



Short-Term Energy and Summer Fuels Outlook

Highlights

- During the 2016 April-through-September summer driving season, U.S. regular gasoline retail prices are forecast to average \$2.04/gallon (gal), compared with \$2.63/gal last summer (see EIA [Summer Fuels Outlook presentation](#)). For all of 2016, the forecast average price is \$1.94/gal, which if realized would save the average U.S. household about \$350 on gasoline in 2016 compared with 2015, with annual average motor fuel expenditures at the lowest level in 12 years.
- North Sea Brent crude oil prices averaged \$38/barrel (b) in March, a \$6/b increase from February. Both Brent and West Texas Intermediate (WTI) crude oil prices are forecast to average \$35/b in 2016 and \$41/b in 2017. However, the current values of futures and options contracts suggest high uncertainty in the price outlook. For example, EIA's forecast for the average WTI price in July 2016 of \$35/b should be considered in the context of Nymex contract values for July 2016 delivery that were traded during the five-day period ending April 7 ([Market Prices and Uncertainty Report](#)), suggesting that the market expects WTI prices to range from \$27/b to \$57/b (at the 95% confidence interval).
- U.S. crude oil production averaged an estimated 9.4 million barrels per day (b/d) in 2015. It is forecast to average 8.6 million b/d in 2016 and 8.0 million b/d in 2017, which are both 0.1 million b/d lower than forecast in last month's report. EIA estimates that crude oil production in March 2016 averaged 9.0 million b/d, 90,000 b/d below the February 2016 level.
- Natural gas inventories ended the winter heating season (March 31) at 2,478 billion cubic feet (Bcf), slightly above the previous end-of-March record high, set in 2012. End-of-March inventories were 67% above the level at the same time last year and 53% above the five-year average for that date. Henry Hub spot prices are forecast to average \$2.18/million British thermal units (MMBtu) in 2016 and \$3.02/MMBtu in 2017, compared with an average of \$2.63/MMBtu in 2015.

Global Petroleum and Other Liquid Fuels

Global oil inventory builds in 2015 averaged 2.1 million b/d. The pace of inventory builds is expected to slow to an average of 1.4 million b/d in 2016 and to 0.4 million b/d in 2017.

Global Petroleum and Other Liquids Consumption. EIA estimates that global consumption of petroleum and other liquid fuels grew by 1.3 million b/d in 2015, averaging 93.7 million b/d. EIA expects global consumption of petroleum and other liquid fuels to grow by 1.2 million b/d in 2016 and by 1.3 million b/d in 2017. Real gross domestic product (GDP) for the world (weighted by oil consumption), which increased by 2.4% in 2015, is expected to rise by 2.3% in 2016 and by 3.0% in 2017.

Consumption of petroleum and other liquid fuels in countries outside of the Organization for Economic Cooperation and Development (OECD) increased by an estimated 0.7 million b/d in 2015. Non-OECD consumption growth is expected to be 1.0 million b/d in 2016 and 1.2 million b/d in 2017, reflecting higher growth in the Middle East and in Eurasia. Slowing economic growth in China poses a downside risk to the forecast for liquid fuels consumption.

OECD petroleum and other liquid fuels consumption rose by 0.6 million b/d in 2015. OECD consumption is expected to increase by 0.2 million b/d in 2016 and by 0.1 million b/d in 2017, led by increases in U.S. consumption. Forecast U.S. consumption increases by 0.1 million b/d in 2016 and by 0.2 million b/d in 2017. OECD Europe demand is forecast to decline slightly in 2016 and 2017. Consumption in Japan is forecast to decline by 0.1 million b/d in both 2016 and 2017.

Non-OPEC Petroleum and Other Liquids Supply. EIA estimates that petroleum and other liquid fuels production in countries outside of the Organization of the Petroleum Exporting Countries (OPEC) grew by 1.5 million b/d in 2015, with most of the growth occurring in North America. EIA expects non-OPEC production to decline by 0.4 million b/d in 2016, which would be the first decline since 2008. Most of the forecast production decline in 2016 is expected to be in the United States. Non-OPEC production is forecast to decline by 0.5 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, making it among the most price-sensitive production globally. However, increases in hydrocarbon gas liquids (HGL) production from natural gas plants and in crude oil production from the Gulf of Mexico will partially offset lower tight oil production. Forecast total U.S. liquid fuels production declines by 0.6 million b/d in 2016 and by 0.3 million b/d in 2017, which are both lower than the decline in crude oil considered separately. Outside of the United States, forecast non-OPEC production increases by 0.2 million b/d in 2016 and then decreases by 0.2 million b/d in 2017.

Petroleum and other liquids production is relatively robust through the forecast period 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 budgets that largely affect production levels beyond 2017.

Among non-OPEC producers outside of the United States, the largest declines are forecast to be in the North Sea. After increasing in 2014 and 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 natural decline rates.

Some non-OPEC producers, led by Canada, are expected to see continuing growth in oil production through the forecast period. Production in Canada is forecast to increase by 0.2 million b/d in both 2016 and 2017. Several oil sands projects in Canada are expected to begin production, including the Imperial Oil project and the Cenovus project, both scheduled to come online by the end of 2016. Producers commissioned these projects before crude oil prices began declining in 2014.

Non-OPEC unplanned supply disruptions in March 2016 were about 0.4 million b/d. A fire at one of Brazil's offshore platforms in mid-March shut in about 50,000 b/d of production. In Ghana, unplanned and planned maintenance work at the Jubilee field's offshore floating production, storage, and offloading (FPSO) vessel forced loadings to be suspended and reduced production in March. Unplanned production volumes disrupted were about 25,000 b/d in March, although the total amount offline because of scheduled maintenance was higher.

OPEC Petroleum and Other Liquids Supply. OPEC crude oil production averaged 31.6 million b/d in 2015, an increase of 0.8 million b/d from 2014, led by rising production in Iraq and Saudi Arabia. Forecast OPEC crude oil production increases by 0.6 million b/d in 2016 and by 0.5 million b/d in 2017, with Iran accounting for most of the increase. The forecast does not assume a collaborative production cut among OPEC members and other major producers in the forecast period, as major OPEC producers continue their strategy of maintaining market share.

OPEC noncrude liquids production averaged 6.6 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.

OPEC unplanned crude oil supply disruptions averaged 2.3 million b/d in March, 0.1 million b/d higher compared with February. In March, disrupted volumes increased slightly in Nigeria because of pipeline sabotage, and in Libya, where power shortages caused production disruptions at several fields. In Iraq, disrupted volumes remained high, but were largely unchanged from the February level. The pipeline carrying oil produced in northern Iraq to the Turkish port of Ceyhan was offline for almost a month starting in mid-February because of sabotage. The pipeline has resumed operation, but production from northern fields operated by Iraq's National Oil Company remains disrupted because of a political dispute between the central government in Baghdad and the Kurdistan Regional Government.

OPEC surplus crude oil production capacity, which averaged 1.6 million b/d in 2015, is expected to be 1.8 million b/d in 2016 and 1.6 million b/d in 2017. 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 3.05 billion barrels at the end of 2015, equivalent to roughly 66 days of consumption. Forecast OECD inventories rise to 3.22 billion barrels at the end of 2016, and they are expected to be 3.25 billion barrels at the end of 2017.

Crude Oil Prices. Brent crude oil spot prices increased by \$6/b in March to a monthly average of \$38/b. Declines in the U.S. rig count and some improvement in global economic indicators contributed to higher oil prices in March. However, market expectations of ongoing growth in global oil inventories contributed to falling prices at the end of March, with Brent prices ending the month below \$37/b.

With global oil inventory builds expected to average 1.4 million b/d in 2016, oil prices are forecast to remain near current levels. Forecast Brent prices average \$35/b in 2016.

Global oil inventories are expected to grow by 0.4 million b/d in 2017. Lower forecast inventory builds contribute to a moderate price recovery in 2017, with Brent prices forecast to average \$41/b. Forecast Brent prices reach an average of \$46/b in the fourth quarter of 2017, as the global oil market is expected to be relatively balanced late in 2017, with the potential for significant inventory draws beyond the forecast period.

Forecast West Texas Intermediate (WTI) crude oil prices average the same as Brent crude oil prices through the forecast period. The price parity of WTI with Brent in the forecast period is based on the assumption of competition between the two crudes in the U.S. Gulf Coast refinery market, as transportation differentials are similar to move the crudes from their respective pricing points to that market.

The expectation of continuing large inventory builds is a major source of uncertainty in the price forecast, as the capacity of global oil storage to absorb such builds is unknown. If global storage capacity becomes stressed, the cost of storage will rise to reflect more expensive marginal storage options such as floating inventories on crude oil tankers. The higher storage costs would lower near-month crude oil prices. Additional uncertainty stems from the pace of global economic growth and its contribution to oil demand growth and from the responsiveness of oil producers to sustained low oil prices.

The current values of futures and options contracts highlight the heightened volatility and high uncertainty in the price outlook ([Market Prices and Uncertainty Report](#)). WTI futures contracts for July 2016 delivery that were traded during the five-day period ending April 7 averaged \$39/b, and implied volatility averaged 44%. These levels established the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in July 2016 at \$27/b and \$57/b, respectively. The 95% confidence interval for market expectations widens over time, with lower and upper limits of \$22/b and \$78/b for prices in December 2016. At this time last year, WTI for July 2015 delivery averaged \$52/b, and implied volatility averaged 46%, with the corresponding lower and upper limits of the 95% confidence interval at \$35/b and \$78/b.

U.S. Petroleum and Other Liquid Fuels

Growing domestic and global consumption of gasoline contributed to refinery wholesale gasoline margins (the difference between the wholesale price of gasoline and the price of Brent crude oil) averaging 48 cents/gallon (gal) in 2015, compared with the previous five-year average

of 25 cents/gal. However, high gasoline inventories contributed to falling gasoline margins in February, which caused retail prices of regular gasoline to fall to an average of \$1.76/gal for the month. U.S. average regular gasoline retail prices increased to \$1.93/gal in March, driven by higher crude oil prices and increasing gasoline margins because of strong demand. Monthly average retail gasoline prices for March ranged from a low of \$1.72/gal in the Gulf Coast (PADD 3) to a high of \$2.38/gal in the West Coast (PADD 5). EIA expects the U.S. regular gasoline retail price to average \$2.05/gal in April and \$2.08/gal in June, followed by lower prices in the second half of 2016.

Liquid Fuels Consumption. Total U.S. liquid fuels consumption increased by an estimated 290,000 b/d (1.5%) in 2015. Liquid fuels consumption is forecast to increase by 120,000 b/d (0.6%) in 2016 and by an additional 190,000 b/d (1.0%) in 2017.

Motor gasoline consumption increased by an estimated 240,000 b/d (2.7%) in 2015 to an average of 9.2 million b/d, the highest level since the record 9.3 million b/d in 2007. Gasoline consumption is forecast to increase by 130,000 b/d (1.4%) in 2016, as a forecast 2.6% increase in highway travel (because of employment growth and low retail prices) is partially offset by continuing increases in vehicle fleet fuel economy. In 2017, forecast gasoline consumption is close to its 2016 level.

In 2015, jet fuel consumption increased by an estimated 70,000 b/d (4.7%). Forecast jet fuel consumption is mostly unchanged through the forecast period, with improvements in average airline fleet fuel economy offsetting growth in freight and passenger travel.

Consumption of distillate fuel, which includes diesel fuel and heating oil, fell by 60,000 b/d (1.5%) in 2015, and it is expected to fall by an additional 70,000 b/d (1.8%) in 2016. Falling distillate consumption in 2016 is the result of warm winter temperatures, lower rates of oil and natural gas drilling activity, and falling coal production that has reduced diesel use in rail shipments of coal. Stronger economic growth in 2017 contributes to distillate fuel consumption growth of 140,000 b/d (3.5%).

HGL consumption is forecast to increase by 40,000 b/d (1.4%) in 2016 and by 50,000 b/d (2.0%) in 2017, as increased ethane consumption more than offsets reduced propane consumption. U.S. ethane consumption is forecast to increase by 60,000 b/d (6.1%) in 2016 as expansion projects at ethylene-producing petrochemical plants increase feedstock demand for ethane. In 2017, forecast ethane consumption increases by an additional 80,000 b/d (6.8%), as capacity begins to ramp up at five new petrochemical plants and at a previously deactivated plant.

Liquid Fuels Supply. U.S. crude oil production is projected to decrease from an average of 9.4 million b/d in 2015 to 8.6 million b/d in 2016 and to 8.0 million b/d in 2017. The forecast reflects a 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.

EIA estimates total U.S. crude oil production has fallen by 0.7 million b/d since April 2015 to an average of 9.0 million b/d in March 2016. The entire production decline came from Lower 48 onshore.

Because WTI crude oil prices are projected to remain below \$40/b through the first half of 2017, 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 tighter 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. Lower onshore investment is expected to reduce the count of oil-directed rigs and well completions in 2016 and 2017.

Projected low oil prices throughout the forecast period are expected to limit onshore drilling activity and well completions, despite continued increases in rig and well productivity and falling drilling and completion costs. Rig counts reported by Baker Hughes continue to decline, with the average number of total rigs in operation during March at less than 450, down from more than 600 in January. The decline in rig counts continues to reduce EIA's forecast of future drilling and production throughout the forecast period.

EIA expects U.S. crude oil production to decline from 9.1 million b/d in the first quarter of 2016 to an average of 7.9 million b/d in the third quarter of 2017. Production of 7.9 million b/d would be 1.8 million b/d below the April 2015 level, which was the highest monthly production since April 1971. Production is expected to begin increasing modestly in the fourth quarter of 2017, reflecting productivity improvements, lower breakeven costs, and anticipated oil price increases. The forecast remains sensitive to actual wellhead prices and rapidly changing drilling economics that vary across regions and operators.

[Projected crude oil production during the forecast period rises in the Gulf of Mexico](#) and falls in Alaska. 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. Although production in Alaska is expected to decrease in response to BP's recent reduction in drilling rigs in the Alaskan North Slope, ConocoPhillips brought two projects online there that could moderate production declines in the region. Several projects in the Gulf of Mexico that began operations or that will begin operations in 2014–16 will increase production from an average of 1.5 million b/d in 2015 to 1.9 million b/d in the fourth quarter of 2017. Some projects may start production later than expected, potentially shifting some of the anticipated production gains from late 2017 into early 2018.

EIA projects [HGL production at natural gas processing plants](#) will increase by 0.2 million b/d (6.1%) in 2016 and by 0.3 million b/d (7.6%) in 2017. 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. In March, the United States shipped the first waterborne exports of ethane from the [Marcus Hook, Pennsylvania, terminal](#) to Europe.

Summer Fuels Outlook

U.S. Gasoline and Diesel Fuel Prices. EIA expects the retail price of regular-grade gasoline will average \$2.04/gal during the 2016 summer driving season (April through September), down from an average of \$2.63/gal last summer. A summer average of \$2.04/gal would mark the lowest summer average since 2004. The projected monthly average retail price of gasoline increases from \$2.05/gal in April to \$2.08/gal in June before falling to \$1.93/gal in September. Diesel fuel retail prices are projected to average \$2.11/gal this summer, down from an average of \$2.74 last summer.

Daily and weekly national average prices of gasoline can differ significantly from monthly and seasonal averages. There are also significant differences across regions, with monthly average prices in some areas exceeding the national average price by 40 cents/gal or more. Unplanned refinery outages or other disruptions to supply can also increase regional product prices to above forecast levels in the short term. In addition, higher overall gasoline demand in 2015, along with [changes in the U.S. vehicle fleet in response to fuel economy standards](#), resulted in higher prices for high-octane gasoline blending components, which contributed to the high gasoline margins for most of 2015. Although some of these higher margins were the result of isolated refinery outages in 2015, many of the same conditions that tightened octane markets in 2015 still exist, and they present an upside risk factor for summer gasoline prices.

Because taxes and retail distribution costs are generally stable, movements in gasoline and diesel prices are primarily the result of changes in both crude oil prices and wholesale margins. The Brent crude oil price is forecast to average \$35/b (83 cents/gal) this summer, compared with an average of \$56/b (\$1.33/gal) last summer. Any difference between actual crude oil prices and EIA's forecast would likely be reflected in the retail price of motor fuels. Absent other factors specific to the gasoline and diesel fuel markets, each dollar per barrel of sustained price change in crude oil compared with the forecast translates into a 2.4-cent-per-gallon change in product prices.

EIA expects wholesale gasoline margins (the difference between the wholesale price of gasoline and the Brent crude oil price) will average 47 cents/gal this summer, about 12 cents/gal lower than last summer but 7 cents/gal higher than the previous five-summer average. Wholesale margins are forecast to be lower this summer compared with last summer because of higher gasoline production, and because the severe refinery outages from last summer (particularly on the West Coast) are not expected this summer.

As in the case of crude oil, the market's expectation of uncertainty in monthly average gasoline prices is reflected in the pricing and implied volatility of futures and options contracts. New York

Harbor reformulated blendstock for oxygenate blending (RBOB) futures contracts for July 2016 delivery that were traded over the five-day period ending April 7 averaged \$1.40/gal. The probability that the RBOB futures price will exceed \$1.85/gal (consistent with a U.S. average regular gasoline retail price above \$2.50/gal) in July 2016 is about 5%.

Forecast wholesale diesel fuel margins average 32 cents/gal this summer, 10 cents/gal below last summer's level and 12 cents/gal below the previous five-summer average. Diesel margins remain weak compared with previous years, as growth in global demand for the fuel has slowed. Lower economic growth in emerging markets compared with previous years and a switch in the composition of economic activity in those markets (particularly China) away from diesel-intensive manufacturing have reduced growth in distillate demand. However, with strong gasoline margins, refinery runs have been high, contributing to high levels of diesel production despite the relatively weak demand.

Motor Gasoline. During the 2016 summer driving season (April through September), projected motor gasoline consumption averages almost 9.5 million b/d, an increase of 120,000 b/d (1.3%) compared with last summer. A year-over-year increase in summer highway travel, projected to be 2.3%, is partially offset by a 1.0% increase in fleet-wide fuel efficiency. Finished motor gasoline is supplied by four sources: domestic refinery output, fuel ethanol blending, net imports of gasoline and gasoline blending components, and withdrawals from primary inventories. EIA expects that domestic refinery production, including gasoline blendstock output, will be about 70,000 b/d higher this summer than last summer. Fuel ethanol blending into gasoline this summer is projected to increase by 20,000 b/d from last summer's level to almost 950,000 b/d, which is 10.0% of total gasoline consumption. Projected total gasoline net imports (including blending components) are down 60,000 b/d from last summer.

At the beginning of the summer driving season (April 1), total gasoline stocks were 246.0 million barrels, 14.5 million barrels higher than a year ago and 23.7 million barrels above the five-year average for beginning-of-season stocks. Stock withdrawals have not been a significant source of motor gasoline supply for the summer season in recent years, having averaged only 42,000 b/d during the previous five summer seasons. This summer, the total gasoline stock draw is projected to average 130,000 b/d, compared with a 35,000 b/d draw last summer. Total gasoline inventories are projected to end the summer at 222.2 million barrels, 3.0 million barrels below last year's level at that time, but 7.5 million barrels above the previous five-year average.

Diesel Fuel. Projected consumption of distillate fuel, which includes diesel fuel and heating oil, averages more than 3.9 million b/d this summer, up 20,000 b/d (0.6%) from the level last summer. This growth is driven by increasing manufacturing output and trucking activity related to economic growth and international trade. This growth is partially offset by lower consumption from railroads.

Distillate fuel is supplied by four sources: domestic refinery output, biodiesel blending, withdrawals from primary inventories, and net imports. EIA expects refinery output of distillate fuel to average almost 5.1 million b/d this summer, up 40,000 b/d from last summer's level. The

production of biodiesel is forecast to average more than 100,000 b/d this summer, up about 10,000 b/d from last summer. Projected net exports of distillate fuel average 1.2 million b/d this summer, up from 1.1 million b/d last summer.

Distillate inventories are projected to start the summer at 163.0 million barrels, up substantially from the 128.3 million barrels recorded at the start of last summer and 33.9 million barrels above the previous five-year average. Distillate inventories typically build during the summer season in preparation for the heating season. This summer, the build is forecast to average 59,000 b/d, down from the 112,000 b/d build recorded last summer, but up from the five-year average summer build of 49,000 b/d. Forecast end-of-summer stocks are 173.8 million barrels, up from the 148.8 million barrels recorded at the end of last summer, and 35.7 million barrels above the five-year end-of-summer average.

Natural Gas

Working natural gas inventories in storage ended the winter withdrawal season at 2,478 billion cubic feet (Bcf), slightly above the previous record high for the end of March set in 2012. The winter heating season was characterized by warmer-than-normal temperatures, continued high production volumes, and low natural gas prices. Looking forward to the summer, EIA projects record-high levels of consumption of natural gas for power generation.

Natural Gas Consumption. EIA's forecast of U.S. total natural gas consumption averages 76.2 Bcf per day (Bcf/d) in 2016 and 77.6 Bcf/d in 2017, compared with 75.3 Bcf/d in 2015. In 2016, increases in the electric power sector primarily drive increases in total consumption. Forecast electric power sector use of natural gas increases by 3.9% in 2016, then declines by 1.3% in 2017, as natural gas prices rise. Forecast industrial sector consumption of natural gas increases by 2.7% in 2016 and by 2.2% in 2017, as new fertilizer and chemical projects come online.

Natural Gas Production and Trade. In January 2016, total marketed production of natural gas averaged 79.0 Bcf/d, an increase of nearly 1% from its December 2015 level. Production in Pennsylvania and West Virginia (two states with Marcellus production) increased substantially from December 2015 levels, offsetting production declines in other areas, particularly in Texas. EIA survey data have shown some production flattening on a national level, and EIA projects relatively low production growth through most of 2016, as low natural gas prices and declining rig activity begin to affect production. At the end of this year and into 2017, however, production growth is expected to rise in response to increases in price, industrial demand, and liquefied natural gas (LNG) exports.

EIA expects growth in U.S. natural gas production through 2017 to reduce demand for natural gas imports from Canada. EIA expects natural gas exports by pipeline to Mexico will increase because of growing demand from Mexico's electric power sector and flat natural gas production in Mexico. EIA projects LNG gross exports will increase to an average of 0.5 Bcf/d in 2016, with the startup of Cheniere's Sabine Pass LNG liquefaction plant in Louisiana, which [sent out its first cargo](#) in February. EIA projects gross LNG exports will average 1.3 Bcf/d in 2017, as Sabine Pass ramps up its capacity.

