	103.9	105.6	106.5	107.0	108.1	108.8	102.9	104.0	107.6
E. N. Central	107.7	108.5	109.5	109.7	109.5	109.3	110.2	112.2	113.3	113.8	115.0	115.9	108.9	110.3	114.5
W. N. Central	105.6	105.7	106.5	106.8	106.8	106.8	107.9	109.8	110.9	111.5	112.6	113.4	106.2	107.8	112.1
S. Atlantic	106.3	106.8	108.0	108.5	108.5	108.5	109.5	111.3	112.3	112.9	113.9	114.6	107.4	109.4	113.4
E. S. Central	108.0	108.2	109.5	109.9	109.9	109.9	110.8	112.5	113.6	114.2	115.3	116.0	108.9	110.8	114.8
W. S. Central	104.7	103.6	103.2	103.0	102.7	102.5	103.4	105.1	106.3	107.0	108.3	109.3	103.6	103.4	107.7
Mountain	107.2	107.9	109.2	109.8	110.0	110.5	111.8	113.9	115.4	116.3	117.7	118.5	108.5	111.6	117.0
Pacific	105.3	106.0	106.6	107.0	106.9	107.1	108.3	110.3	111.5	112.2	113.4	114.3	106.2	108.2	112.9
Real Personal Income (Billion \$2009)															
New England	740	746	752	758	765	769	775	781	787	795	801	806	749	772	797
Middle Atlantic	1,896	1,912	1,925	1,943	1,954	1,964	1,979	1,993	2,007	2,024	2,039	2,050	1,919	1,972	2,030
E. N. Central	2,010	2,023	2,043	2,061	2,077	2,088	2,103	2,117	2,135	2,154	2,171	2,183	2,034	2,096	2,161
W. N. Central	970	976	987	996	1,004	1,011	1,017	1,025	1,034	1,043	1,051	1,059	982	1,014	1,047
S. Atlantic	2,622	2,644	2,670	2,696	2,722	2,742	2,769	2,794	2,824	2,855	2,882	2,904	2,658	2,757	2,866
E. S. Central	760	764	769	776	782	787	793	799	806	814	820	825	767	790	816
W. S. Central	1,710	1,717	1,732	1,745	1,758	1,769	1,785	1,801	1,821	1,844	1,863	1,879	1,726	1,778	1,852
Mountain	922	930	940	950	959	966	976	985	997	1,009	1,019	1,028	935	972	1,013
Pacific	2,218	2,241	2,265	2,288	2,312	2,327	2,348	2,369	2,393	2,418	2,441	2,461	2,253	2,339	2,428
Households (Thousands)															
New England	5,834	5,843	5,849	5,855	5,865	5,871	5,876	5,882	5,889	5,898	5,906	5,916	5,855	5,882	5,916
Middle Atlantic	15,991	16,011	16,022	16,036	16,058	16,073	16,084	16,093	16,106	16,122	16,140	16,157	16,036	16,093	16,157
E. N. Central	18,625	18,639	18,655	18,679	18,709	18,732	18,754	18,777	18,803	18,829	18,858	18,886	18,679	18,777	18,886
W. N. Central	8,451	8,469	8,483	8,499	8,521	8,539	8,557	8,576	8,598	8,619	8,640	8,662	8,499	8,576	8,662
S. Atlantic	24,593	24,675	24,756	24,843	24,947	25,037	25,124	25,211	25,301	25,395	25,489	25,585	24,843	25,211	25,585
E. S. Central	7,522	7,532	7,541	7,555	7,572	7,587	7,602	7,617	7,633	7,650	7,667	7,684	7,555	7,617	7,684
W. S. Central	14,309	14,360	14,405	14,451	14,508	14,561	14,613	14,664	14,715	14,769	14,823	14,878	14,451	14,664	14,878
Mountain	8,778	8,810	8,841	8,874	8,914	8,948	8,986	9,023	9,061	9,101	9,142	9,184	8,874	9,023	9,184
Pacific	18,400	18,456	18,503	18,553	18,616	18,672	18,724	18,779	18,835	18,892	18,949	19,006	18,553	18,779	19,006
Total Non-farm Employment (Millions)															
New England	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.2	7.3	7.4
Middle Atlantic	18.9	19.0	19.1	19.2	19.2	19.2	19.3	19.3	19.4	19.4	19.4	19.5	19.1	19.3	19.4
E. N. Central	21.4	21.5	21.5	21.6	21.6	21.7	21.7	21.8	21.9	21.9	22.0	22.0	21.5	21.7	22.0
W. N. Central	10.4	10.5	10.5	10.5	10.5	10.6	10.6	10.6	10.7	10.7	10.7	10.8	10.5	10.6	10.7
S. Atlantic	26.7	26.9	27.0	27.2	27.3	27.4	27.6	27.7	27.8	27.9	28.1	28.2	27.0	27.5	28.0
E. S. Central	7.8	7.8	7.8	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.1	8.1	7.8	7.9	8.1
W. S. Central	16.6	16.6	16.7	16.7	16.8	16.8	16.9	17.0	17.0	17.1	17.2	17.3	16.6	16.9	17.2
Mountain	9.9	10.0	10.0	10.1	10.1	10.2	10.2	10.3	10.4	10.4	10.5	10.5	10.0	10.2	10.4
Pacific	21.8	21.9	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.7	22.8	22.9	22.0	22.4	22.8