Natural Gas Inventories. End-of-March natural gas working inventories were 2,478 Bcf. The estimated end-of-March inventory level this year is the highest end-of-season level on record, slightly above the previous record, set in 2012. March 2016 was much warmer than normal, and the milder weather limited inventory withdrawals. Looking ahead to the start of next winter, EIA forecasts inventories to be 4,112 Bcf at the end of October 2016, which would be the highest level on record to begin the heating season.

Natural Gas Prices. The Henry Hub natural gas spot price averaged \$1.73/MMBtu in March, a decline of 26 cents/MMBtu from the February price. Warmer-than-normal temperatures through most of the winter, record inventory levels, and production growth have contributed to sustained low natural gas prices. Monthly average Henry Hub spot prices are forecast to remain lower than \$3.00/MMBtu through December 2016. Forecast Henry Hub natural gas prices average \$2.18/MMBtu in 2016 and \$3.02/MMBtu in 2017.

Natural gas futures contracts for July 2016 delivery that were traded during the five-day period ending April 7 averaged \$2.16/MMBtu. Current options and futures prices imply that market participants place the lower and upper bounds for the 95% confidence interval for July 2016 contracts at \$1.48/MMBtu and \$3.14/MMBtu, respectively. In early April 2015, the natural gas futures contract for July 2015 delivery averaged \$2.76/MMBtu, and the corresponding lower and upper limits of the 95% confidence interval were \$1.90/MMBtu and \$4.00/MMBtu.

Coal

Coal Supply. EIA estimates that U.S. coal production in March 2016 was 52 million short tons (MMst), a 2 MMst (4%) decrease from the previous month and 29 MMst (36%) lower than in March 2015. Forecast coal production is expected to decrease by 143 MMst (16%) in 2016, which would be the largest annual percentage decline since 1958. In 2016, forecast Appalachian and Western region production declines by 14% and 20%, respectively, and Interior region production falls by 6%. In 2017, total coal production is expected to increase by 26 MMst (3%).

Interior region production is projected to account for more than 20% of production in 2016 and 2017, up from 13% of coal production 10 years ago. This increase in share reflects the Interior region's growing competitive advantages compared with other U.S. coal-producing regions, despite the higher sulfur content of its coal. These advantages include Interior coal's higher heat content, closer proximity to major markets than Western region coal, the prevalence of sulfur dioxide scrubbers at coal-fired electric generating units, and lower mining costs than Appalachian coal.

Electric power sector coal stockpiles were 189 MMst in January 2016, a 4% (8 MMst) decrease from December. This drop reflects the normal seasonal decline in stockpiles during the winter months. However, overall U.S. coal stockpiles are still very ample given the significant decline in coal's share of overall electricity generation. January 2016 stocks were 22% (34 MMst) higher than the level in January 2015.

Coal Consumption. Coal consumption in the electric power sector, which accounts for more than 90% of total U.S. coal consumption, is forecast to decline by 50 MMst (7%) in 2016 as a result of mild winter weather and competition with natural gas. Coal consumption in the electric power sector is forecast to increase by 16 MMst (2%) in 2017 primarily because of rising natural gas prices. Retirements of coal-fired power plants reduce coal-fired generation capacity in the forecast period. The retirements are the result of increased competition with natural gas generation and the industry response to the implementation of the Environmental Protection Agency's (EPA) [Mercury and Air Toxics Standards \(MATS\)](#).

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 are expected to continue to provide an advantage to mines in other major coal-exporting countries compared with U.S. producers over the next few years.

[Coal exports](#) in January 2016 were 4 MMst, down 9% from December 2015 and 44% lower than the amount exported in January 2015. EIA forecasts U.S. coal exports to decline by 15 MMst (21%) in 2016 and by 2 MMst (3%) in 2017.

Atlantic and Gulf Coast power generators are forecast to maintain their current levels of coal imports, which are primarily from Latin America. Imports are projected to total about 11 MMst in 2016 and 2017.

Coal Prices. EIA estimates the delivered coal price averaged \$2.23/MMBtu in 2015. Forecast prices are \$2.16/MMBtu in 2016 and \$2.19/MMBtu in 2017.

Electricity

Last year, [natural gas combined-cycle plants had a higher average capacity factor](#) than coal power plants for the first time on record. The capacity factor is a measure of how intensively a generating unit or a fleet of generators is run.

Electricity Consumption. Overall U.S. temperatures during summer 2016 are forecast to be lower than in summer 2015, although still slightly above the 10-year average. U.S. cooling degree days in 2016 are expected to be 5% lower than last year and 2% higher than the previous 10-year average. However, there is regional variation across the country. Forecast cooling degree days in the South Atlantic states in 2016 are 10% lower than in 2015, which contributes to an expected decline of 5% in the summer electricity bill for the average residential consumer in that area. In contrast, cooling degree days in the East North Central states are expected to be 12% higher than last year, and EIA expects the average residential bill to be 8% higher than in summer 2015.

Electricity Generation. Although the Mercury and Air Toxics Standards (MATS) went into effect in April 2015, some coal power plant operators applied for one-year or (in a limited number of cases) two-year extensions. As the extensions expire, plants will need to either install pollution controls, switch fuel sources, or suspend operations to comply with MATS. These operator

decisions, along with the continued low price of natural gas, contribute to EIA's forecast of a 7.1% decline in coal generation in 2016 compared with last year. Some of the decline is offset by a projected 3.4% increase in natural gas generation this year. Overall, total U.S. electricity generation in 2016 is expected to average 11.1 terawatthours per day, 0.5% lower than in 2015. Forecast total U.S. generation increases by 1.6% in 2017.

Electricity Retail Prices. EIA forecasts the U.S. average retail price of electricity to the residential sector in April will be 12.6 cents per kilowatthour (kWh). The U.S. residential electricity price averaged 12.7 cents/kWh in 2015 and is expected to average 12.6 cents/kWh and 12.9 cents/kWh in 2016 and 2017, respectively.

Renewables and Carbon Dioxide Emissions

Electricity and Heat Generation from Renewables. EIA expects total renewables used in the electric power sector to increase by 10.0% in 2016 and by 5.1% in 2017. Forecast hydropower generation in the electric power sector increases by 8.8% in 2016 and then falls by 0.4% in 2017. Renewables other than hydropower are forecast to grow by 11.0% in 2016 and by 9.9% in 2017.

EIA expects [utility-scale solar photovoltaic \(PV\) power capacity to grow by more than 9 gigawatts \(GW\)](#) in 2016, after growing by 3 GW in 2015. PV capacity is forecast to increase by an additional 1 GW in 2017. States leading in utility-scale solar capacity additions are California, Nevada, North Carolina, Texas, and Georgia. Forecast utility-scale solar power generation averages 1.1% of total U.S. electricity generation in 2017.

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 8% in 2016 and by 9% in 2017. In 2017, wind generation accounts for 5.6% of total generation.

Liquid Biofuels. On November 30, EPA finalized a rule setting Renewable Fuel Standard (RFS) volumes for 2014 through 2016. EIA used these final 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 that was included in the November 30 rule. Ethanol production averaged 966,000 b/d in 2015, and it is forecast to average between 970,000 b/d and 980,000 b/d in 2016 and 2017. Ethanol consumption averaged about 910,000 b/d in 2015, and it is forecast to average about 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 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 82,000 b/d in 2015 and is forecast to average 100,000 b/d in 2016 and 106,000 b/d in 2017. Net imports of biomass-based diesel are expected to rise from 29,000 b/d in 2015 to 45,000 b/d in 2016 and to 47,000 b/d in 2017.

Energy-Related Carbon Dioxide Emissions. EIA estimates that energy-related emissions of carbon dioxide decreased by about 2.5% in 2015. Emissions are forecast to decrease by 0.9% in 2016, and then increase by 0.9% 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 1.4% in the fourth quarter of 2015, up from the previous estimate of 1.0%. The increase in real GDP in the fourth quarter reflected positive contributions from personal consumption expenditures, residential fixed investment, and federal government spending.

EIA used the March 2016 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 is 2.1% in 2016—below the 2.2% forecast in last month's STEO—and 2.9% in 2017. Real disposable income grows by 3.0% in 2016 and by 3.4% in 2017. Total industrial production falls by 0.9% in 2016, but rises by 2.8% in 2017. Projected growth in nonfarm employment averages 1.7% in 2016 and 1.4% in 2017.

Expenditures. Forecast private real fixed investment growth averages 3.6% and 6.2% in 2016 and 2017, respectively. Real consumption expenditures grow faster than real GDP, at 2.7% in 2016 and 3.2% in 2017. Export growth is 1.6% and 4.7% over the same two years, and import growth is 3.2% in 2016 and 6.6% in 2017. Total government expenditures rise 2.1% in 2016 and 0.3% in 2017.

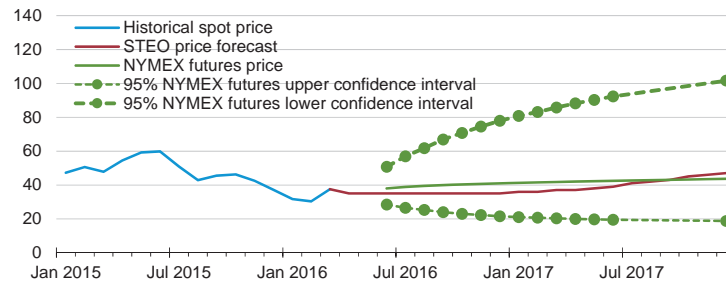
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views 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

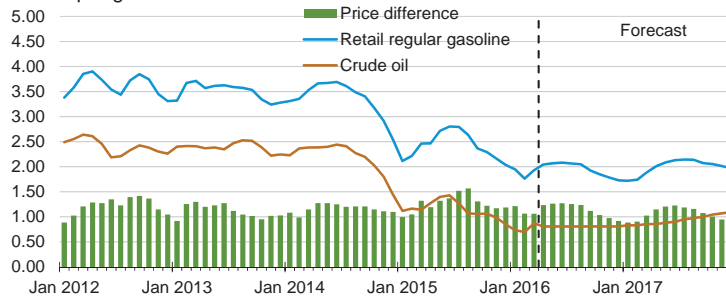
Chart Gallery for April 2016

West Texas Intermediate (WTI) Crude Oil Price
dollars per barrel



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

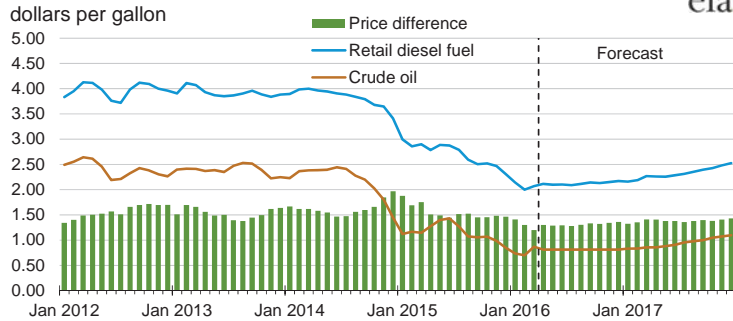
U.S. Gasoline and Crude Oil Prices
dollars per gallon



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

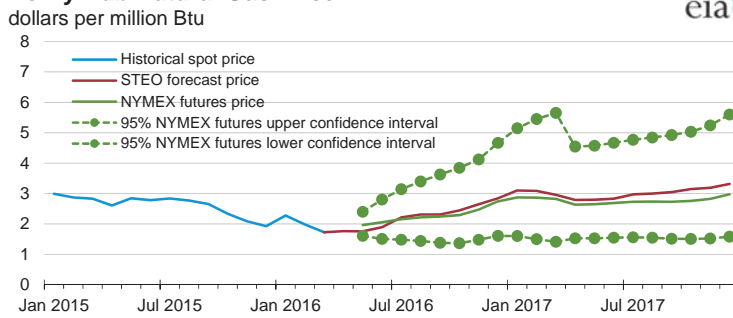
Source: Short-Term Energy Outlook, April 2016.

U.S. Diesel Fuel and Crude Oil Prices



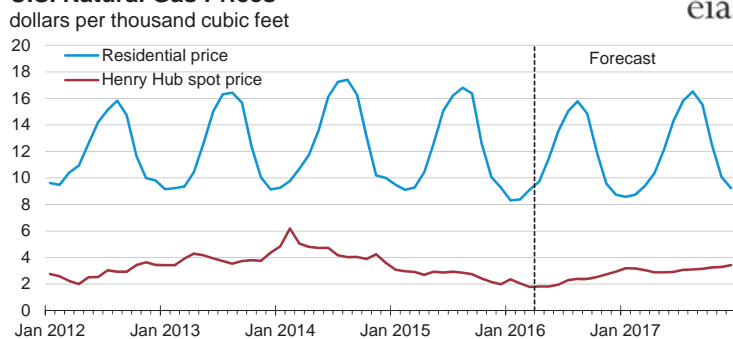
Crude oil price is composite refiner acquisition cost. Retail prices include state and federal taxes.
Source: Short-Term Energy Outlook, April 2016.

Henry Hub Natural Gas Price



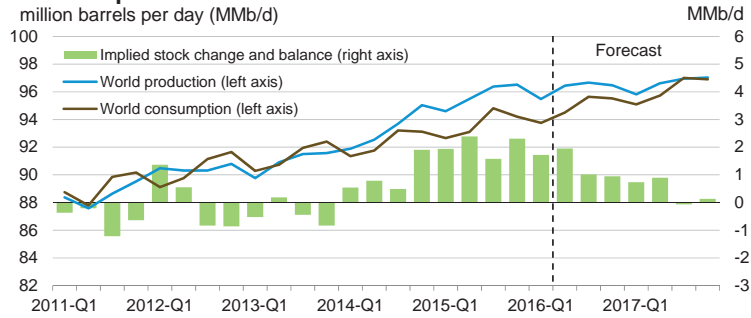
Note: Confidence interval derived from options market information for the 5 trading days ending Apr. 7, 2016. Intervals not calculated for months with sparse trading in near-the-money options contracts.
Source: Short-Term Energy Outlook, April 2016.

U.S. Natural Gas Prices



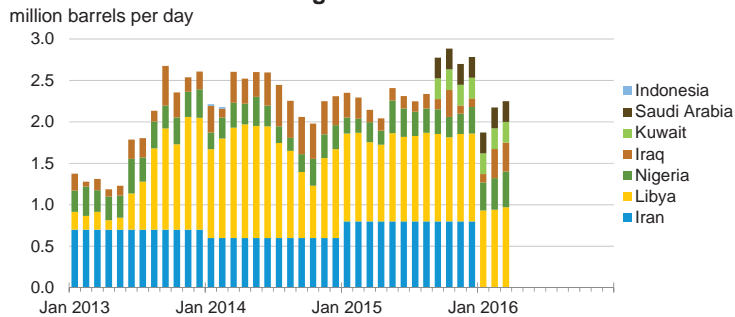
Source: Short-Term Energy Outlook, April 2016.

World Liquid Fuels Production and Consumption Balance



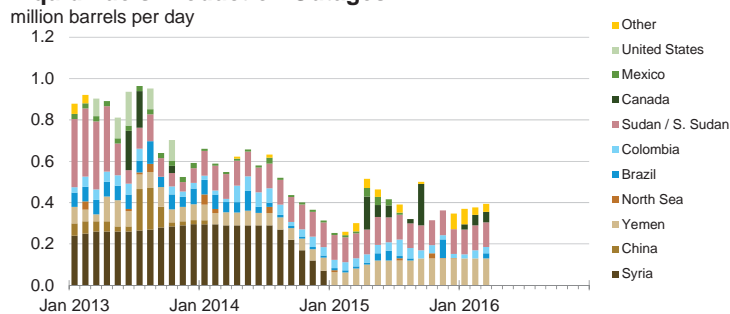
Source: Short-Term Energy Outlook, April 2016.

Estimated Historical Unplanned OPEC Crude Oil Production Outages



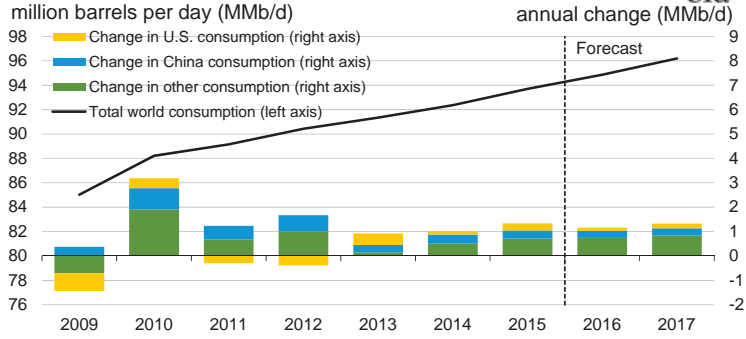
Source: Short-Term Energy Outlook, April 2016.

Estimated Historical Unplanned Non-OPEC Liquid Fuels Production Outages



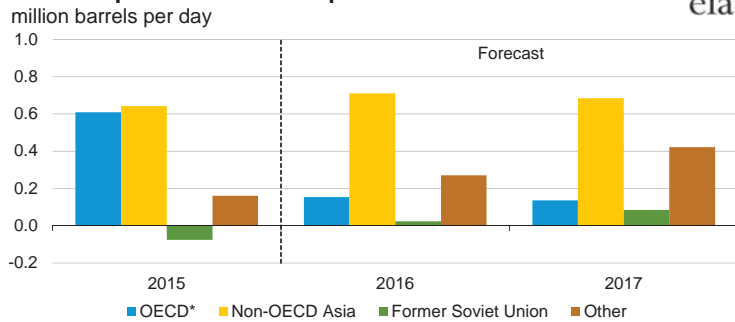
Source: Short-Term Energy Outlook, April 2016.

World Liquid Fuels Consumption



Source: Short-Term Energy Outlook, April 2016.

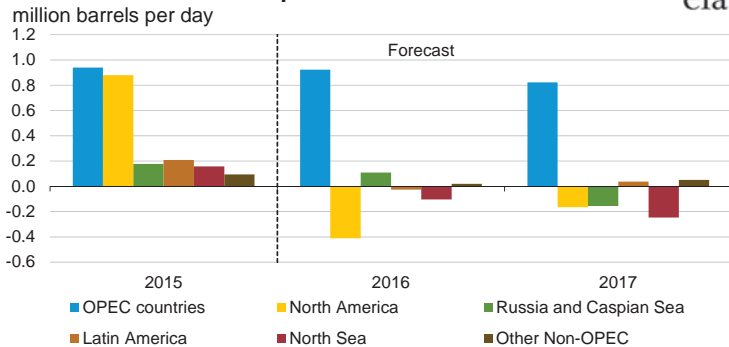
World Liquid Fuels Consumption Growth



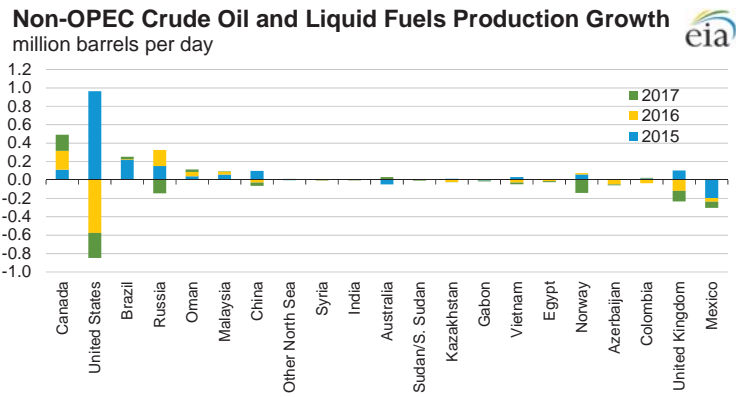
* Countries belonging to the Organization for Economic Cooperation and Development

Source: Short-Term Energy Outlook, April 2016.

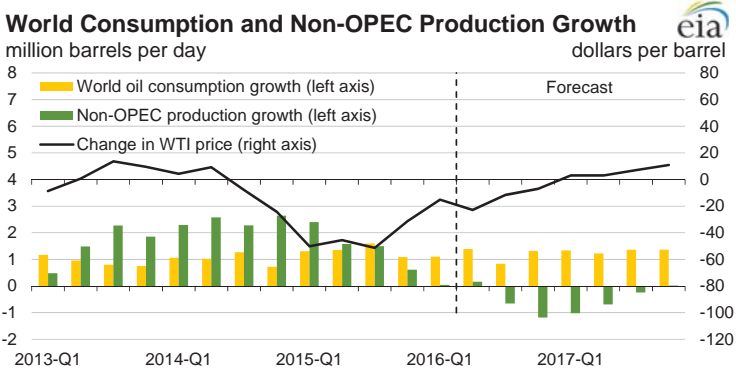
World Crude Oil and Liquid Fuels Production Growth



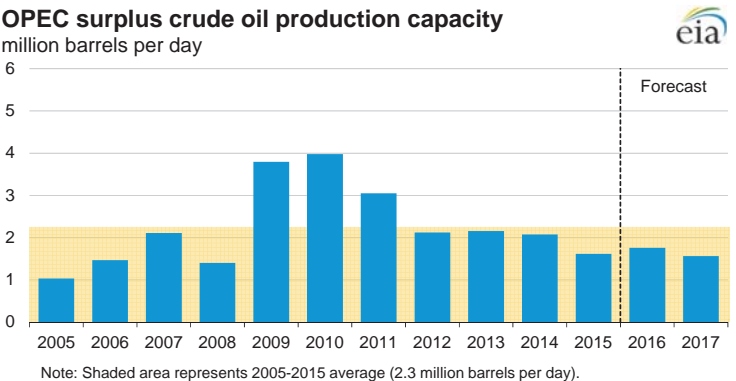
Source: Short-Term Energy Outlook, April 2016.



Source: Short-Term Energy Outlook, April 2016.



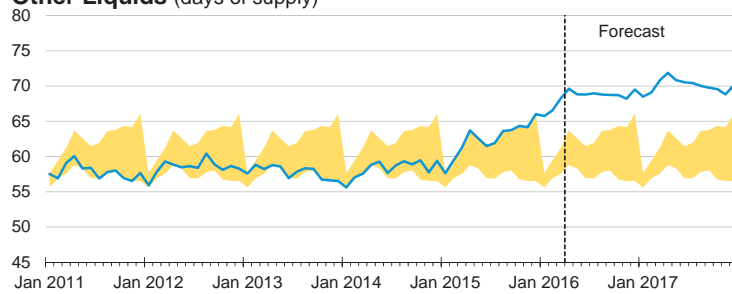
Source: Short-Term Energy Outlook, April 2016.



Note: Shaded area represents 2005-2015 average (2.3 million barrels per day).

Source: Short-Term Energy Outlook, April 2016.

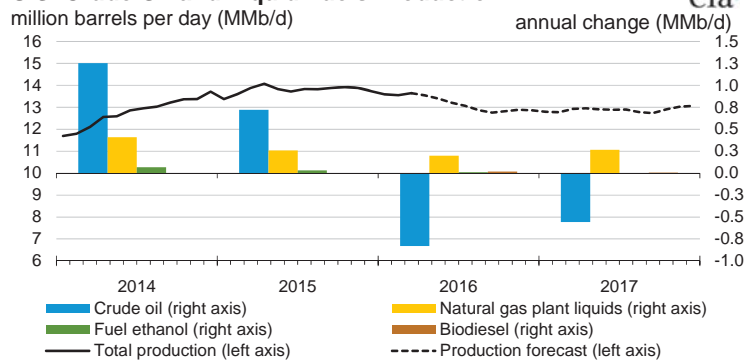
OECD Commercial Stocks of Crude Oil and Other Liquids (days of supply)



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.

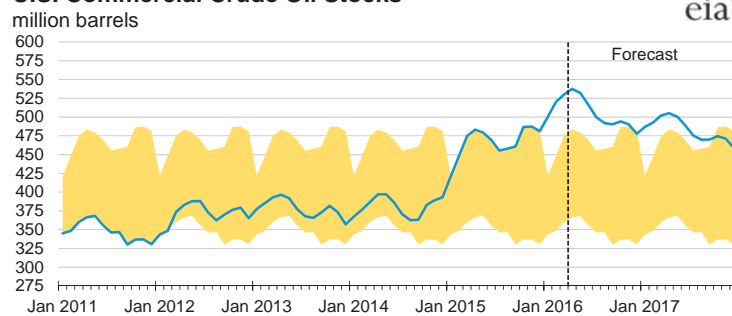
Source: Short-Term Energy Outlook, April 2016.

U.S. Crude Oil and Liquid Fuels Production



Source: Short-Term Energy Outlook, April 2016.

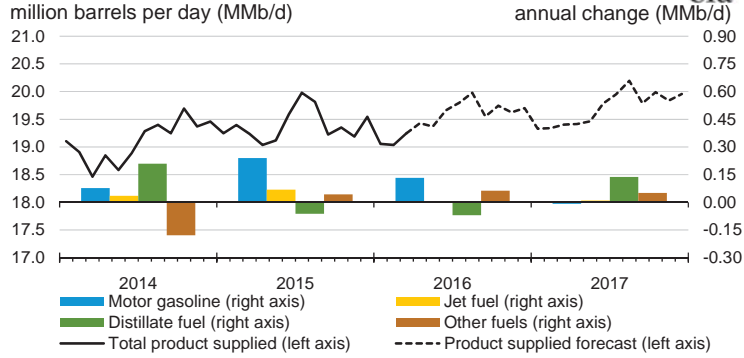
U.S. Commercial Crude Oil Stocks



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

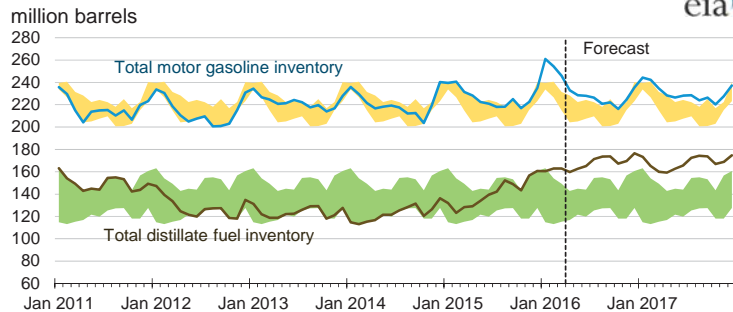
Source: Short-Term Energy Outlook, April 2016.

U.S. Liquid Fuels Product Supplied



Source: Short-Term Energy Outlook, April 2016.

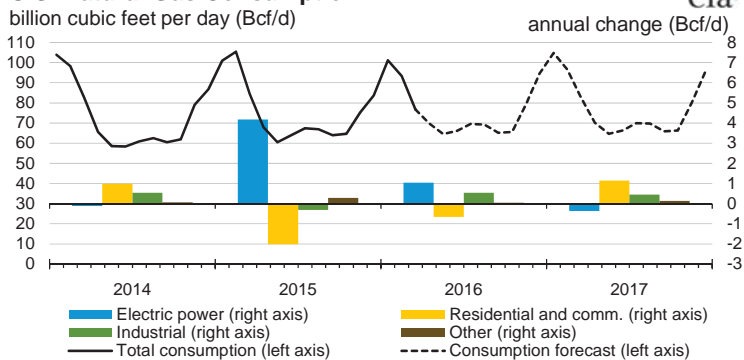
U.S. Gasoline and Distillate Inventories



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

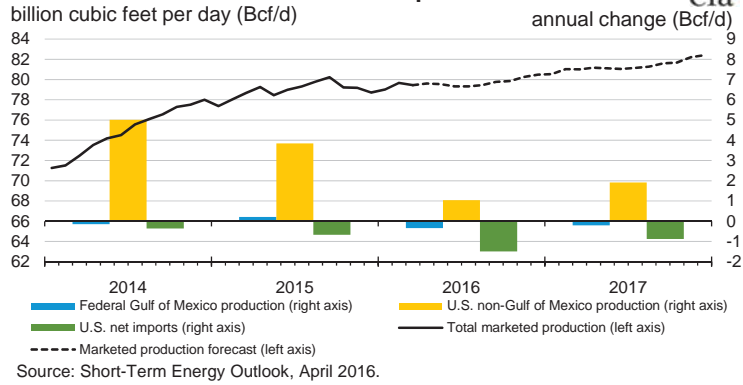
Source: Short-Term Energy Outlook, April 2016.

U.S. Natural Gas Consumption

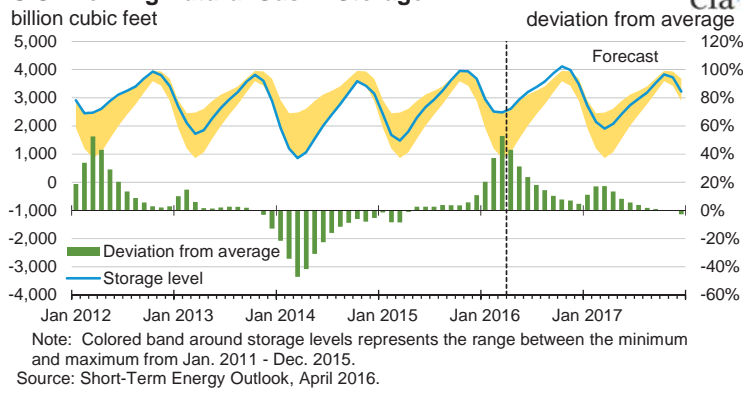


Source: Short-Term Energy Outlook, April 2016.

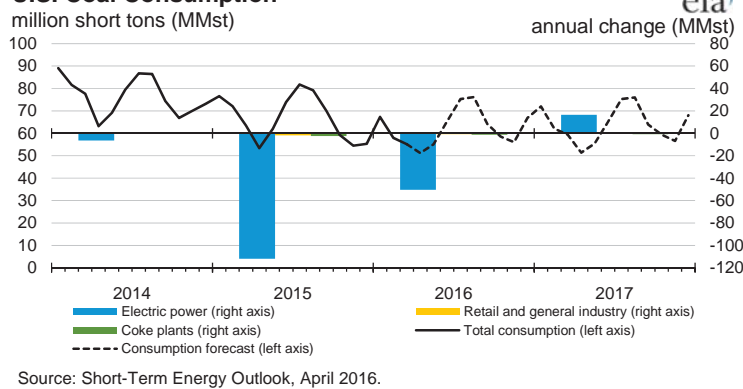
U.S. Natural Gas Production and Imports



U.S. Working Natural Gas in Storage




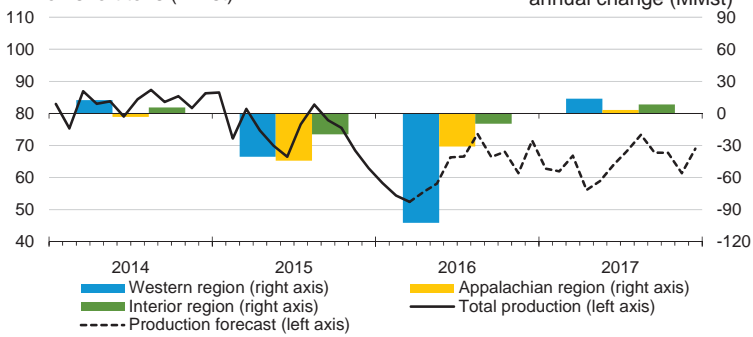
U.S. Coal Consumption



U.S. Coal Production

million short tons (MMst)

annual change (MMst) 

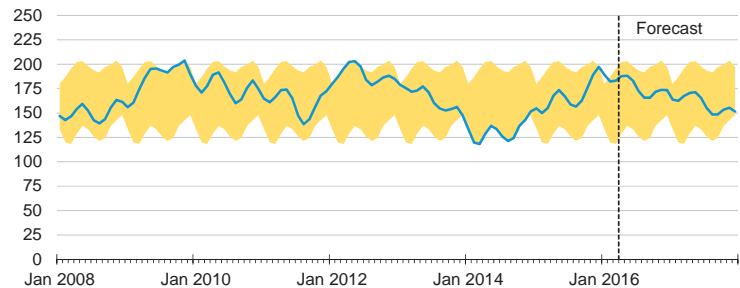


Source: Short-Term Energy Outlook, April 2016.

U.S. Electric Power Coal Stocks

million short tons






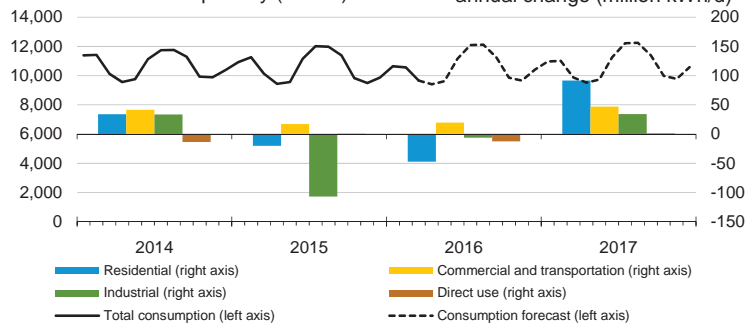
Note: Colored band around stock levels represents the range between the minimum and maximum from Jan. 2008 - Dec. 2015.

Source: Short-Term Energy Outlook, April 2016.

U.S. Electricity Consumption

million kilowatthours per day (kWh/d)

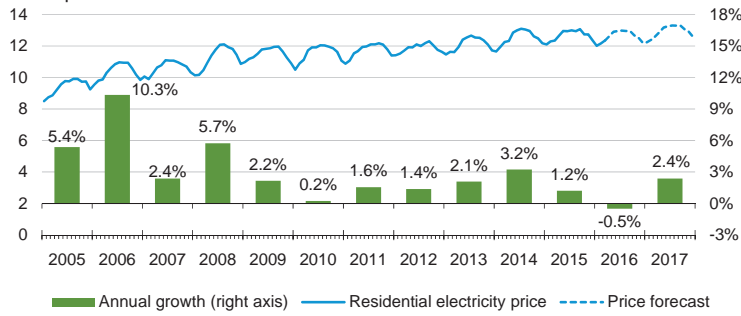
annual change (million kWh/d) 



Source: Short-Term Energy Outlook, April 2016.

U.S. Residential Electricity Price

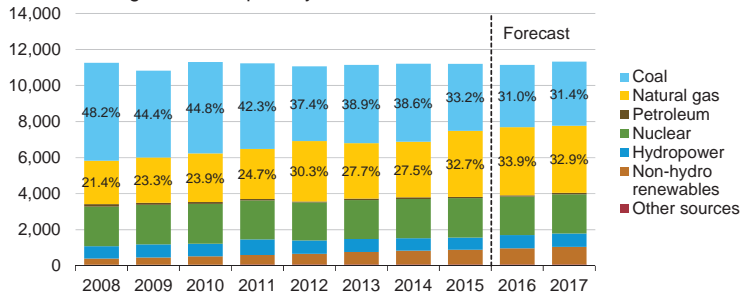
cents per kilowatthour



Source: Short-Term Energy Outlook, April 2016.

U.S. Electricity Generation by Fuel, All Sectors

thousand megawatthours per day

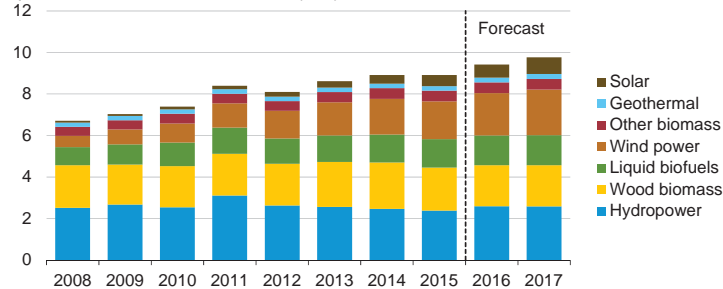


Note: Labels show percentage share of total generation provided by coal and natural gas.

Source: Short-Term Energy Outlook, April 2016.

U.S. Renewable Energy Supply

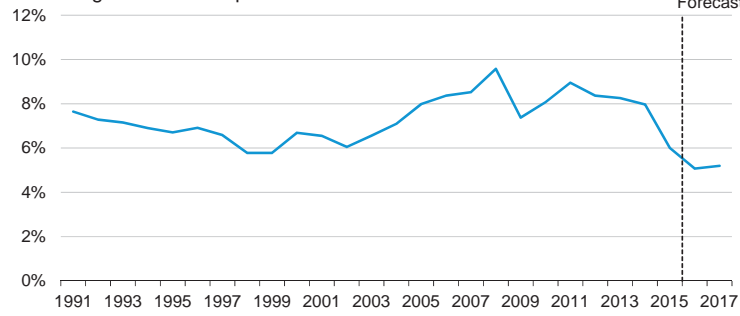
quadrillion British thermal units (Btu)



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.

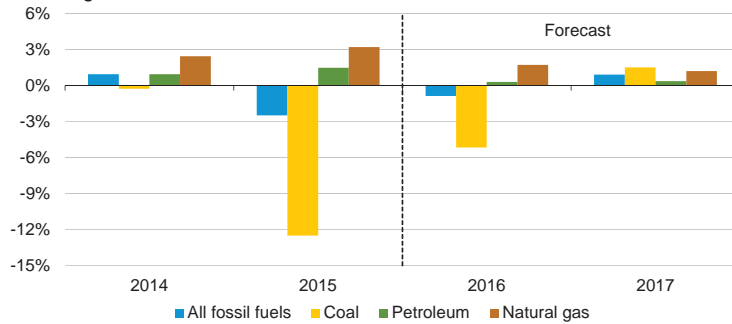
Source: Short-Term Energy Outlook, April 2016.

U.S. Annual Energy Expenditures share of gross domestic product



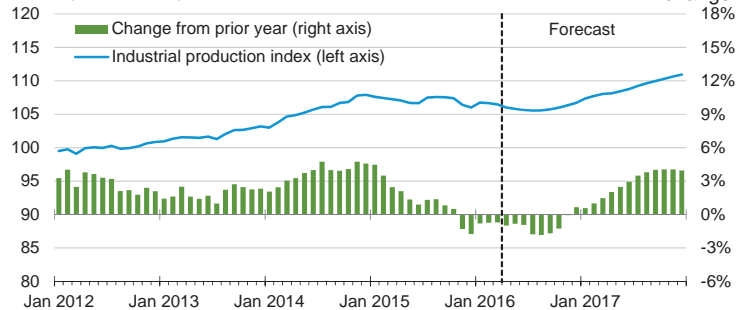
Source: Short-Term Energy Outlook, April 2016.

U.S. Energy-Related Carbon Dioxide Emissions annual growth



Source: Short-Term Energy Outlook, April 2016.

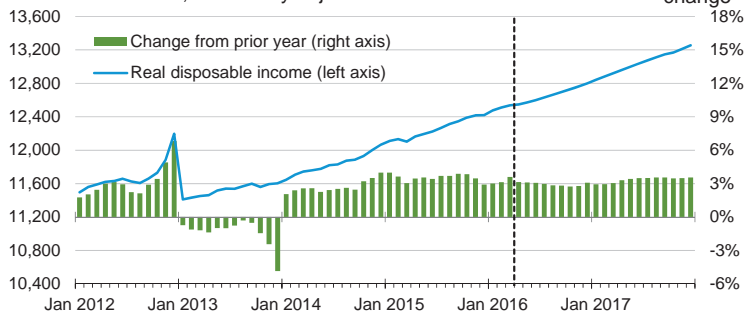
U.S. Total Industrial Production Index index (2007 = 100)



Source: Short-Term Energy Outlook, April 2016.

U.S. Disposable Income

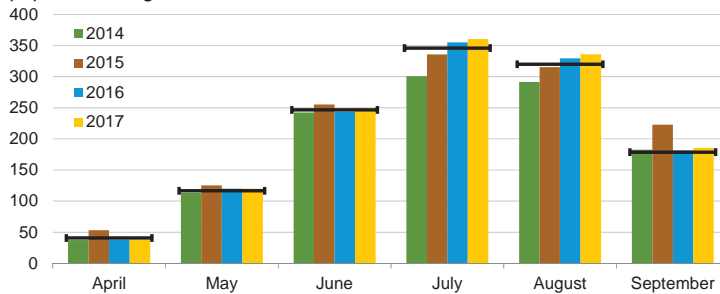
billion 2009 dollars, seasonally adjusted



Source: Short-Term Energy Outlook, April 2016.

U.S. Summer Cooling Degree Days

population-weighted

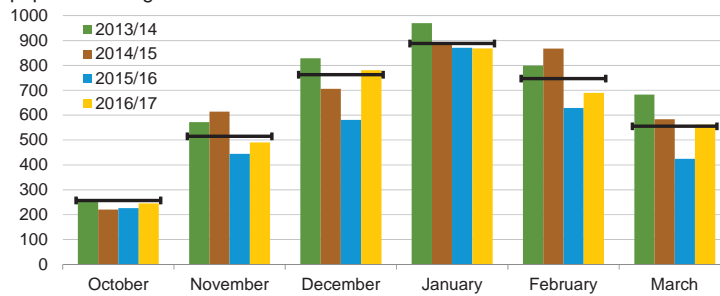


Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2006-2015). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, April 2016.

U.S. Winter Heating Degree Days

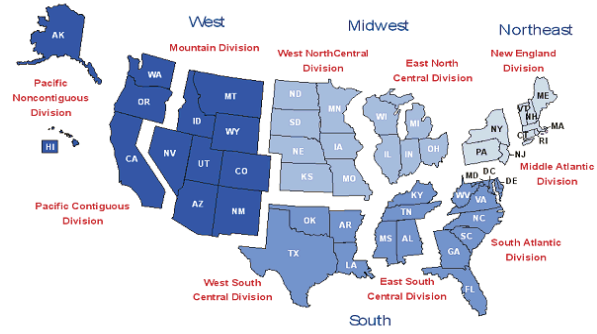
population-weighted



Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2006 - Mar 2016). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, April 2016.

U.S. Census Regions and Divisions



Source: Short-Term Energy Outlook, April 2016.

Table SF01. U.S. Motor Gasoline Summer Outlook

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

	2015			2016			Year-over-year Change (percent)		
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) ^a	1.38	1.11	1.24	<i>0.83</i>	<i>0.83</i>	<i>0.83</i>	-39.5	-24.8	-32.8
Brent Crude oil Price (Spot)	1.47	1.20	1.33	<i>0.83</i>	<i>0.83</i>	<i>0.83</i>	-43.2	-30.6	-37.4
U.S. Refiner Average Crude Oil Cost	1.37	1.14	1.25	<i>0.81</i>	<i>0.81</i>	<i>0.81</i>	-40.8	-28.7	-35.3
Wholesale Gasoline Price ^b	2.01	1.84	1.93	<i>1.34</i>	<i>1.27</i>	<i>1.31</i>	-33.3	-31.1	-32.3
Wholesale Diesel Fuel Price ^b	1.89	1.61	1.75	<i>1.13</i>	<i>1.17</i>	<i>1.15</i>	-40.2	-27.5	-34.3
Regular Gasoline Retail Price ^c	2.67	2.60	2.63	<i>2.07</i>	<i>2.02</i>	<i>2.04</i>	-22.5	-22.5	-22.5
Diesel Fuel Retail Price ^c	2.85	2.63	2.74	<i>2.10</i>	<i>2.11</i>	<i>2.11</i>	-26.2	-19.7	-23.0
Gasoline Consumption/Supply (million barrels per day)									
Total Consumption	9.260	9.395	9.328	<i>9.407</i>	<i>9.498</i>	<i>9.452</i>	1.6	1.1	1.3
Total Refinery and Blender Output ^d	8.022	8.305	8.164	<i>8.124</i>	<i>8.335</i>	<i>8.230</i>	1.3	0.4	0.8
Fuel Ethanol Blending	0.919	0.935	0.927	<i>0.938</i>	<i>0.953</i>	<i>0.946</i>	2.1	2.0	2.1
Total Stock Withdrawal ^e	0.115	-0.044	0.035	<i>0.199</i>	<i>0.062</i>	<i>0.130</i>			
Net Imports ^e	0.204	0.200	0.202	<i>0.145</i>	<i>0.147</i>	<i>0.146</i>	-29.1	-26.6	-27.8
Refinery Utilization (percent)	92.8	93.2	93.0	<i>91.3</i>	<i>92.2</i>	<i>91.8</i>			
Gasoline Stocks, Including Blending Components (million barrels)									
Beginning	231.5	221.0	231.5	<i>246.0</i>	<i>227.9</i>	<i>246.0</i>			
Ending	221.0	225.1	225.1	<i>227.9</i>	<i>222.2</i>	<i>222.2</i>			
Economic Indicators (annualized billion 2000 dollars)									
Real GDP	16,334	16,414	16,374	<i>16,631</i>	<i>16,735</i>	<i>16,683</i>	1.8	2.0	1.9
Real Income	12,194	12,308	12,251	<i>12,572</i>	<i>12,664</i>	<i>12,618</i>	3.1	2.9	3.0

^a Spot Price of West Texas Intermediate (WTI) crude oil.^b Price product sold by refiners to resellers.^c Average pump price including taxes.^d Refinery and blender net production plus finished motor gasoline adjustment.^e Total stock withdrawal and net imports includes both finished gasoline and gasoline blend components.