- = 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 - January 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Heating Degree Days															
New England	3,854	819	58	1,793	3,093	818	130	2,204	3,065	810	131	2,150	6,523	6,246	6,155
Middle Atlantic	3,580	612	41	1,547	2,808	636	80	1,990	2,850	648	90	1,989	5,780	5,515	5,578
E. N. Central	3,693	660	75	1,745	3,007	687	114	2,234	3,104	721	129	2,268	6,174	6,041	6,222
W. N. Central	3,375	653	95	1,960	3,119	659	141	2,414	3,224	688	155	2,462	6,083	6,332	6,529
South Atlantic	1,676	156	8	657	1,454	201	13	975	1,443	208	16	981	2,498	2,643	2,648
E. S. Central	2,147	184	14	886	1,860	258	18	1,293	1,846	263	22	1,312	3,231	3,429	3,443
W. S. Central	1,397	69	2	613	1,266	98	4	776	1,200	101	5	748	2,081	2,144	2,054
Mountain	1,901	704	122	1,863	2,191	658	132	1,805	2,248	677	134	1,850	4,590	4,786	4,909
Pacific	1,085	526	77	1,162	1,271	462	83	1,113	1,497	534	87	1,265	2,850	2,929	3,383
U.S. Average	2,343	443	49	1,247	2,063	453	69	1,516	2,121	477	76	1,550	4,082	4,101	4,223
Heating Degree Days, Prior 10-year Average															
New England	3,166	838	134	2,147	3,212	824	132	2,104	3,226	822	127	2,133	6,285	6,273	6,309
Middle Atlantic	2,935	666	90	1,976	2,982	651	90	1,927	2,996	649	85	1,950	5,667	5,650	5,680
E. N. Central	3,192	694	123	2,262	3,247	689	125	2,206	3,268	694	121	2,217	6,272	6,267	6,301
W. N. Central	3,273	691	150	2,433	3,298	693	150	2,392	3,325	707	146	2,407	6,546	6,533	6,584
South Atlantic	1,481	196	14	1,013	1,502	185	14	975	1,512	188	13	980	2,704	2,676	2,693
E. S. Central	1,853	236	19	1,358	1,898	225	19	1,308	1,916	233	17	1,306	3,466	3,451	3,472
W. S. Central	1,188	86	5	834	1,221	83	5	814	1,248	90	4	814	2,113	2,123	2,157
Mountain	2,258	730	150	1,873	2,231	724	147	1,879	2,227	731	139	1,871	5,011	4,980	4,968
Pacific	1,534	621	92	1,205	1,495	610	88	1,208	1,458	596	87	1,196	3,453	3,400	3,337
U.S. Average	2,182	493	77	1,567	2,199	483	76	1,534	2,204	484	73	1,538	4,319	4,293	4,299
Cooling Degree Days															
New England	0	72	489	0	0	96	429	0	0	99	444	0	561	525	543
Middle Atlantic	0	185	612	1	0	177	578	6	0	176	576	5	798	761	758
E. N. Central	0	221	499	7	0	231	574	9	0	221	553	8	727	814	782
W. N. Central	3	266	659	13	3	283	711	12	3	275	688	11	941	1,008	977
South Atlantic	136	762	1,157	320	114	630	1,160	233	114	632	1,167	234	2,375	2,137	2,147
E. S. Central	23	578	1,018	89	27	506	1,072	72	27	508	1,070	69	1,708	1,678	1,673
W. S. Central	51	858	1,572	272	69	819	1,498	212	72	863	1,609	227	2,754	2,599	2,770
Mountain	45	432	923	86	19	442	971	88	19	439	973	88	1,487	1,521	1,520
Pacific	52	229	687	123	31	204	586	75	32	211	613	77	1,091	897	933
U.S. Average	46	434	876	130	39	399	866	98	40	404	882	100	1,486	1,402	1,426
Cooling Degree Days, Prior 10-year Average															
New England	0	85	420	1	0	81	420	1	0	82	422	1	506	502	506
Middle Atlantic	0	168	557	5	0	168	548	5	0	172	550	6	731	721	728
E. N. Central	3	234	545	6	3	229	528	6	3	234	530	7	787	765	773
W. N. Central	7	282	683	9	7	279	674	9	7	277	672	10	981	969	966
South Atlantic	110	635	1,154	210	113	659	1,144	220	114	662	1,145	223	2,108	2,136	2,144
E. S. Central	33	526	1,053	52	32	541	1,038	55	31	541	1,038	59	1,664	1,667	1,670
W. S. Central	94	883	1,519	184	90	890	1,518	192	84	875	1,518	194	2,679	2,690	2,671
Mountain	17	424	930	75	21	429	931	76	22	423	940	78	1,445	1,457	1,462
Pacific	26	170	602	65	29	180	613	72	30	178	609	74	863	894	892
U.S. Average	40	396	849	83	42	404	845	88	41	404	847	90	1,369	1,378	1,383

- = 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>).