GDP = gross domestic product.

Notes: Minor discrepancies with other Energy Information Administration (EIA) published historical data are due to rounding. Historical data are printed in bold. Forecasts are in italic. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: latest data available from: EIA, *Petroleum Supply Monthly*, DOE/EIA-0109; Monthly Energy Review, DOE/EIA-0035; U.S. Department of Commerce, Bureau of Economic Analysis (GDP and income); Reuters News Service (WTI and Brent crude oil spot prices). Macroeconomic projections are based on IHS Global Insight Macroeconomic Forecast Model.

Table SF02 Average Summer Residential Electricity Usage, Prices and Expenditures

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

	2011	2012	2013	2014	2015	Forecast 2016	Change from 2015
United States							
Usage (kWh)	3,444	3,354	3,129	3,037	3,153	3,143	-0.3%
Price (cents/kWh)	12.06	12.09	12.58	13.04	12.95	12.96	0.1%
Expenditures	\$415	\$405	\$393	\$396	\$408	\$407	-0.3%
New England							
Usage (kWh)	2,122	2,188	2,173	1,930	1,993	2,033	2.0%
Price (cents/kWh)	15.85	15.50	16.04	17.63	18.64	18.04	-3.2%
Expenditures	\$336	\$339	\$348	\$340	\$372	\$367	-1.3%
Mid-Atlantic							
Usage (kWh)	2,531	2,548	2,447	2,234	2,372	2,413	1.7%
Price (cents/kWh)	16.39	15.63	16.39	16.90	16.52	16.68	1.0%
Expenditures	\$415	\$398	\$401	\$378	\$392	\$402	2.7%
East North Central							
Usage (kWh)	2,975	3,048	2,618	2,505	2,556	2,717	6.3%
Price (cents/kWh)	12.17	12.08	12.57	13.24	13.20	13.46	2.0%
Expenditures	\$362	\$368	\$329	\$332	\$337	\$366	8.4%
West North Central							
Usage (kWh)	3,517	3,547	3,098	3,040	3,054	3,136	2.7%
Price (cents/kWh)	11.16	11.50	12.25	12.42	12.66	13.02	2.8%
Expenditures	\$393	\$408	\$380	\$378	\$387	\$408	5.6%
South Atlantic							
Usage (kWh)	4,277	4,001	3,771	3,776	3,957	3,852	-2.7%
Price (cents/kWh)	11.48	11.65	11.76	12.09	12.10	11.85	-2.1%
Expenditures	\$491	\$466	\$443	\$457	\$479	\$456	-4.7%
East South Central							
Usage (kWh)	4,750	4,467	4,078	4,033	4,296	4,249	-1.1%
Price (cents/kWh)	10.28	10.36	10.71	11.09	10.90	11.07	1.6%
Expenditures	\$488	\$463	\$437	\$447	\$468	\$471	0.4%
West South Central							
Usage (kWh)	5,231	4,781	4,507	4,252	4,518	4,401	-2.6%
Price (cents/kWh)	10.64	10.27	10.94	11.46	11.05	10.86	-1.7%
Expenditures	\$557	\$491	\$493	\$487	\$499	\$478	-4.3%
Mountain							
Usage (kWh)	3,322	3,440	3,380	3,228	3,304	3,292	-0.4%
Price (cents/kWh)	11.29	11.55	11.97	12.32	12.36	12.55	1.5%
Expenditures	\$375	\$397	\$405	\$398	\$408	\$413	1.1%
Pacific							
Usage (kWh)	2,022	2,079	2,036	2,090	2,056	1,984	-3.5%
Price (cents/kWh)	13.22	13.78	14.47	15.17	15.34	15.40	0.4%
Expenditures	\$267	\$286	\$295	\$317	\$315	\$306	-3.1%

Notes: kWh = kilowatthours. All data cover the 3-month period of June-August of each year. Usage amounts represent total residential retail electricity sales per customer. Prices and expenditures are not adjusted for inflation.

Source: EIA Form-861 and Form-826 databases, Short-Term Energy Outlook.

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - April 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)	9.48	9.50	9.43	9.31	9.11	<i>8.79</i>	<i>8.29</i>	<i>8.21</i>	<i>8.16</i>	<i>8.07</i>	<i>7.89</i>	<i>8.05</i>	9.43	<i>8.60</i>	<i>8.04</i>
Dry Natural Gas Production (billion cubic feet per day)	73.58	74.20	75.02	74.12	74.52	<i>74.62</i>	<i>74.63</i>	<i>75.27</i>	<i>75.89</i>	<i>76.13</i>	<i>76.35</i>	<i>77.06</i>	74.23	<i>74.76</i>	<i>76.36</i>
Coal Production (million short tons)	240	211	237	207	165	<i>180</i>	<i>207</i>	<i>201</i>	<i>192</i>	<i>179</i>	<i>209</i>	<i>198</i>	895	<i>752</i>	<i>778</i>
Energy Consumption															
Liquid Fuels (million barrels per day)	19.29	19.25	19.68	19.36	19.12	<i>19.49</i>	<i>19.78</i>	<i>19.69</i>	<i>19.36</i>	<i>19.55</i>	<i>19.98</i>	<i>19.93</i>	19.40	<i>19.52</i>	<i>19.71</i>
Natural Gas (billion cubic feet per day)	96.66	64.09	66.12	74.55	90.39	<i>66.81</i>	<i>68.03</i>	<i>79.79</i>	<i>94.59</i>	<i>67.03</i>	<i>68.54</i>	<i>80.57</i>	75.27	<i>76.24</i>	<i>77.62</i>
Coal (b) (million short tons)	212	189	231	169	180	<i>172</i>	<i>216</i>	<i>181</i>	<i>194</i>	<i>172</i>	<i>215</i>	<i>184</i>	802	<i>749</i>	<i>765</i>
Electricity (billion kilowatt hours per day)	10.75	10.05	11.80	9.73	10.28	<i>10.06</i>	<i>11.83</i>	<i>9.97</i>	<i>10.60</i>	<i>10.17</i>	<i>11.95</i>	<i>10.11</i>	10.58	<i>10.54</i>	<i>10.71</i>
Renewables (c) (quadrillion Btu)	2.43	2.43	2.34	2.47	2.54	<i>2.70</i>	<i>2.51</i>	<i>2.49</i>	<i>2.55</i>	<i>2.83</i>	<i>2.62</i>	<i>2.58</i>	9.67	<i>10.24</i>	<i>10.58</i>
Total Energy Consumption (d) (quadrillion Btu)	26.38	23.02	24.49	23.76	25.21	<i>22.89</i>	<i>24.23</i>	<i>24.41</i>	<i>25.62</i>	<i>23.10</i>	<i>24.48</i>	<i>24.74</i>	97.65	<i>96.74</i>	<i>97.94</i>
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	48.48	57.85	46.55	41.94	33.35	<i>35.00</i>	<i>35.00</i>	<i>35.00</i>	<i>36.37</i>	<i>38.03</i>	<i>42.00</i>	<i>45.97</i>	48.67	<i>34.60</i>	<i>40.58</i>
Natural Gas Henry Hub Spot (dollars per million Btu)	2.90	2.75	2.76	2.12	2.00	<i>1.81</i>	<i>2.28</i>	<i>2.65</i>	<i>3.05</i>	<i>2.81</i>	<i>3.01</i>	<i>3.22</i>	2.63	<i>2.18</i>	<i>3.02</i>
Coal (dollars per million Btu)	2.27	2.25	2.22	2.15	2.12	<i>2.19</i>	<i>2.20</i>	<i>2.15</i>	<i>2.14</i>	<i>2.19</i>	<i>2.23</i>	<i>2.18</i>	2.23	<i>2.16</i>	<i>2.19</i>
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR)	16,177	16,334	16,414	16,455	16,550	<i>16,631</i>	<i>16,735</i>	<i>16,858</i>	<i>16,982</i>	<i>17,120</i>	<i>17,250</i>	<i>17,361</i>	16,345	<i>16,694</i>	<i>17,178</i>
Percent change from prior year	2.9	2.7	2.1	1.9	2.3	<i>1.8</i>	<i>2.0</i>	<i>2.4</i>	<i>2.6</i>	<i>2.9</i>	<i>3.1</i>	<i>3.0</i>	2.4	<i>2.1</i>	<i>2.9</i>
GDP Implicit Price Deflator (Index, 2009=100)	109.1	109.7	110.0	110.3	110.8	<i>111.3</i>	<i>111.7</i>	<i>112.2</i>	<i>112.9</i>	<i>113.4</i>	<i>113.9</i>	<i>114.5</i>	109.8	<i>111.5</i>	<i>113.7</i>
Percent change from prior year	1.0	1.0	0.9	1.1	1.6	<i>1.5</i>	<i>1.5</i>	<i>1.8</i>	<i>1.9</i>	<i>1.9</i>	<i>2.0</i>	<i>2.0</i>	1.0	<i>1.6</i>	<i>1.9</i>
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,115	12,194	12,308	12,408	12,508	<i>12,572</i>	<i>12,664</i>	<i>12,764</i>	<i>12,880</i>	<i>12,999</i>	<i>13,111</i>	<i>13,211</i>	12,256	<i>12,627</i>	<i>13,050</i>
Percent change from prior year	3.6	3.5	3.8	3.4	3.2	<i>3.1</i>	<i>2.9</i>	<i>2.9</i>	<i>3.0</i>	<i>3.4</i>	<i>3.5</i>	<i>3.5</i>	3.5	<i>3.0</i>	<i>3.4</i>
Manufacturing Production Index (Index, 2012=100)	105.5	105.8	106.7	106.8	107.0	<i>106.3</i>	<i>105.9</i>	<i>106.7</i>	<i>108.2</i>	<i>108.8</i>	<i>110.0</i>	<i>111.1</i>	106.2	<i>106.5</i>	<i>109.5</i>
Percent change from prior year	3.5	2.3	2.0	1.1	1.4	<i>0.4</i>	<i>-0.7</i>	<i>-0.1</i>	<i>1.1</i>	<i>2.4</i>	<i>3.9</i>	<i>4.1</i>	2.2	<i>0.3</i>	<i>2.9</i>
Weather															
U.S. Heating Degree-Days	2,342	443	49	1,252	1,924	<i>448</i>	<i>69</i>	<i>1,517</i>	<i>2,120</i>	<i>476</i>	<i>76</i>	<i>1,549</i>	4,086	<i>3,957</i>	<i>4,221</i>
U.S. Cooling Degree-Days	46	434	874	133	46	<i>402</i>	<i>866</i>	<i>98</i>	<i>40</i>	<i>405</i>	<i>882</i>	<i>100</i>	1,487	<i>1,412</i>	<i>1,427</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 - April 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	33.35	<i>35.00</i>	<i>35.00</i>	<i>35.00</i>	<i>36.37</i>	<i>38.03</i>	<i>42.00</i>	<i>45.97</i>	48.67	<i>34.60</i>	<i>40.58</i>
Brent Spot Average	53.91	61.65	50.43	43.55	33.89	<i>35.00</i>	<i>35.00</i>	<i>35.00</i>	<i>36.37</i>	<i>38.03</i>	<i>42.00</i>	<i>45.97</i>	52.32	<i>34.73</i>	<i>40.58</i>
U.S. Imported Average	46.40	56.12	45.60	37.87	29.92	<i>31.50</i>	<i>31.50</i>	<i>31.50</i>	<i>32.86</i>	<i>34.50</i>	<i>38.50</i>	<i>42.51</i>	46.36	<i>31.12</i>	<i>37.20</i>
U.S. Refiner Average Acquisition Cost	47.98	57.47	47.68	40.49	32.32	<i>34.00</i>	<i>34.00</i>	<i>34.00</i>	<i>35.35</i>	<i>37.01</i>	<i>40.98</i>	<i>45.02</i>	48.42	<i>33.59</i>	<i>39.67</i>
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	159	201	184	145	118	<i>134</i>	<i>127</i>	<i>104</i>	<i>109</i>	<i>135</i>	<i>138</i>	<i>127</i>	173	<i>121</i>	<i>128</i>
Diesel Fuel	176	189	161	141	110	<i>113</i>	<i>117</i>	<i>119</i>	<i>124</i>	<i>127</i>	<i>139</i>	<i>151</i>	167	<i>115</i>	<i>135</i>
Heating Oil	178	180	151	129	105	<i>109</i>	<i>110</i>	<i>116</i>	<i>122</i>	<i>119</i>	<i>131</i>	<i>146</i>	157	<i>110</i>	<i>130</i>
Refiner Prices to End Users															
Jet Fuel	172	186	156	138	108	<i>110</i>	<i>112</i>	<i>115</i>	<i>121</i>	<i>122</i>	<i>133</i>	<i>146</i>	162	<i>111</i>	<i>131</i>
No. 6 Residual Fuel Oil (a)	137	154	123	101	77	<i>84</i>	<i>86</i>	<i>86</i>	<i>89</i>	<i>91</i>	<i>101</i>	<i>111</i>	125	<i>83</i>	<i>98</i>
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	227	267	260	216	188	<i>207</i>	<i>202</i>	<i>179</i>	<i>178</i>	<i>207</i>	<i>212</i>	<i>201</i>	243	<i>194</i>	<i>200</i>
Gasoline All Grades (b)	236	275	269	226	199	<i>217</i>	<i>212</i>	<i>190</i>	<i>189</i>	<i>218</i>	<i>223</i>	<i>213</i>	252	<i>204</i>	<i>211</i>
On-highway Diesel Fuel	292	285	263	243	207	<i>210</i>	<i>211</i>	<i>215</i>	<i>221</i>	<i>227</i>	<i>235</i>	<i>248</i>	271	<i>211</i>	<i>233</i>
Heating Oil	288	276	247	224	196	<i>195</i>	<i>193</i>	<i>201</i>	<i>213</i>	<i>209</i>	<i>214</i>	<i>230</i>	265	<i>197</i>	<i>218</i>
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	2.99	2.83	2.84	2.18	2.06	<i>1.86</i>	<i>2.35</i>	<i>2.73</i>	<i>3.14</i>	<i>2.89</i>	<i>3.10</i>	<i>3.32</i>	2.71	<i>2.25</i>	<i>3.11</i>
Henry Hub Spot (dollars per million Btu)	2.90	2.75	2.76	2.12	2.00	<i>1.81</i>	<i>2.28</i>	<i>2.65</i>	<i>3.05</i>	<i>2.81</i>	<i>3.01</i>	<i>3.22</i>	2.63	<i>2.18</i>	<i>3.02</i>
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	4.57	3.68	3.66	3.34	3.37	<i>2.71</i>	<i>3.16</i>	<i>3.77</i>	<i>4.34</i>	<i>3.78</i>	<i>3.99</i>	<i>4.44</i>	3.84	<i>3.27</i>	<i>4.15</i>
Commercial Sector	7.94	8.13	8.42	7.38	6.83	<i>7.16</i>	<i>7.85</i>	<i>7.32</i>	<i>7.60</i>	<i>8.11</i>	<i>8.72</i>	<i>8.08</i>	7.88	<i>7.15</i>	<i>7.95</i>
Residential Sector	9.30	11.96	16.45	10.11	8.52	<i>10.97</i>	<i>15.20</i>	<i>9.47</i>	<i>8.83</i>	<i>11.61</i>	<i>15.93</i>	<i>10.00</i>	10.36	<i>9.64</i>	<i>10.05</i>
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.27	2.25	2.22	2.15	2.12	<i>2.19</i>	<i>2.20</i>	<i>2.15</i>	<i>2.14</i>	<i>2.19</i>	<i>2.23</i>	<i>2.18</i>	2.23	<i>2.16</i>	<i>2.19</i>
Natural Gas	4.09	3.12	3.09	2.72	2.95	<i>2.64</i>	<i>2.91</i>	<i>3.71</i>	<i>4.24</i>	<i>3.58</i>	<i>3.56</i>	<i>4.25</i>	3.22	<i>3.03</i>	<i>3.87</i>
Residual Fuel Oil (c)	10.82	11.64	10.48	7.76	7.26	<i>7.91</i>	<i>7.44</i>	<i>7.25</i>	<i>7.17</i>	<i>8.01</i>	<i>8.06</i>	<i>8.51</i>	10.36	<i>7.46</i>	<i>7.92</i>
Distillate Fuel Oil	15.61	15.17	13.19	11.74	10.49	<i>11.00</i>	<i>11.10</i>	<i>11.72</i>	<i>12.17</i>	<i>12.29</i>	<i>12.99</i>	<i>14.18</i>	14.43	<i>11.07</i>	<i>12.86</i>
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.79	6.81	7.32	6.63	6.52	<i>6.71</i>	<i>7.27</i>	<i>6.66</i>	<i>6.58</i>	<i>6.83</i>	<i>7.41</i>	<i>6.78</i>	6.90	<i>6.80</i>	<i>6.91</i>
Commercial Sector	10.46	10.54	10.95	10.36	10.18	<i>10.52</i>	<i>10.89</i>	<i>10.34</i>	<i>10.32</i>	<i>10.71</i>	<i>11.14</i>	<i>10.61</i>	10.59	<i>10.50</i>	<i>10.72</i>
Residential Sector	12.24	12.85	12.99	12.59	12.16	<i>12.83</i>	<i>12.96</i>	<i>12.44</i>	<i>12.39</i>	<i>13.11</i>	<i>13.29</i>	<i>12.82</i>	12.67	<i>12.61</i>	<i>12.91</i>

- = 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 - April 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	26.64	26.43	26.80	27.06	26.70	26.43	25.89	25.91	25.85	25.89	25.73	25.95	26.73	26.23	25.85
U.S. (50 States)	14.81	15.10	15.13	15.11	14.83	14.66	14.21	14.17	14.09	14.22	14.13	14.33	15.04	14.46	14.19
Canada	4.69	4.16	4.55	4.62	4.64	4.67	4.74	4.79	4.86	4.86	4.89	4.93	4.50	4.71	4.88
Mexico	2.68	2.58	2.62	2.62	2.61	2.59	2.58	2.56	2.54	2.53	2.51	2.49	2.62	2.58	2.52
North Sea (b)	3.00	3.10	2.96	3.18	3.12	3.00	2.85	2.85	2.83	2.74	2.63	2.63	3.06	2.96	2.71
Other OECD	1.47	1.48	1.54	1.52	1.50	1.50	1.52	1.53	1.54	1.55	1.56	1.56	1.50	1.51	1.55
Non-OECD	67.96	69.07	69.59	69.46	68.77	70.02	70.78	70.57	69.97	70.73	71.22	71.09	69.02	70.04	70.76
OPEC	37.46	38.22	38.61	38.42	38.30	39.01	39.54	39.57	39.67	39.87	40.06	40.10	38.18	39.10	39.93
Crude Oil Portion	30.92	31.65	32.03	31.80	31.51	32.14	32.60	32.57	32.54	32.69	32.81	32.79	31.60	32.21	32.71
Other Liquids (c)	6.55	6.57	6.58	6.62	6.79	6.87	6.94	7.00	7.13	7.18	7.25	7.31	6.58	6.90	7.22
Eurasia	14.09	14.01	13.98	14.13	14.28	14.22	14.13	14.06	14.04	14.01	13.98	13.98	14.06	14.17	14.00
China	4.66	4.73	4.71	4.72	4.65	4.68	4.69	4.69	4.61	4.64	4.65	4.65	4.70	4.68	4.64
Other Non-OECD	11.75	12.11	12.29	12.19	11.55	12.12	12.42	12.26	11.65	12.21	12.52	12.35	12.08	12.09	12.19
Total World Supply	94.60	95.50	96.39	96.52	95.47	96.45	96.66	96.48	95.83	96.62	96.94	97.03	95.76	96.27	96.61
Non-OPEC Supply	57.13	57.28	57.78	58.09	57.18	57.44	57.12	56.91	56.16	56.75	56.88	56.93	57.57	57.16	56.68
Consumption (million barrels per day) (d)															
OECD	46.50	45.38	46.75	46.71	46.62	45.74	46.57	47.02	46.80	45.77	46.73	47.20	46.33	46.49	46.62
U.S. (50 States)	19.29	19.25	19.68	19.36	19.12	19.49	19.78	19.69	19.36	19.55	19.98	19.93	19.40	19.52	19.71
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	2.26	2.38	2.41	2.35	2.29	2.40	2.38	2.35	2.29	2.40	2.38	2.35	2.35	2.35
Europe	13.42	13.50	14.12	13.83	13.67	13.41	13.85	13.80	13.61	13.36	13.80	13.74	13.72	13.68	13.63
Japan	4.79	3.89	3.94	4.28	4.55	3.82	3.85	4.22	4.45	3.75	3.78	4.14	4.22	4.11	4.03
Other OECD	6.26	6.10	6.26	6.45	6.54	6.34	6.29	6.53	6.60	6.40	6.34	6.59	6.27	6.42	6.48
Non-OECD	46.16	47.73	48.06	47.50	47.14	48.76	49.08	48.51	48.30	49.96	50.28	49.69	47.37	48.37	49.56
Eurasia	4.71	4.65	4.92	4.90	4.73	4.66	4.93	4.92	4.80	4.73	5.01	4.99	4.80	4.81	4.88
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	11.06	11.67	11.62	11.57	11.35	11.97	11.92	11.87	11.18	11.48	11.78
Other Asia	12.11	12.33	11.87	12.19	12.53	12.75	12.27	12.60	12.91	13.14	12.64	12.99	12.13	12.54	12.92
Other Non-OECD	17.85	18.67	19.22	18.41	18.10	18.95	19.51	18.67	18.50	19.37	19.96	19.08	18.54	18.81	19.23
Total World Consumption	92.66	93.11	94.81	94.21	93.76	94.50	95.65	95.53	95.09	95.72	97.01	96.90	93.70	94.86	96.19
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	-0.54	-0.69	-0.32	-0.15	-0.41	-0.09	0.11	0.54	0.11	-0.30	-0.01	0.62	-0.43	0.04	0.11
Other OECD	-0.32	-0.34	-0.40	-0.79	-0.48	-0.65	-0.40	-0.54	-0.31	-0.20	0.03	-0.27	-0.46	-0.52	-0.19
Other Stock Draws and Balance	-1.07	-1.36	-0.86	-1.37	-0.83	-1.21	-0.73	-0.96	-0.54	-0.39	0.05	-0.49	-1.17	-0.93	-0.34
Total Stock Draw	-1.94	-2.39	-1.58	-2.31	-1.72	-1.95	-1.02	-0.95	-0.73	-0.89	0.07	-0.14	-2.05	-1.41	-0.42
End-of-period Commercial Crude Oil and Other Liquids Inventories															
U.S. Commercial Inventory	1,217	1,277	1,306	1,320	1,357	1,365	1,355	1,305	1,295	1,322	1,324	1,268	1,320	1,305	1,268
OECD Commercial Inventory	2,797	2,888	2,961	3,047	3,128	3,196	3,222	3,222	3,239	3,285	3,284	3,253	3,047	3,222	3,253

- = 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 - April 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
North America	22.17	21.84	22.31	22.35	22.08	<i>21.92</i>	<i>21.52</i>	<i>21.52</i>	<i>21.49</i>	<i>21.60</i>	<i>21.53</i>	<i>21.75</i>	22.17	<i>21.76</i>	<i>21.59</i>
Canada	4.69	4.16	4.55	4.62	4.64	<i>4.67</i>	<i>4.74</i>	<i>4.79</i>	<i>4.86</i>	<i>4.86</i>	<i>4.89</i>	<i>4.93</i>	4.50	<i>4.71</i>	<i>4.88</i>
Mexico	2.68	2.58	2.62	2.62	2.61	<i>2.59</i>	<i>2.58</i>	<i>2.56</i>	<i>2.54</i>	<i>2.53</i>	<i>2.51</i>	<i>2.49</i>	2.62	<i>2.58</i>	<i>2.52</i>
United States	14.81	15.10	15.13	15.11	14.83	<i>14.66</i>	<i>14.21</i>	<i>14.17</i>	<i>14.09</i>	<i>14.22</i>	<i>14.13</i>	<i>14.33</i>	15.04	<i>14.46</i>	<i>14.19</i>
Central and South America	4.95	5.42	5.66	5.47	4.84	<i>5.40</i>	<i>5.67</i>	<i>5.48</i>	<i>4.91</i>	<i>5.43</i>	<i>5.70</i>	<i>5.50</i>	5.38	<i>5.35</i>	<i>5.39</i>
Argentina	0.70	0.71	0.72	0.74	0.70	<i>0.72</i>	<i>0.73</i>	<i>0.74</i>	<i>0.71</i>	<i>0.72</i>	<i>0.73</i>	<i>0.74</i>	0.72	<i>0.72</i>	<i>0.73</i>
Brazil	2.75	3.23	3.50	3.24	2.72	<i>3.25</i>	<i>3.52</i>	<i>3.26</i>	<i>2.78</i>	<i>3.27</i>	<i>3.54</i>	<i>3.28</i>	3.18	<i>3.19</i>	<i>3.22</i>
Colombia	1.06	1.05	1.00	1.02	0.96	<i>1.01</i>	<i>1.00</i>	<i>1.02</i>	<i>0.97</i>	<i>1.01</i>	<i>1.00</i>	<i>1.02</i>	1.03	<i>1.00</i>	<i>1.00</i>
Other Central and S. America	0.45	0.43	0.44	0.46	0.45	<i>0.43</i>	<i>0.43</i>	<i>0.46</i>	<i>0.45</i>	<i>0.42</i>	<i>0.43</i>	<i>0.46</i>	0.45	<i>0.44</i>	<i>0.44</i>
Europe	3.95	4.05	3.90	4.13	4.06	<i>3.94</i>	<i>3.79</i>	<i>3.80</i>	<i>3.77</i>	<i>3.68</i>	<i>3.58</i>	<i>3.58</i>	4.01	<i>3.90</i>	<i>3.65</i>
Norway	1.94	1.94	1.92	2.03	2.05	<i>2.00</i>	<i>1.94</i>	<i>1.90</i>	<i>1.88</i>	<i>1.85</i>	<i>1.81</i>	<i>1.78</i>	1.96	<i>1.97</i>	<i>1.83</i>
United Kingdom (offshore)	0.88	0.97	0.85	0.98	0.89	<i>0.83</i>	<i>0.72</i>	<i>0.76</i>	<i>0.76</i>	<i>0.70</i>	<i>0.63</i>	<i>0.67</i>	0.92	<i>0.80</i>	<i>0.69</i>
Other North Sea	0.18	0.18	0.18	0.18	0.18	<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	14.03	14.00	14.15	14.29	<i>14.23</i>	<i>14.14</i>	<i>14.07</i>	<i>14.06</i>	<i>14.02</i>	<i>14.00</i>	<i>14.00</i>	14.07	<i>14.18</i>	<i>14.02</i>
Azerbaijan	0.86	0.87	0.88	0.84	0.80	<i>0.80</i>	<i>0.81</i>	<i>0.84</i>	<i>0.83</i>	<i>0.81</i>	<i>0.79</i>	<i>0.78</i>	0.86	<i>0.81</i>	<i>0.80</i>
Kazakhstan	1.76	1.72	1.70	1.75	1.73	<i>1.71</i>	<i>1.70</i>	<i>1.69</i>	<i>1.71</i>	<i>1.70</i>	<i>1.70</i>	<i>1.72</i>	1.73	<i>1.71</i>	<i>1.71</i>
Russia	10.99	10.98	10.95	11.08	11.27	<i>11.23</i>	<i>11.14</i>	<i>11.06</i>	<i>11.03</i>	<i>11.03</i>	<i>11.03</i>	<i>11.02</i>	11.00	<i>11.17</i>	<i>11.03</i>
Turkmenistan	0.29	0.27	0.28	0.27	0.28	<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	0.19	0.20	0.21	<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>	0.20	<i>0.20</i>	<i>0.19</i>
Middle East	1.18	1.13	1.13	1.13	1.15	<i>1.15</i>	<i>1.16</i>	<i>1.16</i>	<i>1.17</i>	<i>1.18</i>	<i>1.18</i>	<i>1.19</i>	1.14	<i>1.16</i>	<i>1.18</i>
Oman	0.97	0.98	1.00	1.01	1.03	<i>1.04</i>	<i>1.04</i>	<i>1.05</i>	<i>1.06</i>	<i>1.06</i>	<i>1.07</i>	<i>1.07</i>	0.99	<i>1.04</i>	<i>1.06</i>
Syria	0.03	0.03	0.03	0.03	0.03	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	<i>0.03</i>	0.03	<i>0.03</i>	<i>0.03</i>
Yemen	0.11	0.04	0.02	0.02	0.01	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	0.05	<i>0.01</i>	<i>0.01</i>
Asia and Oceania	8.43	8.48	8.46	8.54	8.45	<i>8.48</i>	<i>8.51</i>	<i>8.53</i>	<i>8.45</i>	<i>8.49</i>	<i>8.51</i>	<i>8.52</i>	8.48	<i>8.49</i>	<i>8.49</i>
Australia	0.39	0.39	0.45	0.43	0.41	<i>0.41</i>	<i>0.42</i>	<i>0.43</i>	<i>0.44</i>	<i>0.45</i>	<i>0.45</i>	<i>0.45</i>	0.42	<i>0.42</i>	<i>0.45</i>
China	4.66	4.73	4.71	4.72	4.65	<i>4.68</i>	<i>4.69</i>	<i>4.69</i>	<i>4.61</i>	<i>4.64</i>	<i>4.65</i>	<i>4.65</i>	4.70	<i>4.68</i>	<i>4.64</i>
India	1.01	1.00	1.01	1.01	1.01	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	<i>1.00</i>	<i>1.01</i>	<i>1.02</i>	<i>1.02</i>	1.01	<i>1.01</i>	<i>1.01</i>
Malaysia	0.78	0.75	0.70	0.74	0.75	<i>0.77</i>	<i>0.78</i>	<i>0.79</i>	<i>0.78</i>	<i>0.78</i>	<i>0.78</i>	<i>0.78</i>	0.74	<i>0.78</i>	<i>0.78</i>
Vietnam	0.36	0.34	0.35	0.37	0.34	<i>0.33</i>	<i>0.32</i>	<i>0.32</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	<i>0.31</i>	0.36	<i>0.33</i>	<i>0.31</i>
Africa	2.33	2.32	2.32	2.33	2.31	<i>2.31</i>	<i>2.32</i>	<i>2.34</i>	<i>2.31</i>	<i>2.35</i>	<i>2.37</i>	<i>2.39</i>	2.33	<i>2.32</i>	<i>2.36</i>
Egypt	0.71	0.70	0.71	0.70	0.70	<i>0.69</i>	<i>0.69</i>	<i>0.69</i>	<i>0.68</i>	<i>0.68</i>	<i>0.68</i>	<i>0.67</i>	0.70	<i>0.69</i>	<i>0.68</i>
Equatorial Guinea	0.27	0.27	0.27	0.27	0.25	<i>0.25</i>	<i>0.25</i>	<i>0.26</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	0.27	<i>0.25</i>	<i>0.24</i>
Gabon	0.21	0.21	0.21	0.21	0.21	<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	0.26	<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	57.13	57.28	57.78	58.09	57.18	<i>57.44</i>	<i>57.12</i>	<i>56.91</i>	<i>56.16</i>	<i>56.75</i>	<i>56.88</i>	<i>56.93</i>	57.57	<i>57.16</i>	<i>56.68</i>
OPEC non-crude liquids	6.55	6.57	6.58	6.62	6.79	<i>6.87</i>	<i>6.94</i>	<i>7.00</i>	<i>7.13</i>	<i>7.18</i>	<i>7.25</i>	<i>7.31</i>	6.58	<i>6.90</i>	<i>7.22</i>
Non-OPEC + OPEC non-crude	63.68	63.85	64.36	64.72	63.97	<i>64.31</i>	<i>64.06</i>	<i>63.91</i>	<i>63.28</i>	<i>63.93</i>	<i>64.13</i>	<i>64.24</i>	64.16	<i>64.06</i>	<i>63.90</i>
Unplanned non-OPEC Production Outages	0.27	0.46	0.40	0.34	0.38	<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 - April 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	1.05	-	-	-	-	-	-	-	1.10	-	-
Angola	1.77	1.78	1.81	1.78	1.77	-	-	-	-	-	-	-	1.79	-	-
Ecuador	0.55	0.54	0.54	0.54	0.55	-	-	-	-	-	-	-	0.54	-	-
Indonesia	0.67	0.69	0.69	0.71	0.71	-	-	-	-	-	-	-	0.69	-	-
Iran	2.80	2.80	2.80	2.80	3.03	-	-	-	-	-	-	-	2.80	-	-
Iraq	3.51	4.02	4.33	4.35	4.29	-	-	-	-	-	-	-	4.05	-	-
Kuwait	2.57	2.53	2.50	2.45	2.48	-	-	-	-	-	-	-	2.51	-	-
Libya	0.40	0.45	0.38	0.39	0.35	-	-	-	-	-	-	-	0.40	-	-
Nigeria	2.03	1.88	1.88	1.91	1.79	-	-	-	-	-	-	-	1.93	-	-
Qatar	0.68	0.68	0.68	0.68	0.66	-	-	-	-	-	-	-	0.68	-	-
Saudi Arabia	9.73	10.07	10.22	10.00	9.92	-	-	-	-	-	-	-	10.01	-	-
United Arab Emirates	2.70	2.70	2.70	2.70	2.60	-	-	-	-	-	-	-	2.70	-	-
Venezuela	2.40	2.40	2.40	2.40	2.30	-	-	-	-	-	-	-	2.40	-	-
OPEC Total	30.92	31.65	32.03	31.80	31.51	<i>32.14</i>	<i>32.60</i>	<i>32.57</i>	<i>32.54</i>	<i>32.69</i>	<i>32.81</i>	<i>32.79</i>	31.60	<i>32.21</i>	<i>32.71</i>
Other Liquids (a)	6.55	6.57	6.58	6.62	6.79	<i>6.87</i>	<i>6.94</i>	<i>7.00</i>	<i>7.13</i>	<i>7.18</i>	<i>7.25</i>	<i>7.31</i>	6.58	<i>6.90</i>	<i>7.22</i>
Total OPEC Supply	37.46	38.22	38.61	38.42	38.30	<i>39.01</i>	<i>39.54</i>	<i>39.57</i>	<i>39.67</i>	<i>39.87</i>	<i>40.06</i>	<i>40.10</i>	38.18	<i>39.10</i>	<i>39.93</i>
Crude Oil Production Capacity															
Africa	5.31	5.21	5.18	5.18	4.96	5.03	5.12	5.20	5.20	5.28	5.35	5.43	5.22	5.08	5.31
South America	2.95	2.94	2.95	2.97	2.87	2.86	2.86	2.89	2.77	2.76	2.65	2.65	2.95	2.87	2.71
Middle East	23.90	24.33	24.56	24.58	25.00	25.33	25.38	25.38	25.51	25.53	25.55	25.58	24.35	25.27	25.54
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	0.75	0.71
OPEC Total	32.86	33.20	33.38	33.44	33.54	<i>33.96</i>	<i>34.13</i>	<i>34.23</i>	<i>34.21</i>	<i>34.28</i>	<i>34.26</i>	<i>34.36</i>	33.22	<i>33.97</i>	<i>34.28</i>
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.01	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	0.01	0.04	0.02	0.01	0.02	0.04	0.02	0.01	0.00	0.00	0.01	0.02	0.01
Middle East	1.92	1.53	1.33	1.60	2.02	1.81	1.51	1.62	1.65	1.58	1.44	1.56	1.59	1.74	1.56
Asia	0.02	0.02	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	1.55	1.35	1.64	2.04	1.82	1.52	1.66	1.67	1.59	1.45	1.56	1.62	1.76	1.57
Unplanned OPEC Production Outages	2.56	2.66	2.79	2.79	2.10	<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>	2.70	<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 - April 2016

	2015				2016				2017				2015	2016	2017
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
North America	23.57	23.46	24.11	23.71	23.41	<i>23.73</i>	<i>24.11</i>	<i>24.01</i>	<i>23.65</i>	<i>23.80</i>	<i>24.31</i>	<i>24.25</i>	23.72	<i>23.82</i>	<i>24.01</i>
Canada	2.36	2.26	2.38	2.41	2.35	<i>2.29</i>	<i>2.40</i>	<i>2.38</i>	<i>2.35</i>	<i>2.29</i>	<i>2.40</i>	<i>2.38</i>	2.35	<i>2.35</i>	<i>2.35</i>
Mexico	1.91	1.95	2.04	1.93	1.93	<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>	1.96	<i>1.93</i>	<i>1.93</i>
United States	19.29	19.25	19.68	19.36	19.12	<i>19.49</i>	<i>19.78</i>	<i>19.69</i>	<i>19.36</i>	<i>19.55</i>	<i>19.98</i>	<i>19.93</i>	19.40	<i>19.52</i>	<i>19.71</i>
Central and South America	7.05	7.30	7.32	7.35	7.06	<i>7.33</i>	<i>7.36</i>	<i>7.34</i>	<i>7.10</i>	<i>7.37</i>	<i>7.40</i>	<i>7.38</i>	7.26	<i>7.27</i>	<i>7.31</i>
Brazil	3.00	3.11	3.18	3.17	2.95	<i>3.06</i>	<i>3.13</i>	<i>3.12</i>	<i>2.95</i>	<i>3.06</i>	<i>3.13</i>	<i>3.12</i>	3.12	<i>3.06</i>	<i>3.07</i>
Europe	14.13	14.22	14.86	14.56	14.39	<i>14.13</i>	<i>14.60</i>	<i>14.55</i>	<i>14.34</i>	<i>14.09</i>	<i>14.56</i>	<i>14.50</i>	14.44	<i>14.42</i>	<i>14.37</i>
Eurasia	4.74	4.68	4.95	4.93	4.76	<i>4.69</i>	<i>4.97</i>	<i>4.95</i>	<i>4.84</i>	<i>4.76</i>	<i>5.04</i>	<i>5.03</i>	4.83	<i>4.84</i>	<i>4.92</i>
Russia	3.39	3.34	3.54	3.53	3.35	<i>3.30</i>	<i>3.50</i>	<i>3.48</i>	<i>3.36</i>	<i>3.31</i>	<i>3.51</i>	<i>3.49</i>	3.45	<i>3.41</i>	<i>3.42</i>
Middle East	7.84	8.43	8.98	8.20	8.04	<i>8.64</i>	<i>9.22</i>	<i>8.35</i>	<i>8.27</i>	<i>8.90</i>	<i>9.50</i>	<i>8.59</i>	8.37	<i>8.57</i>	<i>8.82</i>
Asia and Oceania	31.42	31.14	30.75	31.60	32.05	<i>31.94</i>	<i>31.40</i>	<i>32.32</i>	<i>32.69</i>	<i>32.62</i>	<i>32.05</i>	<i>32.98</i>	31.23	<i>31.93</i>	<i>32.58</i>
China	10.77	11.36	11.32	11.27	11.06	<i>11.67</i>	<i>11.62</i>	<i>11.57</i>	<i>11.35</i>	<i>11.97</i>	<i>11.92</i>	<i>11.87</i>	11.18	<i>11.48</i>	<i>11.78</i>
Japan	4.79	3.89	3.94	4.28	4.55	<i>3.82</i>	<i>3.85</i>	<i>4.22</i>	<i>4.45</i>	<i>3.75</i>	<i>3.78</i>	<i>4.14</i>	4.22	<i>4.11</i>	<i>4.03</i>
India	4.08	4.06	3.72	4.02	4.29	<i>4.27</i>	<i>3.92</i>	<i>4.24</i>	<i>4.50</i>	<i>4.48</i>	<i>4.11</i>	<i>4.44</i>	3.97	<i>4.18</i>	<i>4.38</i>
Africa	3.89	3.88	3.84	3.86	4.04	<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	46.50	45.38	46.75	46.71	46.62	<i>45.74</i>	<i>46.57</i>	<i>47.02</i>	<i>46.80</i>	<i>45.77</i>	<i>46.73</i>	<i>47.20</i>	46.33	<i>46.49</i>	<i>46.62</i>
Total non-OECD Liquid Fuels Consumption	46.16	47.73	48.06	47.50	47.14	<i>48.76</i>	<i>49.08</i>	<i>48.51</i>	<i>48.30</i>	<i>49.96</i>	<i>50.28</i>	<i>49.69</i>	47.37	<i>48.37</i>	<i>49.56</i>
Total World Liquid Fuels Consumption	92.66	93.11	94.81	94.21	93.76	<i>94.50</i>	<i>95.65</i>	<i>95.53</i>	<i>95.09</i>	<i>95.72</i>	<i>97.01</i>	<i>96.90</i>	93.70	<i>94.86</i>	<i>96.19</i>
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	116.2	116.9	117.6	118.1	118.6	<i>119.5</i>	<i>120.3</i>	<i>121.2</i>	<i>122.2</i>	<i>123.0</i>	<i>123.9</i>	<i>124.8</i>	117.2	<i>119.9</i>	<i>123.5</i>
Percent change from prior year	2.7	2.5	2.4	2.1	2.1	<i>2.2</i>	<i>2.3</i>	<i>2.6</i>	<i>3.0</i>	<i>3.0</i>	<i>3.0</i>	<i>3.0</i>	2.4	<i>2.3</i>	<i>3.0</i>
OECD Index, 2010 Q1 = 100	109.2	109.8	110.4	110.7	111.2	<i>111.7</i>	<i>112.3</i>	<i>113.0</i>	<i>113.8</i>	<i>114.3</i>	<i>115.0</i>	<i>115.6</i>	110.0	<i>112.1</i>	<i>114.7</i>
Percent change from prior year	2.0	2.1	2.0	1.8	1.8	<i>1.7</i>	<i>1.8</i>	<i>2.1</i>	<i>2.3</i>	<i>2.3</i>	<i>2.4</i>	<i>2.3</i>	2.0	<i>1.9</i>	<i>2.3</i>
Non-OECD Index, 2010 Q1 = 100	125.2	125.9	126.8	127.6	128.1	<i>129.4</i>	<i>130.6</i>	<i>131.7</i>	<i>133.0</i>	<i>134.2</i>	<i>135.4</i>	<i>136.7</i>	126.4	<i>130.0</i>	<i>134.8</i>
Percent change from prior year	3.4	3.0	2.8	2.5	2.3	<i>2.8</i>	<i>3.0</i>	<i>3.2</i>	<i>3.8</i>	<i>3.7</i>	<i>3.7</i>	<i>3.9</i>	2.9	<i>2.8</i>	<i>3.8</i>
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100	119.42	119.72	123.05	124.95	129.47	<i>131.57</i>	<i>131.67</i>	<i>131.40</i>	<i>130.96</i>	<i>130.41</i>	<i>130.10</i>	<i>129.79</i>	121.78	<i>131.03</i>	<i>130.31</i>
Percent change from prior year	10.2	10.8	12.7	9.8	8.4	<i>9.9</i>	<i>7.0</i>	<i>5.2</i>	<i>1.2</i>	<i>-0.9</i>	<i>-1.2</i>	<i>-1.2</i>	10.9	<i>7.6</i>	<i>-0.5</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 - April 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)	9.48	9.50	9.43	9.31	9.11	8.79	8.29	8.21	8.16	8.07	7.89	8.05	9.43	8.60	8.04
Alaska	0.50	0.48	0.44	0.51	0.50	0.48	0.43	0.49	0.48	0.46	0.42	0.49	0.48	0.47	0.46
Federal Gulf of Mexico (b)	1.46	1.47	1.64	1.59	1.64	1.68	1.60	1.74	1.83	1.84	1.75	1.87	1.54	1.66	1.82
Lower 48 States (excl GOM)	7.52	7.55	7.35	7.21	6.97	6.64	6.27	5.98	5.86	5.77	5.72	5.70	7.41	6.46	5.76
Crude Oil Net Imports (c)	6.84	6.74	6.93	7.06	7.41	7.25	7.85	7.81	7.61	8.14	8.55	8.13	6.89	7.58	8.11
SPR Net Withdrawals	0.00	-0.03	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.01	0.00	0.00
Commercial Inventory Net Withdrawals	-0.91	0.06	0.10	-0.22	-0.53	0.14	0.29	0.13	-0.27	0.15	0.20	0.12	-0.24	0.01	0.05
Crude Oil Adjustment (d)	0.11	0.22	0.13	0.09	-0.03	0.19	0.21	0.15	0.19	0.19	0.21	0.15	0.14	0.13	0.19
Total Crude Oil Input to Refineries	15.53	16.48	16.58	16.24	15.96	16.38	16.64	16.30	15.70	16.54	16.85	16.47	16.21	16.32	16.39
Other Supply															
Refinery Processing Gain	0.99	1.02	1.08	1.06	1.02	1.05	1.08	1.08	1.03	1.06	1.09	1.09	1.04	1.06	1.07
Natural Gas Plant Liquids Production	3.09	3.27	3.31	3.41	3.37	3.48	3.49	3.54	3.56	3.74	3.80	3.85	3.27	3.47	3.74
Renewables and Oxygenate Production (e)	1.05	1.10	1.10	1.11	1.11	1.11	1.12	1.10	1.11	1.11	1.12	1.11	1.09	1.11	1.11
Fuel Ethanol Production	0.96	0.96	0.96	0.99	0.98	0.98	0.98	0.97	0.98	0.97	0.98	0.97	0.97	0.98	0.97
Petroleum Products Adjustment (f)	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.22	0.24	0.24	0.24	0.21	0.23	0.24
Product Net Imports (c)	-1.89	-2.12	-2.20	-2.75	-2.67	-2.52	-2.59	-2.98	-2.65	-2.69	-2.90	-3.30	-2.24	-2.69	-2.89
Hydrocarbon Gas Liquids	-0.68	-0.80	-0.93	-0.87	-1.08	-1.10	-1.17	-1.14	-1.23	-1.35	-1.41	-1.36	-0.82	-1.12	-1.34
Unfinished Oils	0.26	0.28	0.38	0.19	0.28	0.29	0.31	0.27	0.30	0.31	0.34	0.29	0.28	0.29	0.31
Other HC/Oxygenates	-0.08	-0.09	-0.06	-0.07	-0.10	-0.06	-0.03	-0.03	-0.07	-0.05	-0.03	-0.03	-0.07	-0.06	-0.04
Motor Gasoline Blend Comp.	0.41	0.52	0.60	0.28	0.28	0.50	0.48	0.41	0.44	0.64	0.51	0.41	0.45	0.42	0.50
Finished Motor Gasoline	-0.44	-0.32	-0.40	-0.46	-0.44	-0.35	-0.33	-0.51	-0.43	-0.45	-0.39	-0.59	-0.40	-0.41	-0.47
Jet Fuel	-0.06	0.01	-0.05	-0.06	-0.04	-0.01	0.01	-0.10	-0.03	-0.02	-0.02	-0.10	-0.04	-0.03	-0.04
Distillate Fuel Oil	-0.67	-1.05	-1.12	-1.10	-0.90	-1.12	-1.18	-1.09	-0.92	-1.10	-1.21	-1.14	-0.99	-1.07	-1.09
Residual Fuel Oil	-0.13	-0.21	-0.11	-0.09	-0.07	-0.23	-0.21	-0.20	-0.22	-0.24	-0.21	-0.22	-0.14	-0.18	-0.22
Other Oils (g)	-0.50	-0.46	-0.50	-0.57	-0.61	-0.43	-0.47	-0.59	-0.49	-0.42	-0.47	-0.59	-0.51	-0.52	-0.49
Product Inventory Net Withdrawals	0.36	-0.72	-0.41	0.08	0.13	-0.23	-0.18	0.41	0.38	-0.45	-0.22	0.48	-0.17	0.03	0.05
Total Supply	19.32	19.25	19.68	19.36	19.14	19.49	19.78	19.69	19.36	19.55	19.98	19.93	19.40	19.52	19.71
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	2.72	2.27	2.29	2.58	2.69	2.30	2.33	2.68	2.67	2.29	2.43	2.81	2.47	2.50	2.55
Unfinished Oils	-0.05	0.05	-0.03	-0.01	0.01	-0.01	-0.01	0.04	0.00	-0.01	-0.01	0.04	-0.01	0.01	0.00
Motor Gasoline	8.81	9.26	9.39	9.17	9.02	9.41	9.50	9.24	8.99	9.40	9.48	9.27	9.16	9.29	9.28
Fuel Ethanol blended into Motor Gasoline	0.87	0.92	0.93	0.91	0.90	0.94	0.95	0.93	0.90	0.94	0.95	0.93	0.91	0.93	0.93
Jet Fuel	1.45	1.54	1.59	1.57	1.48	1.55	1.58	1.53	1.47	1.56	1.60	1.55	1.54	1.54	1.55
Distillate Fuel Oil	4.27	3.88	3.93	3.83	3.76	3.95	3.91	4.01	4.12	4.00	3.99	4.06	3.98	3.91	4.04
Residual Fuel Oil	0.24	0.19	0.31	0.30	0.30	0.20	0.23	0.21	0.20	0.19	0.22	0.20	0.26	0.24	0.21
Other Oils (g)	1.85	2.06	2.20	1.92	1.85	2.10	2.24	1.98	1.90	2.12	2.27	2.00	2.01	2.04	2.08
Total Consumption	19.29	19.25	19.68	19.36	19.12	19.49	19.78	19.69	19.36	19.55	19.98	19.93	19.40	19.52	19.71
Total Petroleum and Other Liquids Net Imports	4.95	4.61	4.74	4.31	4.74	4.73	5.25	4.83	4.97	5.45	5.65	4.82	4.65	4.89	5.22
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	474.8	469.5	460.8	481.4	529.9	516.7	490.3	477.9	502.0	488.6	470.1	458.9	481.4	477.9	458.9
Hydrocarbon Gas Liquids	138.8	196.3	228.7	197.3	151.2	194.0	219.8	174.4	139.9	184.2	207.0	158.6	197.3	174.4	158.6
Unfinished Oils	84.7	86.0	88.8	82.6	89.9	88.5	85.2	79.5	89.4	87.8	85.3	79.4	82.6	79.5	79.4
Other HC/Oxygenates	26.7	25.0	23.8	26.8	28.2	26.9	26.2	26.5	28.6	27.4	26.6	26.9	26.8	26.5	26.9
Total Motor Gasoline	231.5	221.0	225.1	235.0	246.0	227.9	222.2	235.5	234.6	228.3	226.3	237.1	235.0	235.5	237.1
Finished Motor Gasoline	26.9	25.7	29.0	28.5	26.9	25.5	25.8	27.5	27.1	25.6	26.4	27.8	28.5	27.5	27.8
Motor Gasoline Blend Comp.	204.6	195.4	196.1	206.5	219.1	202.4	196.3	208.0	207.5	202.7	199.9	209.3	206.5	208.0	209.3
Jet Fuel	37.2	43.7	40.4	40.3	44.6	44.7	46.3	42.1	41.4	42.5	44.8	41.0	40.3	42.1	41.0
Distillate Fuel Oil	128.3	139.4	148.8	160.7	163.0	165.1	173.8	176.6	160.0	165.7	173.8	174.7	160.7	176.6	174.7
Residual Fuel Oil	38.1	41.8	41.3	42.2	44.2	43.5	40.1	39.5	40.5	41.2	39.1	38.8	42.2	39.5	38.8
Other Oils (g)	57.3	54.6	48.3	53.5	59.9	57.6	51.4	53.2	58.9	56.8	50.7	52.7	53.5	53.2	52.7
Total Commercial Inventory	1,217	1,277	1,306	1,320	1,357	1,365	1,355	1,305	1,295	1,322	1,324	1,268	1,320	1,305	1,268
Crude Oil in SPR	691	694	695	695	695	695	695	695	695	695	695	694	695	695	694

- = no data available

(a) Includes lease condensate.

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

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

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

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

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

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

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - April 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	1.20	1.20	1.25	1.26	1.30	1.32	1.41	1.45	1.49	1.11	1.25	1.42
Propane	1.07	1.12	1.13	1.15	1.14	1.15	1.14	1.16	1.17	1.20	1.20	1.22	1.12	1.15	1.20
Butanes	0.58	0.62	0.64	0.64	0.62	0.64	0.63	0.64	0.65	0.67	0.67	0.68	0.62	0.63	0.67
Natural Gasoline (Pentanes Plus)	0.39	0.44	0.46	0.43	0.41	0.44	0.46	0.44	0.42	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	0.55	0.55	0.58	0.57	0.56	0.55	0.58	0.57	0.57	0.56	0.56	0.57
Butanes/Butylenes	-0.08	0.27	0.19	-0.19	-0.09	0.25	0.19	-0.17	-0.06	0.25	0.19	-0.17	0.05	0.04	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	-0.10	-0.12	-0.16	-0.19	-0.21	-0.22	-0.24	-0.26	-0.06	-0.14	-0.23
Propane/Propylene	-0.40	-0.49	-0.56	-0.57	-0.69	-0.64	-0.65	-0.62	-0.69	-0.76	-0.76	-0.72	-0.50	-0.65	-0.73
Butanes/Butylenes	-0.06	-0.09	-0.11	-0.08	-0.10	-0.16	-0.14	-0.13	-0.11	-0.18	-0.17	-0.15	-0.08	-0.13	-0.15
Natural Gasoline (Pentanes Plus)	-0.17	-0.15	-0.21	-0.16	-0.20	-0.19	-0.22	-0.21	-0.22	-0.20	-0.24	-0.22	-0.17	-0.20	-0.22
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.40	0.27	0.32	0.50	0.41	0.27	0.30	0.43	0.37	0.27	0.30	0.43	0.37	0.35	0.34
Natural Gasoline (Pentanes Plus)	0.15	0.14	0.16	0.15	0.15	0.16	0.16	0.15	0.15	0.16	0.16	0.16	0.15	0.16	0.15
HGL Consumption															
Ethane/Ethylene	1.03	1.02	1.02	1.13	1.10	1.10	1.11	1.15	1.11	1.15	1.23	1.28	1.05	1.12	1.19
Propane/Propylene	1.43	0.92	0.96	1.17	1.35	0.92	0.94	1.24	1.34	0.84	0.92	1.23	1.12	1.11	1.08
Butanes/Butylenes	0.16	0.24	0.22	0.20	0.18	0.23	0.21	0.22	0.17	0.24	0.22	0.23	0.20	0.21	0.21
Natural Gasoline (Pentanes Plus)	0.10	0.09	0.09	0.08	0.07	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	33.79	33.63	37.54	38.09	35.89	34.26	37.99	38.48	36.03	32.18	36.29	36.70
Propane/Propylene	58.10	84.20	100.20	96.67	65.36	80.18	91.48	78.63	50.75	67.26	75.70	60.09	96.67	78.63	60.09
Butanes/Butylenes	32.46	59.42	76.52	46.14	32.99	54.99	69.76	41.69	35.61	57.32	71.73	43.40	46.14	41.69	43.40
Natural Gasoline (Pentanes Plus)	17.16	20.51	19.00	20.54	18.41	20.35	20.77	19.62	18.38	20.78	21.47	20.66	20.54	19.62	20.66
Refinery and Blender Net Inputs															
Crude Oil	15.53	16.48	16.58	16.24	15.96	16.38	16.64	16.30	15.70	16.54	16.85	16.47	16.21	16.32	16.39
Hydrocarbon Gas Liquids	0.54	0.40	0.47	0.64	0.56	0.42	0.46	0.58	0.51	0.43	0.46	0.59	0.52	0.51	0.50
Other Hydrocarbons/Oxygenates	1.12	1.18	1.19	1.17	1.15	1.24	1.28	1.25	1.20	1.26	1.29	1.27	1.16	1.23	1.25
Unfinished Oils	0.24	0.22	0.38	0.27	0.19	0.31	0.35	0.30	0.19	0.34	0.37	0.31	0.28	0.29	0.31
Motor Gasoline Blend Components	0.72	0.91	0.75	0.39	0.33	0.91	0.74	0.48	0.66	0.91	0.74	0.51	0.69	0.61	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	18.71	18.20	19.26	19.47	18.91	18.27	19.48	19.71	19.15	18.86	18.96	19.16
Refinery Processing Gain															
.....	0.99	1.02	1.08	1.06	1.02	1.05	1.08	1.08	1.03	1.06	1.09	1.09	1.04	1.06	1.07
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.47	0.86	0.76	0.37	0.46	0.83	0.76	0.39	0.49	0.84	0.76	0.40	0.61	0.61	0.62
Finished Motor Gasoline	9.48	9.83	9.97	9.83	9.60	9.96	10.02	9.95	9.63	10.05	10.07	10.05	9.78	9.88	9.95
Jet Fuel	1.50	1.61	1.60	1.63	1.57	1.56	1.59	1.58	1.49	1.60	1.65	1.60	1.59	1.57	1.59
Distillate Fuel	4.82	4.99	5.08	5.00	4.66	5.04	5.13	5.07	4.80	5.11	5.22	5.16	4.97	4.97	5.08
Residual Fuel	0.43	0.44	0.41	0.39	0.41	0.43	0.41	0.40	0.43	0.44	0.41	0.41	0.42	0.41	0.42
Other Oils (a)	2.44	2.48	2.63	2.55	2.52	2.50	2.64	2.59	2.45	2.52	2.68	2.61	2.52	2.56	2.57
Total Refinery and Blender Net Production	19.13	20.20	20.45	19.77	19.22	20.31	20.54	19.99	19.30	20.55	20.80	20.24	19.89	20.02	20.22
Refinery Distillation Inputs															
.....	15.78	16.69	16.85	16.40	16.22	16.60	16.91	16.56	16.00	16.75	17.09	16.71	16.43	16.57	16.64
Refinery Operable Distillation Capacity															
.....	17.88	17.98	18.08	18.16	18.22	18.17	18.33	18.41	18.45	18.45	18.45	18.45	18.03	18.29	18.45
Refinery Distillation Utilization Factor															
.....	0.88	0.93	0.93	0.90	0.89	0.91	0.92	0.90	0.87	0.91	0.93	0.91	0.91	0.91	0.90

- = no data available

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

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

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - April 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	145	118	<i>134</i>	<i>127</i>	<i>104</i>	<i>109</i>	<i>135</i>	<i>138</i>	<i>127</i>	173	<i>121</i>	<i>128</i>
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	228	259	247	211	186	<i>201</i>	<i>196</i>	<i>179</i>	<i>181</i>	<i>205</i>	<i>208</i>	<i>203</i>	236	<i>191</i>	<i>200</i>
PADD 2	216	255	253	209	175	<i>199</i>	<i>195</i>	<i>170</i>	<i>172</i>	<i>204</i>	<i>207</i>	<i>195</i>	234	<i>185</i>	<i>195</i>
PADD 3	204	240	229	190	166	<i>184</i>	<i>177</i>	<i>154</i>	<i>158</i>	<i>184</i>	<i>187</i>	<i>177</i>	216	<i>170</i>	<i>177</i>
PADD 4	207	261	276	218	183	<i>199</i>	<i>201</i>	<i>175</i>	<i>164</i>	<i>197</i>	<i>212</i>	<i>199</i>	241	<i>190</i>	<i>193</i>
PADD 5	271	328	327	264	240	<i>253</i>	<i>248</i>	<i>217</i>	<i>207</i>	<i>244</i>	<i>250</i>	<i>232</i>	298	<i>240</i>	<i>233</i>
U.S. Average	227	267	260	216	188	<i>207</i>	<i>202</i>	<i>179</i>	<i>178</i>	<i>207</i>	<i>212</i>	<i>201</i>	243	<i>194</i>	<i>200</i>
Gasoline All Grades Including Taxes	236	275	269	226	199	<i>217</i>	<i>212</i>	<i>190</i>	<i>189</i>	<i>218</i>	<i>223</i>	<i>213</i>	252	<i>204</i>	<i>211</i>
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	64.5	61.3	62.6	60.3	65.9	<i>63.2</i>	<i>59.0</i>	<i>61.4</i>	<i>62.3</i>	<i>63.7</i>	<i>61.2</i>	<i>63.6</i>	60.3	<i>61.4</i>	<i>63.6</i>
PADD 2	52.9	50.4	47.0	53.7	56.7	<i>50.2</i>	<i>49.0</i>	<i>51.1</i>	<i>52.1</i>	<i>49.1</i>	<i>49.4</i>	<i>51.1</i>	53.7	<i>51.1</i>	<i>51.1</i>
PADD 3	78.4	74.6	78.1	84.6	84.5	<i>78.7</i>	<i>78.4</i>	<i>82.9</i>	<i>82.0</i>	<i>79.8</i>	<i>80.3</i>	<i>82.8</i>	84.6	<i>82.9</i>	<i>82.8</i>
PADD 4	6.5	6.8	7.1	7.7	8.5	<i>7.2</i>	<i>7.0</i>	<i>7.8</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.8</i>	7.7	<i>7.8</i>	<i>7.8</i>
PADD 5	29.2	28.0	30.3	28.7	30.3	<i>28.6</i>	<i>28.7</i>	<i>32.3</i>	<i>30.9</i>	<i>28.4</i>	<i>28.2</i>	<i>31.8</i>	28.7	<i>32.3</i>	<i>31.8</i>
U.S. Total	231.5	221.0	225.1	235.0	246.0	<i>227.9</i>	<i>222.2</i>	<i>235.5</i>	<i>234.6</i>	<i>228.3</i>	<i>226.3</i>	<i>237.1</i>	235.0	<i>235.5</i>	<i>237.1</i>
Finished Gasoline Inventories															
U.S. Total	26.9	25.7	29.0	28.5	26.9	<i>25.5</i>	<i>25.8</i>	<i>27.5</i>	<i>27.1</i>	<i>25.6</i>	<i>26.4</i>	<i>27.8</i>	28.5	<i>27.5</i>	<i>27.8</i>
Gasoline Blending Components Inventories															
U.S. Total	204.6	195.4	196.1	206.5	219.1	<i>202.4</i>	<i>196.3</i>	<i>208.0</i>	<i>207.5</i>	<i>202.7</i>	<i>199.9</i>	<i>209.3</i>	206.5	<i>208.0</i>	<i>209.3</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 - April 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	78.02	78.90	79.78	79.04	79.37	<i>79.50</i>	<i>79.51</i>	<i>80.19</i>	<i>80.85</i>	<i>81.11</i>	<i>81.34</i>	<i>82.10</i>	78.94	<i>79.64</i>	<i>81.35</i>
Alaska	0.99	0.93	0.86	0.98	1.00	<i>0.84</i>	<i>0.76</i>	<i>0.93</i>	<i>0.97</i>	<i>0.82</i>	<i>0.75</i>	<i>0.93</i>	0.94	<i>0.88</i>	<i>0.87</i>
Federal GOM (a)	3.37	3.68	3.95	3.57	3.48	<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>3.31</i>	<i>3.10</i>
Lower 48 States (excl GOM)	73.66	74.28	74.97	74.49	74.89	<i>75.27</i>	<i>75.54</i>	<i>76.09</i>	<i>76.66</i>	<i>77.12</i>	<i>77.59</i>	<i>78.14</i>	74.35	<i>75.45</i>	<i>77.38</i>
Total Dry Gas Production	73.58	74.20	75.02	74.12	74.52	<i>74.62</i>	<i>74.63</i>	<i>75.27</i>	<i>75.89</i>	<i>76.13</i>	<i>76.35</i>	<i>77.06</i>	74.23	<i>74.76</i>	<i>76.36</i>
LNG Gross Imports	0.43	0.08	0.26	0.24	0.23	<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>	0.25	<i>0.18</i>	<i>0.12</i>
LNG Gross Exports	0.06	0.06	0.09	0.10	0.05	<i>0.26</i>	<i>0.66</i>	<i>1.00</i>	<i>1.04</i>	<i>1.10</i>	<i>1.35</i>	<i>1.73</i>	0.08	<i>0.49</i>	<i>1.31</i>
Pipeline Gross Imports	8.36	6.69	6.69	7.06	7.43	<i>6.20</i>	<i>6.53</i>	<i>6.71</i>	<i>7.34</i>	<i>6.20</i>	<i>6.51</i>	<i>6.76</i>	7.20	<i>6.72</i>	<i>6.70</i>
Pipeline Gross Exports	4.98	4.36	4.81	5.08	5.33	<i>5.07</i>	<i>5.39</i>	<i>5.53</i>	<i>5.27</i>	<i>5.15</i>	<i>5.30</i>	<i>5.57</i>	4.81	<i>5.33</i>	<i>5.32</i>
Supplemental Gaseous Fuels	0.17	0.16	0.14	0.18	0.16	<i>0.16</i>	<i>0.16</i>	<i>0.17</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	-0.55	13.20	<i>-7.96</i>	<i>-7.16</i>	<i>4.25</i>	<i>17.43</i>	<i>-9.17</i>	<i>-8.61</i>	<i>3.30</i>	-1.46	<i>0.57</i>	<i>0.67</i>
Total Supply	95.98	63.71	66.74	75.87	90.15	<i>67.85</i>	<i>68.27</i>	<i>80.03</i>	<i>94.64</i>	<i>67.20</i>	<i>67.87</i>	<i>80.12</i>	75.49	<i>76.56</i>	<i>77.39</i>
Balancing Item (b)	0.68	0.38	-0.62	-1.32	0.24	<i>-1.03</i>	<i>-0.25</i>	<i>-0.24</i>	<i>-0.04</i>	<i>-0.17</i>	<i>0.67</i>	<i>0.45</i>	-0.23	<i>-0.32</i>	<i>0.23</i>
Total Primary Supply	96.66	64.09	66.12	74.55	90.39	<i>66.81</i>	<i>68.03</i>	<i>79.79</i>	<i>94.59</i>	<i>67.03</i>	<i>68.54</i>	<i>80.57</i>	75.27	<i>76.24</i>	<i>77.62</i>
Consumption (billion cubic feet per day)															
Residential	27.52	6.91	3.46	12.92	22.71	<i>6.79</i>	<i>3.37</i>	<i>15.51</i>	<i>25.26</i>	<i>6.99</i>	<i>3.40</i>	<i>15.77</i>	12.64	<i>12.08</i>	<i>12.81</i>
Commercial	16.01	5.87	4.43	8.95	13.54	<i>6.05</i>	<i>4.62</i>	<i>10.54</i>	<i>14.88</i>	<i>6.14</i>	<i>4.68</i>	<i>10.80</i>	8.78	<i>8.68</i>	<i>9.10</i>
Industrial	22.68	19.61	19.18	20.84	22.51	<i>20.19</i>	<i>19.95</i>	<i>21.82</i>	<i>23.00</i>	<i>20.61</i>	<i>20.40</i>	<i>22.30</i>	20.57	<i>21.12</i>	<i>21.57</i>
Electric Power (c)	23.05	25.28	32.50	25.07	24.35	<i>27.27</i>	<i>33.54</i>	<i>24.94</i>	<i>23.95</i>	<i>26.68</i>	<i>33.38</i>	<i>24.59</i>	26.50	<i>27.54</i>	<i>27.17</i>
Lease and Plant Fuel	4.28	4.33	4.38	4.34	4.36	<i>4.36</i>	<i>4.36</i>	<i>4.40</i>	<i>4.44</i>	<i>4.45</i>	<i>4.46</i>	<i>4.51</i>	4.33	<i>4.37</i>	<i>4.46</i>
Pipeline and Distribution Use	3.03	2.01	2.07	2.33	2.81	<i>2.04</i>	<i>2.08</i>	<i>2.46</i>	<i>2.95</i>	<i>2.05</i>	<i>2.09</i>	<i>2.49</i>	2.36	<i>2.35</i>	<i>2.39</i>
Vehicle Use	0.09	0.09	0.10	0.10	0.11	<i>0.11</i>	<i>0.11</i>	<i>0.11</i>	<i>0.11</i>	<i>0.11</i>	<i>0.11</i>	<i>0.11</i>	0.09	<i>0.11</i>	<i>0.11</i>
Total Consumption	96.66	64.09	66.12	74.55	90.39	<i>66.81</i>	<i>68.03</i>	<i>79.79</i>	<i>94.59</i>	<i>67.03</i>	<i>68.54</i>	<i>80.57</i>	75.27	<i>76.24</i>	<i>77.62</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	1,483	2,658	3,625	3,677	2,478	<i>3,203</i>	<i>3,862</i>	<i>3,471</i>	<i>1,902</i>	<i>2,736</i>	<i>3,528</i>	<i>3,224</i>	3,677	<i>3,471</i>	<i>3,224</i>
East Region (d)	242	576	859	856	431	<i>657</i>	<i>865</i>	<i>701</i>	<i>259</i>	<i>528</i>	<i>781</i>	<i>644</i>	856	<i>701</i>	<i>644</i>
Midwest Region (d)	252	565	972	987	544	<i>733</i>	<i>1,043</i>	<i>879</i>	<i>384</i>	<i>620</i>	<i>970</i>	<i>822</i>	987	<i>879</i>	<i>822</i>
South Central Region (d)	575	1,002	1,206	1,304	1,071	<i>1,239</i>	<i>1,287</i>	<i>1,280</i>	<i>838</i>	<i>1,034</i>	<i>1,127</i>	<i>1,178</i>	1,304	<i>1,280</i>	<i>1,178</i>
Mountain Region (d)	113	155	203	186	147	<i>196</i>	<i>250</i>	<i>223</i>	<i>146</i>	<i>179</i>	<i>231</i>	<i>205</i>	186	<i>223</i>	<i>205</i>
Pacific Region (d)	276	336	359	320	262	<i>353</i>	<i>393</i>	<i>363</i>	<i>251</i>	<i>350</i>	<i>396</i>	<i>351</i>	320	<i>363</i>	<i>351</i>
Alaska	24	24	25	24	24	<i>24</i>	<i>25</i>	<i>24</i>	<i>24</i>	<i>24</i>	<i>25</i>	<i>24</i>	24	<i>24</i>	<i>24</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 - April 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	2.06	<i>1.86</i>	<i>2.35</i>	<i>2.73</i>	<i>3.14</i>	<i>2.89</i>	<i>3.10</i>	<i>3.32</i>	2.71	<i>2.25</i>	<i>3.11</i>
Residential Retail															
New England	13.09	13.33	16.17	12.55	11.74	<i>12.87</i>	<i>15.83</i>	<i>12.57</i>	<i>12.33</i>	<i>13.55</i>	<i>16.26</i>	<i>13.01</i>	13.19	<i>12.45</i>	<i>12.99</i>
Middle Atlantic	9.53	11.20	16.32	10.99	9.30	<i>12.13</i>	<i>16.53</i>	<i>11.10</i>	<i>10.02</i>	<i>12.23</i>	<i>16.65</i>	<i>11.29</i>	10.52	<i>10.71</i>	<i>11.13</i>
E. N. Central	7.78	10.58	16.71	7.96	7.01	<i>9.96</i>	<i>15.79</i>	<i>7.86</i>	<i>7.57</i>	<i>10.77</i>	<i>16.31</i>	<i>8.30</i>	8.67	<i>8.19</i>	<i>8.69</i>
W. N. Central	8.66	11.84	17.65	9.34	7.13	<i>9.32</i>	<i>15.73</i>	<i>8.59</i>	<i>7.85</i>	<i>10.52</i>	<i>17.29</i>	<i>9.63</i>	9.74	<i>8.38</i>	<i>9.23</i>
S. Atlantic	10.74	16.68	22.48	14.02	10.44	<i>15.60</i>	<i>21.35</i>	<i>12.26</i>	<i>10.74</i>	<i>15.48</i>	<i>21.42</i>	<i>12.35</i>	12.93	<i>12.30</i>	<i>12.44</i>
E. S. Central	9.34	14.36	19.42	11.83	8.82	<i>12.21</i>	<i>17.31</i>	<i>10.21</i>	<i>8.81</i>	<i>13.03</i>	<i>18.32</i>	<i>11.14</i>	10.92	<i>10.14</i>	<i>10.42</i>
W. S. Central	8.45	13.94	19.90	12.07	8.40	<i>12.17</i>	<i>17.10</i>	<i>10.01</i>	<i>8.11</i>	<i>12.77</i>	<i>18.53</i>	<i>11.42</i>	10.72	<i>10.10</i>	<i>10.35</i>
Mountain	9.57	10.87	14.57	8.56	8.02	<i>9.02</i>	<i>12.49</i>	<i>8.17</i>	<i>8.20</i>	<i>9.64</i>	<i>13.46</i>	<i>9.14</i>	9.77	<i>8.57</i>	<i>9.11</i>
Pacific	11.46	11.40	12.05	10.88	10.40	<i>9.68</i>	<i>10.25</i>	<i>9.45</i>	<i>9.62</i>	<i>10.43</i>	<i>11.01</i>	<i>9.90</i>	11.32	<i>9.96</i>	<i>10.02</i>
U.S. Average	9.30	11.96	16.45	10.11	8.52	<i>10.97</i>	<i>15.20</i>	<i>9.47</i>	<i>8.83</i>	<i>11.61</i>	<i>15.93</i>	<i>10.00</i>	10.36	<i>9.64</i>	<i>10.05</i>
Commercial Retail															
New England	10.77	10.13	9.69	9.13	9.03	<i>9.20</i>	<i>9.17</i>	<i>9.71</i>	<i>10.45</i>	<i>10.59</i>	<i>10.62</i>	<i>10.88</i>	10.21	<i>9.27</i>	<i>10.60</i>
Middle Atlantic	7.91	7.48	6.62	7.01	6.95	<i>6.51</i>	<i>6.57</i>	<i>7.40</i>	<i>7.95</i>	<i>7.60</i>	<i>7.55</i>	<i>8.23</i>	7.49	<i>6.96</i>	<i>7.92</i>
E. N. Central	6.95	7.51	8.80	6.30	6.04	<i>6.94</i>	<i>7.98</i>	<i>6.37</i>	<i>6.70</i>	<i>8.03</i>	<i>8.93</i>	<i>7.16</i>	7.01	<i>6.42</i>	<i>7.18</i>
W. N. Central	7.65	7.98	9.01	6.70	6.08	<i>6.51</i>	<i>7.86</i>	<i>6.71</i>	<i>7.16</i>	<i>7.65</i>	<i>8.78</i>	<i>7.39</i>	7.54	<i>6.49</i>	<i>7.42</i>
S. Atlantic	8.48	9.21	9.62	8.92	7.51	<i>8.48</i>	<i>9.33</i>	<i>8.56</i>	<i>8.68</i>	<i>9.07</i>	<i>9.75</i>	<i>8.98</i>	8.83	<i>8.20</i>	<i>8.96</i>
E. S. Central	8.54	9.62	10.00	8.90	7.64	<i>8.14</i>	<i>8.81</i>	<i>8.18</i>	<i>7.93</i>	<i>8.97</i>	<i>9.76</i>	<i>9.06</i>	8.93	<i>8.01</i>	<i>8.60</i>
W. S. Central	7.15	7.21	8.00	7.27	6.25	<i>6.33</i>	<i>6.98</i>	<i>6.61</i>	<i>6.80</i>	<i>7.47</i>	<i>8.04</i>	<i>7.47</i>	7.31	<i>6.47</i>	<i>7.27</i>
Mountain	8.28	8.35	9.03	7.23	6.84	<i>6.86</i>	<i>7.74</i>	<i>6.85</i>	<i>6.71</i>	<i>7.11</i>	<i>8.47</i>	<i>7.61</i>	8.02	<i>6.94</i>	<i>7.24</i>
Pacific	9.20	8.43	8.69	8.14	8.03	<i>7.75</i>	<i>8.24</i>	<i>8.07</i>	<i>8.40</i>	<i>8.55</i>	<i>9.08</i>	<i>8.67</i>	8.61	<i>8.02</i>	<i>8.62</i>
U.S. Average	7.94	8.13	8.42	7.38	6.83	<i>7.16</i>	<i>7.85</i>	<i>7.32</i>	<i>7.60</i>	<i>8.11</i>	<i>8.72</i>	<i>8.08</i>	7.88	<i>7.15</i>	<i>7.95</i>
Industrial Retail															
New England	9.10	7.61	6.10	6.77	7.16	<i>6.81</i>	<i>6.95</i>	<i>8.13</i>	<i>8.44</i>	<i>7.63</i>	<i>7.49</i>	<i>8.51</i>	7.77	<i>7.33</i>	<i>8.14</i>
Middle Atlantic	8.31	7.56	7.08	7.12	6.97	<i>6.09</i>	<i>6.57</i>	<i>7.41</i>	<i>7.84</i>	<i>7.15</i>	<i>7.48</i>	<i>8.15</i>	7.82	<i>6.86</i>	<i>7.74</i>
E. N. Central	6.41	5.65	5.54	5.15	5.35	<i>4.85</i>	<i>5.18</i>	<i>5.54</i>	<i>6.28</i>	<i>6.03</i>	<i>6.23</i>	<i>6.35</i>	5.89	<i>5.30</i>	<i>6.25</i>
W. N. Central	5.81	4.56	4.41	4.37	4.23	<i>3.29</i>	<i>3.67</i>	<i>4.45</i>	<i>5.08</i>	<i>4.45</i>	<i>4.62</i>	<i>5.19</i>	4.88	<i>3.96</i>	<i>4.87</i>
S. Atlantic	5.46	4.51	4.54	4.26	4.28	<i>3.82</i>	<i>4.29</i>	<i>4.77</i>	<i>5.13</i>	<i>4.81</i>	<i>5.01</i>	<i>5.37</i>	4.73	<i>4.31</i>	<i>5.09</i>
E. S. Central	5.15	4.28	4.14	3.84	3.86	<i>3.56</i>	<i>4.00</i>	<i>4.50</i>	<i>5.00</i>	<i>4.50</i>	<i>4.64</i>	<i>5.03</i>	4.39	<i>3.98</i>	<i>4.81</i>
W. S. Central	3.21	2.92	3.07	2.49	2.26	<i>1.97</i>	<i>2.53</i>	<i>2.88</i>	<i>3.23</i>	<i>3.06</i>	<i>3.37</i>	<i>3.56</i>	2.92	<i>2.41</i>	<i>3.31</i>
Mountain	6.61	6.22	6.12	5.71	4.92	<i>4.21</i>	<i>4.83</i>	<i>5.18</i>	<i>5.44</i>	<i>5.15</i>	<i>5.67</i>	<i>5.82</i>	6.18	<i>4.83</i>	<i>5.53</i>
Pacific	7.32	6.57	6.62	6.48	6.12	<i>5.13</i>	<i>5.51</i>	<i>6.01</i>	<i>6.22</i>	<i>5.91</i>	<i>6.35</i>	<i>6.57</i>	6.77	<i>5.74</i>	<i>6.27</i>
U.S. Average	4.57	3.68	3.66	3.34	3.37	<i>2.71</i>	<i>3.16</i>	<i>3.77</i>	<i>4.34</i>	<i>3.78</i>	<i>3.99</i>	<i>4.44</i>	3.84	<i>3.27</i>	<i>4.15</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 - April 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	237.3	206.8	165.1	<i>179.8</i>	<i>206.6</i>	<i>200.9</i>	<i>191.5</i>	<i>179.0</i>	<i>209.4</i>	<i>198.1</i>	895.4	<i>752.5</i>	<i>778.0</i>
Appalachia	62.3	54.6	56.5	50.6	40.3	<i>51.0</i>	<i>52.0</i>	<i>49.8</i>	<i>49.1</i>	<i>48.4</i>	<i>50.7</i>	<i>48.2</i>	224.0	<i>193.1</i>	<i>196.4</i>
Interior	45.2	38.9	45.2	39.7	31.0	<i>39.4</i>	<i>45.6</i>	<i>43.5</i>	<i>40.2</i>	<i>39.0</i>	<i>45.7</i>	<i>43.0</i>	169.1	<i>159.5</i>	<i>167.9</i>
Western	132.7	117.6	135.5	116.5	93.9	<i>89.4</i>	<i>109.0</i>	<i>107.6</i>	<i>102.2</i>	<i>91.7</i>	<i>113.0</i>	<i>106.8</i>	502.3	<i>399.9</i>	<i>413.8</i>
Primary Inventory Withdrawals	-0.7	0.3	3.1	-1.6	-1.0	<i>3.2</i>	<i>0.4</i>	<i>-1.6</i>	<i>0.2</i>	<i>1.9</i>	<i>-1.3</i>	<i>0.2</i>	1.1	<i>1.0</i>	<i>1.1</i>
Imports	3.0	2.6	3.0	2.7	2.5	<i>2.5</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>11.2</i>	<i>10.8</i>
Exports	22.0	19.8	16.9	15.3	13.5	<i>15.6</i>	<i>14.0</i>	<i>15.3</i>	<i>9.9</i>	<i>15.2</i>	<i>15.0</i>	<i>16.5</i>	74.0	<i>58.5</i>	<i>56.7</i>
Metallurgical Coal	13.5	12.7	10.3	9.4	9.6	<i>9.8</i>	<i>7.8</i>	<i>8.7</i>	<i>7.8</i>	<i>9.4</i>	<i>8.6</i>	<i>10.0</i>	46.0	<i>35.8</i>	<i>35.7</i>
Steam Coal	8.5	7.0	6.6	5.9	3.9	<i>5.8</i>	<i>6.2</i>	<i>6.6</i>	<i>2.2</i>	<i>5.8</i>	<i>6.4</i>	<i>6.6</i>	28.0	<i>22.7</i>	<i>21.0</i>
Total Primary Supply	220.5	194.3	226.4	192.6	153.1	<i>169.9</i>	<i>196.2</i>	<i>186.9</i>	<i>184.0</i>	<i>168.2</i>	<i>196.4</i>	<i>184.7</i>	833.8	<i>706.1</i>	<i>733.2</i>
Secondary Inventory Withdrawals	-2.4	-12.8	3.8	-34.8	15.0	<i>-0.7</i>	<i>16.9</i>	<i>-8.0</i>	<i>7.1</i>	<i>1.1</i>	<i>16.4</i>	<i>-3.1</i>	-46.2	<i>23.3</i>	<i>21.7</i>
Waste Coal (a)	2.4	2.4	2.4	2.4	2.5	<i>2.5</i>	<i>2.5</i>	<i>2.5</i>	<i>2.5</i>	<i>2.5</i>	<i>2.5</i>	<i>2.5</i>	9.5	<i>10.0</i>	<i>10.0</i>
Total Supply	220.4	183.9	232.6	160.2	170.7	<i>171.7</i>	<i>215.6</i>	<i>181.4</i>	<i>193.6</i>	<i>171.8</i>	<i>215.3</i>	<i>184.1</i>	797.1	<i>739.5</i>	<i>764.9</i>
Consumption (million short tons)															
Coke Plants	4.4	4.4	5.1	5.0	4.2	<i>4.0</i>	<i>4.9</i>	<i>4.7</i>	<i>4.1</i>	<i>4.0</i>	<i>4.6</i>	<i>4.2</i>	18.9	<i>17.6</i>	<i>16.9</i>
Electric Power Sector (b)	196.3	174.6	215.5	153.3	165.2	<i>157.4</i>	<i>200.6</i>	<i>166.1</i>	<i>178.6</i>	<i>157.5</i>	<i>200.5</i>	<i>169.1</i>	739.7	<i>689.3</i>	<i>705.7</i>
Retail and Other Industry	11.4	10.4	10.5	10.8	11.1	<i>10.3</i>	<i>10.2</i>	<i>10.7</i>	<i>11.0</i>	<i>10.4</i>	<i>10.2</i>	<i>10.8</i>	43.0	<i>42.3</i>	<i>42.3</i>
Residential and Commercial	0.8	0.6	0.6	0.7	0.8	<i>0.5</i>	<i>0.5</i>	<i>0.6</i>	<i>0.7</i>	<i>0.5</i>	<i>0.4</i>	<i>0.5</i>	2.7	<i>2.4</i>	<i>2.1</i>
Other Industrial	10.6	9.8	9.9	10.1	10.2	<i>9.8</i>	<i>9.7</i>	<i>10.1</i>	<i>10.3</i>	<i>9.9</i>	<i>9.8</i>	<i>10.2</i>	40.3	<i>39.9</i>	<i>40.2</i>
Total Consumption	212.1	189.4	231.0	169.1	180.4	<i>171.7</i>	<i>215.6</i>	<i>181.4</i>	<i>193.6</i>	<i>171.8</i>	<i>215.3</i>	<i>184.1</i>	801.6	<i>749.2</i>	<i>764.9</i>
Discrepancy (c)	8.3	-5.5	1.6	-8.9	-9.7	<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>	-4.5	<i>-9.7</i>	<i>0.0</i>
End-of-period Inventories (million short tons)															
Primary Inventories (d)	39.6	39.3	36.2	37.8	38.8	<i>35.6</i>	<i>35.2</i>	<i>36.9</i>	<i>36.7</i>	<i>34.7</i>	<i>36.0</i>	<i>35.8</i>	37.8	<i>36.9</i>	<i>35.8</i>
Secondary Inventories	161.3	174.1	170.2	205.0	190.0	<i>190.7</i>	<i>173.7</i>	<i>181.7</i>	<i>174.6</i>	<i>173.4</i>	<i>157.0</i>	<i>160.1</i>	205.0	<i>181.7</i>	<i>160.1</i>
Electric Power Sector	155.1	167.2	162.8	197.2	183.2	<i>183.2</i>	<i>165.8</i>	<i>173.5</i>	<i>167.4</i>	<i>165.6</i>	<i>148.7</i>	<i>151.6</i>	197.2	<i>173.5</i>	<i>151.6</i>
Retail and General Industry	4.1	4.5	5.1	5.5	4.8	<i>5.0</i>	<i>5.6</i>	<i>5.9</i>	<i>5.2</i>	<i>5.4</i>	<i>6.0</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	1.5	<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	5.46	<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	0.226	0.238	<i>0.244</i>	<i>0.233</i>	<i>0.202</i>	<i>0.201</i>	<i>0.213</i>	<i>0.188</i>	<i>0.157</i>	0.241	<i>0.229</i>	<i>0.190</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.27	2.25	2.22	2.15	2.12	<i>2.19</i>	<i>2.20</i>	<i>2.15</i>	<i>2.14</i>	<i>2.19</i>	<i>2.23</i>	<i>2.18</i>	2.23	<i>2.16</i>	<i>2.19</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 - April 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	12.46	10.21	10.72	<i>10.85</i>	<i>12.44</i>	<i>10.56</i>	<i>11.07</i>	<i>10.95</i>	<i>12.58</i>	<i>10.71</i>	11.20	<i>11.15</i>	<i>11.33</i>
Electric Power Sector (a)	10.93	10.36	12.01	9.78	10.31	<i>10.45</i>	<i>12.01</i>	<i>10.15</i>	<i>10.66</i>	<i>10.55</i>	<i>12.14</i>	<i>10.29</i>	10.77	<i>10.73</i>	<i>10.91</i>
Comm. and Indus. Sectors (b)	0.43	0.41	0.45	0.43	0.41	<i>0.40</i>	<i>0.43</i>	<i>0.42</i>	<i>0.41</i>	<i>0.39</i>	<i>0.44</i>	<i>0.43</i>	0.43	<i>0.42</i>	<i>0.42</i>
Net Imports	0.17	0.20	0.20	0.16	0.18	<i>0.16</i>	<i>0.19</i>	<i>0.13</i>	<i>0.15</i>	<i>0.15</i>	<i>0.18</i>	<i>0.13</i>	0.18	<i>0.17</i>	<i>0.15</i>
Total Supply	11.52	10.97	12.66	10.37	10.91	<i>11.01</i>	<i>12.63</i>	<i>10.70</i>	<i>11.21</i>	<i>11.10</i>	<i>12.76</i>	<i>10.84</i>	11.38	<i>11.31</i>	<i>11.48</i>
Losses and Unaccounted for (c)	0.77	0.92	0.86	0.63	0.63	<i>0.96</i>	<i>0.80</i>	<i>0.72</i>	<i>0.61</i>	<i>0.93</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	10.37	9.69	11.40	9.35	9.92	<i>9.70</i>	<i>11.45</i>	<i>9.60</i>	<i>10.24</i>	<i>9.82</i>	<i>11.56</i>	<i>9.74</i>	10.20	<i>10.17</i>	<i>10.34</i>
Residential Sector	4.20	3.35	4.51	3.29	3.87	<i>3.34</i>	<i>4.49</i>	<i>3.44</i>	<i>4.07</i>	<i>3.39</i>	<i>4.53</i>	<i>3.52</i>	3.84	<i>3.79</i>	<i>3.88</i>
Commercial Sector	3.60	3.65	4.12	3.51	3.53	<i>3.68</i>	<i>4.18</i>	<i>3.58</i>	<i>3.57</i>	<i>3.72</i>	<i>4.24</i>	<i>3.62</i>	3.72	<i>3.74</i>	<i>3.79</i>
Industrial Sector	2.55	2.67	2.76	2.53	2.50	<i>2.66</i>	<i>2.75</i>	<i>2.56</i>	<i>2.58</i>	<i>2.68</i>	<i>2.77</i>	<i>2.58</i>	2.63	<i>2.62</i>	<i>2.65</i>
Transportation Sector	0.02	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>	0.02	<i>0.02</i>	<i>0.02</i>
Direct Use (d)	0.38	0.36	0.40	0.38	0.37	<i>0.35</i>	<i>0.38</i>	<i>0.37</i>	<i>0.36</i>	<i>0.35</i>	<i>0.39</i>	<i>0.38</i>	0.38	<i>0.37</i>	<i>0.37</i>
Total Consumption	10.75	10.05	11.80	9.73	10.28	<i>10.06</i>	<i>11.83</i>	<i>9.97</i>	<i>10.60</i>	<i>10.17</i>	<i>11.95</i>	<i>10.11</i>	10.58	<i>10.54</i>	<i>10.71</i>
Average residential electricity usage per customer (kWh)	2,924	2,350	3,190	2,323	2,697	<i>2,326</i>	<i>3,154</i>	<i>2,410</i>	<i>2,783</i>	<i>2,339</i>	<i>3,154</i>	<i>2,440</i>	10,787	<i>10,587</i>	<i>10,716</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.27	2.25	2.22	2.15	2.12	<i>2.19</i>	<i>2.20</i>	<i>2.15</i>	<i>2.14</i>	<i>2.19</i>	<i>2.23</i>	<i>2.18</i>	2.23	<i>2.16</i>	<i>2.19</i>
Natural Gas	4.09	3.12	3.09	2.72	2.95	<i>2.64</i>	<i>2.91</i>	<i>3.71</i>	<i>4.24</i>	<i>3.58</i>	<i>3.56</i>	<i>4.25</i>	3.22	<i>3.03</i>	<i>3.87</i>
Residual Fuel Oil	10.82	11.64	10.48	7.76	7.26	<i>7.91</i>	<i>7.44</i>	<i>7.25</i>	<i>7.17</i>	<i>8.01</i>	<i>8.06</i>	<i>8.51</i>	10.36	<i>7.46</i>	<i>7.92</i>
Distillate Fuel Oil	15.61	15.17	13.19	11.74	10.49	<i>11.00</i>	<i>11.10</i>	<i>11.72</i>	<i>12.17</i>	<i>12.29</i>	<i>12.99</i>	<i>14.18</i>	14.43	<i>11.07</i>	<i>12.86</i>
Retail Prices (cents per kilowatthour)															
Residential Sector	12.24	12.85	12.99	12.59	12.16	<i>12.83</i>	<i>12.96</i>	<i>12.44</i>	<i>12.39</i>	<i>13.11</i>	<i>13.29</i>	<i>12.82</i>	12.67	<i>12.61</i>	<i>12.91</i>
Commercial Sector	10.46	10.54	10.95	10.36	10.18	<i>10.52</i>	<i>10.89</i>	<i>10.34</i>	<i>10.32</i>	<i>10.71</i>	<i>11.14</i>	<i>10.61</i>	10.59	<i>10.50</i>	<i>10.72</i>
Industrial Sector	6.79	6.81	7.32	6.63	6.52	<i>6.71</i>	<i>7.27</i>	<i>6.66</i>	<i>6.58</i>	<i>6.83</i>	<i>7.41</i>	<i>6.78</i>	6.90	<i>6.80</i>	<i>6.91</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 - April 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	112	137	113	141	119	143	114	141	121	130	128	130
Middle Atlantic	423	321	423	306	370	314	421	320	389	315	419	324	368	356	362
E. N. Central	587	428	556	434	528	437	574	464	554	435	565	470	501	501	506
W. N. Central	325	232	309	243	300	234	313	260	321	234	308	265	277	277	282
S. Atlantic	1,078	889	1,137	809	985	855	1,142	866	1,038	866	1,151	886	978	962	985
E. S. Central	390	275	384	254	347	279	387	281	368	282	389	287	326	324	331
W. S. Central	602	503	782	479	538	519	754	489	566	545	793	506	592	575	603
Mountain	235	240	333	237	242	243	341	239	253	248	344	245	261	267	273
Pacific contiguous	396	337	425	400	406	337	408	391	427	344	413	400	389	385	396
AK and HI	13	12	13	14	14	12	12	13	14	12	12	13	13	13	13
Total	4,202	3,349	4,505	3,288	3,868	3,344	4,494	3,442	4,073	3,393	4,535	3,516	3,835	3,788	3,880
Commercial Sector															
New England	147	139	159	137	140	140	158	138	140	139	158	137	146	144	144
Middle Atlantic	444	417	478	404	425	414	479	407	429	416	481	409	436	432	434
E. N. Central	509	490	544	471	492	498	562	484	498	503	566	490	503	509	514
W. N. Central	281	269	305	265	272	274	315	272	279	278	318	276	280	283	288
S. Atlantic	805	859	939	795	797	853	957	813	805	866	974	825	850	855	868
E. S. Central	235	239	279	222	229	239	285	228	232	242	289	230	244	245	248
W. S. Central	499	534	630	506	487	540	634	517	498	546	645	522	542	544	553
Mountain	240	256	289	246	243	262	299	251	247	268	306	257	258	264	269
Pacific contiguous	424	433	479	449	424	439	477	450	426	443	484	454	447	448	452
AK and HI	16	16	17	17	16	16	17	17	16	16	17	17	16	16	17
Total	3,603	3,651	4,119	3,511	3,525	3,676	4,182	3,577	3,571	3,718	4,236	3,617	3,722	3,741	3,787
Industrial Sector															
New England	49	50	52	49	46	49	52	48	48	49	52	48	50	49	49
Middle Atlantic	198	196	204	188	194	198	205	193	202	200	207	195	197	198	201
E. N. Central	520	525	531	493	500	519	528	497	514	519	528	497	517	511	515
W. N. Central	237	240	252	231	227	242	255	238	238	245	259	241	240	241	246
S. Atlantic	375	406	406	379	366	395	399	376	376	401	405	381	391	384	391
E. S. Central	279	287	290	265	268	283	282	272	285	284	282	272	280	276	281
W. S. Central	433	462	492	458	455	471	488	456	442	470	487	455	461	468	464
Mountain	217	235	251	223	213	243	259	230	226	249	265	234	232	236	244
Pacific contiguous	227	251	266	234	217	250	269	241	233	253	272	244	245	244	250
AK and HI	13	13	15	14	13	14	14	14	14	14	14	14	14	14	14
Total	2,546	2,666	2,757	2,535	2,500	2,663	2,751	2,563	2,577	2,684	2,772	2,581	2,626	2,620	2,654
Total All Sectors (a)															
New England	350	302	357	299	326	303	352	306	333	303	351	307	327	322	324
Middle Atlantic	1,077	944	1,115	909	1,001	937	1,116	932	1,033	942	1,118	939	1,011	996	1,008
E. N. Central	1,618	1,444	1,632	1,399	1,522	1,455	1,666	1,447	1,569	1,458	1,661	1,458	1,523	1,523	1,537
W. N. Central	844	742	866	739	800	750	883	769	837	758	885	782	797	801	816
S. Atlantic	2,262	2,158	2,486	1,986	2,152	2,108	2,502	2,058	2,223	2,138	2,533	2,096	2,223	2,205	2,248
E. S. Central	904	801	953	741	844	801	954	781	885	807	960	790	850	845	861
W. S. Central	1,535	1,499	1,904	1,444	1,481	1,531	1,876	1,462	1,506	1,562	1,925	1,483	1,596	1,588	1,620
Mountain	692	731	874	707	698	749	900	720	727	766	916	736	752	767	786
Pacific contiguous	1,050	1,023	1,172	1,085	1,049	1,028	1,156	1,085	1,088	1,042	1,170	1,099	1,083	1,080	1,100
AK and HI	43	41	44	44	43	41	44	44	44	42	44	44	43	43	43
Total	10,374	9,685	11,402	9,354	9,915	9,704	11,449	9,604	10,244	9,817	11,565	9,736	10,204	10,170	10,343

- = 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 Retail Electricity Prices (Cents per Kilowatt-hour)
 U.S. Energy Information Administration | Short-Term Energy Outlook - April 2016

	2015				2016				2017				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Residential Sector															
New England	20.43	20.30	18.35	18.61	19.10	18.71	17.93	18.18	19.14	18.81	18.23	18.63	19.42	18.48	18.70
Middle Atlantic	15.77	16.07	16.47	16.04	15.48	16.20	16.67	16.01	15.99	16.83	17.40	16.72	16.09	16.11	16.75
E. N. Central	12.22	13.21	13.16	13.09	12.48	13.55	13.42	13.13	12.93	14.08	13.97	13.70	12.88	13.13	13.65
W. N. Central	10.24	12.16	12.46	11.22	10.59	12.43	12.89	11.27	10.79	12.72	13.19	11.53	11.48	11.79	12.03
S. Atlantic	11.37	11.91	12.14	11.70	11.36	11.78	11.85	11.34	11.51	11.95	12.07	11.60	11.79	11.60	11.79
E. S. Central	10.33	11.15	10.89	10.95	10.44	11.22	11.04	10.89	10.68	11.46	11.31	11.22	10.79	10.89	11.15
W. S. Central	10.67	11.36	11.03	10.81	10.31	11.07	10.82	10.52	10.40	11.32	11.22	10.97	10.96	10.69	11.00
Mountain	11.30	12.21	12.33	11.34	10.99	12.14	12.52	11.52	11.21	12.41	12.82	11.80	11.85	11.86	12.13
Pacific	13.69	13.47	15.76	13.89	13.74	13.88	15.68	13.92	13.95	14.08	15.93	14.19	14.26	14.33	14.56
U.S. Average	12.24	12.85	12.99	12.59	12.16	12.83	12.96	12.44	12.39	13.11	13.29	12.82	12.67	12.61	12.91
Commercial Sector															
New England	16.92	15.21	14.91	14.87	15.43	14.91	14.75	14.63	15.48	15.01	15.03	15.00	15.47	14.92	15.13
Middle Atlantic	13.07	13.04	13.72	12.58	12.13	12.59	13.49	12.38	12.30	12.88	13.87	12.74	13.13	12.68	12.98
E. N. Central	9.72	9.96	10.04	9.81	9.69	9.96	9.98	9.80	9.84	10.10	10.13	9.98	9.89	9.86	10.02
W. N. Central	8.57	9.53	9.95	8.89	8.81	9.59	10.02	8.82	9.01	9.83	10.28	9.05	9.25	9.34	9.57
S. Atlantic	9.66	9.45	9.59	9.35	9.51	9.53	9.57	9.38	9.65	9.71	9.81	9.69	9.51	9.50	9.72
E. S. Central	10.22	10.38	10.27	10.17	10.07	10.37	10.31	10.31	10.27	10.57	10.57	10.63	10.26	10.27	10.51
W. S. Central	8.05	7.89	7.94	7.72	7.79	7.91	7.91	7.70	7.78	8.04	8.14	7.96	7.90	7.83	8.00
Mountain	9.37	9.96	10.21	9.37	9.10	9.89	10.24	9.56	9.20	10.01	10.40	9.71	9.75	9.73	9.87
Pacific	12.23	13.31	15.60	13.44	12.18	13.59	15.62	13.40	12.51	13.86	15.96	13.75	13.71	13.75	14.08
U.S. Average	10.46	10.54	10.95	10.36	10.18	10.52	10.89	10.34	10.32	10.71	11.14	10.61	10.59	10.50	10.72
Industrial Sector															
New England	13.18	11.85	11.87	11.84	12.32	11.99	12.12	11.62	12.51	12.13	12.22	11.68	12.17	12.01	12.13
Middle Atlantic	7.90	7.21	7.36	7.06	7.29	7.06	7.28	7.00	7.38	7.22	7.45	7.12	7.38	7.16	7.30
E. N. Central	6.86	6.77	7.06	6.75	6.78	6.75	7.03	6.80	6.85	6.83	7.13	6.90	6.86	6.84	6.93
W. N. Central	6.49	6.88	7.51	6.47	6.64	6.93	7.56	6.54	6.71	7.03	7.66	6.63	6.85	6.93	7.02
S. Atlantic	6.55	6.38	6.90	6.26	6.37	6.49	6.86	6.38	6.43	6.62	7.00	6.50	6.53	6.53	6.64
E. S. Central	5.78	5.95	6.58	5.74	5.57	6.04	6.72	5.76	5.64	6.21	6.91	5.92	6.02	6.03	6.17
W. S. Central	5.69	5.53	5.73	5.26	5.12	5.17	5.61	5.24	5.17	5.33	5.81	5.44	5.56	5.29	5.45
Mountain	6.16	6.65	7.17	6.00	5.92	6.44	7.21	6.18	6.07	6.62	7.42	6.37	6.52	6.47	6.65
Pacific	8.00	8.94	10.46	9.21	8.01	8.71	10.12	9.10	7.79	8.73	10.12	9.10	9.21	9.04	8.98
U.S. Average	6.79	6.81	7.32	6.63	6.52	6.71	7.27	6.66	6.58	6.83	7.41	6.78	6.90	6.80	6.91
All Sectors (a)															
New England	17.90	16.51	15.83	15.75	16.50	15.82	15.61	15.51	16.59	15.95	15.87	15.88	16.51	15.86	16.08
Middle Atlantic	13.17	12.85	13.59	12.58	12.42	12.62	13.53	12.49	12.71	12.98	13.98	12.93	13.08	12.80	13.18
E. N. Central	9.71	9.76	10.13	9.75	9.70	9.89	10.23	9.83	9.95	10.12	10.48	10.13	9.84	9.92	10.18
W. N. Central	8.63	9.49	10.14	8.90	8.86	9.62	10.33	8.94	9.04	9.82	10.53	9.15	9.30	9.46	9.65
S. Atlantic	9.96	9.88	10.31	9.71	9.82	9.87	10.18	9.65	9.97	10.03	10.39	9.92	9.98	9.90	10.09
E. S. Central	8.90	9.06	9.40	8.85	8.80	9.14	9.54	8.94	8.95	9.35	9.79	9.22	9.07	9.12	9.34
W. S. Central	8.41	8.32	8.64	7.97	7.88	8.14	8.48	7.87	8.00	8.37	8.82	8.21	8.36	8.12	8.38
Mountain	9.02	9.63	10.14	8.97	8.79	9.50	10.23	9.13	8.93	9.68	10.45	9.34	9.48	9.47	9.65
Pacific	11.85	12.27	14.48	12.68	11.92	12.49	14.35	12.62	12.06	12.67	14.58	12.87	12.88	12.88	13.08
U.S. Average	10.27	10.31	10.88	10.13	10.03	10.27	10.83	10.11	10.20	10.48	11.09	10.39	10.42	10.33	10.56

- = 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 - April 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	2,988	3,348	3,183	3,987	3,279	3,684	3,195	3,999	3,351	3,715	3,450	3,557
Natural Gas	3,248	3,477	4,392	3,503	3,418	3,698	4,506	3,498	3,343	3,615	4,485	3,454	3,658	3,781	3,727
Petroleum (a)	124	61	72	57	70	68	77	68	84	72	80	69	78	71	76
Other Gases	38	34	40	30	36	33	40	31	37	33	40	32	36	35	36
Nuclear	2,248	2,133	2,286	2,070	2,176	2,003	2,259	2,128	2,224	2,044	2,288	2,156	2,184	2,142	2,178
Renewable Energy Sources:	1,590	1,528	1,373	1,533	1,652	1,838	1,552	1,538	1,673	1,964	1,662	1,627	1,506	1,644	1,731
Conventional Hydropower	803	691	617	644	761	862	731	630	706	878	757	638	688	746	745
Wind	506	534	442	610	608	654	478	605	658	706	515	661	523	586	635
Wood Biomass	118	112	122	112	112	108	119	112	113	109	122	116	116	113	115
Waste Biomass	58	59	61	62	60	59	61	60	59	59	60	60	60	60	59
Geothermal	48	46	45	45	47	47	48	48	48	47	48	48	46	47	48
Solar	57	87	86	60	63	108	115	83	89	165	159	105	73	92	129
Pumped Storage Hydropower	-16	-11	-18	-11	-10	-10	-15	-14	-12	-11	-15	-14	-14	-12	-13
Other Nonrenewable Fuels (b)	33	37	39	37	34	37	39	36	34	37	39	37	36	36	37
Total Generation	11,355	10,770	12,460	10,207	10,724	10,850	12,444	10,563	11,067	10,949	12,577	10,712	11,198	11,147	11,329
Northeast Census Region															
Coal	292	175	203	139	190	133	169	166	239	147	195	192	202	165	193
Natural Gas	483	534	714	543	510	586	733	568	516	564	703	551	569	600	584
Petroleum (a)	46	2	5	2	7	4	6	5	11	5	7	6	14	6	7
Other Gases	2	2	2	1	2	2	2	1	2	2	2	1	2	2	2
Nuclear	545	499	542	499	523	470	526	496	508	462	518	488	521	504	494
Hydropower (c)	93	99	98	102	99	107	100	95	98	116	105	96	98	100	104
Other Renewables (d)	76	65	58	73	76	65	60	70	76	67	62	74	68	68	70
Other Nonrenewable Fuels (b)	11	12	12	12	11	12	12	12	11	12	12	12	12	12	12
Total Generation	1,548	1,388	1,634	1,373	1,417	1,379	1,608	1,415	1,461	1,375	1,603	1,420	1,485	1,455	1,465
South Census Region															
Coal	1,716	1,539	1,908	1,167	1,336	1,326	1,679	1,247	1,422	1,352	1,724	1,284	1,582	1,398	1,446
Natural Gas	1,971	2,075	2,465	1,975	2,012	2,287	2,619	1,959	1,945	2,218	2,593	1,936	2,122	2,220	2,174
Petroleum (a)	42	24	29	22	31	28	32	25	34	30	33	25	29	29	30
Other Gases	15	13	15	14	14	13	15	14	14	12	15	15	14	14	14
Nuclear	974	956	1,001	872	938	883	1,005	947	995	917	1,026	967	951	944	976
Hydropower (c)	122	108	94	145	159	123	104	134	151	132	109	134	117	130	132
Other Renewables (d)	231	267	255	287	299	325	269	314	335	369	303	351	260	302	339
Other Nonrenewable Fuels (b)	14	15	16	15	14	15	16	14	14	15	16	14	15	15	15
Total Generation	5,084	4,999	5,783	4,497	4,803	5,001	5,739	4,655	4,910	5,045	5,820	4,728	5,091	5,050	5,127
Midwest Census Region															
Coal	1,578	1,302	1,578	1,166	1,355	1,254	1,550	1,282	1,431	1,232	1,526	1,272	1,405	1,361	1,365
Natural Gas	300	257	340	285	326	328	403	310	331	338	408	319	296	342	349
Petroleum (a)	12	11	13	9	10	11	13	10	12	11	13	10	11	11	12
Other Gases	14	13	16	8	14	13	16	8	14	13	17	9	13	13	13
Nuclear	553	529	570	547	549	502	562	529	558	514	576	542	550	536	547
Hydropower (c)	44	47	42	37	47	50	43	34	45	53	44	34	43	43	44
Other Renewables (d)	251	218	168	277	262	251	179	263	280	268	192	282	228	239	255
Other Nonrenewable Fuels (b)	4	5	5	5	4	5	5	5	4	5	5	5	5	5	5
Total Generation	2,757	2,382	2,731	2,335	2,566	2,414	2,771	2,442	2,676	2,434	2,781	2,474	2,550	2,549	2,591
West Census Region															
Coal	505	496	587	517	467	470	589	582	592	464	553	602	526	527	553
Natural Gas	494	611	874	699	570	497	750	660	550	495	781	647	671	620	619
Petroleum (a)	23	22	25	23	23	24	26	27	27	26	28	28	23	25	27
Other Gases	7	6	7	7	7	6	7	7	7	6	7	7	7	7	7
Nuclear	176	149	172	152	167	148	165	156	163	151	169	159	162	159	161
Hydropower (c)	527	426	365	348	447	571	469	354	401	565	484	360	416	460	452
Other Renewables (d)	230	287	276	252	253	336	313	260	276	383	346	281	261	290	322
Other Nonrenewable Fuels (b)	4	5	5	5	5	5	5	5	5	5	6	5	5	5	5
Total Generation	1,967	2,002	2,311	2,002	1,938	2,056	2,325	2,051	2,021	2,095	2,373	2,091	2,071	2,093	2,146

(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 - April 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)	2,185	1,922	2,347	1,667	1,819	<i>1,734</i>	<i>2,186</i>	<i>1,810</i>	<i>1,989</i>	<i>1,736</i>	<i>2,186</i>	<i>1,843</i>	2,030	<i>1,888</i>	<i>1,939</i>
Natural Gas (million cf/d)	24,017	26,265	33,602	26,144	25,304	<i>28,180</i>	<i>34,515</i>	<i>25,911</i>	<i>24,801</i>	<i>27,543</i>	<i>34,367</i>	<i>25,604</i>	27,530	<i>28,487</i>	<i>28,098</i>
Petroleum (thousand b/d)	215	108	126	100	123	<i>121</i>	<i>136</i>	<i>121</i>	<i>152</i>	<i>129</i>	<i>141</i>	<i>123</i>	137	<i>125</i>	<i>136</i>
Residual Fuel Oil	76	26	33	26	32	<i>30</i>	<i>33</i>	<i>29</i>	<i>38</i>	<i>32</i>	<i>35</i>	<i>30</i>	40	<i>31</i>	<i>34</i>
Distillate Fuel Oil	66	25	24	25	30	<i>28</i>	<i>30</i>	<i>30</i>	<i>40</i>	<i>30</i>	<i>32</i>	<i>30</i>	35	<i>30</i>	<i>33</i>
Petroleum Coke (a)	61	52	65	46	57	<i>60</i>	<i>68</i>	<i>57</i>	<i>66</i>	<i>62</i>	<i>70</i>	<i>58</i>	56	<i>60</i>	<i>64</i>
Other Petroleum Liquids (b)	13	4	4	3	5	<i>4</i>	<i>5</i>	<i>5</i>	<i>8</i>	<i>5</i>	<i>5</i>	<i>5</i>	6	<i>5</i>	<i>6</i>
Northeast Census Region															
Coal (thousand st/d)	133	82	99	68	90	<i>63</i>	<i>82</i>	<i>80</i>	<i>112</i>	<i>70</i>	<i>94</i>	<i>92</i>	95	<i>79</i>	<i>92</i>
Natural Gas (million cf/d)	3,638	4,102	5,595	4,107	3,864	<i>4,491</i>	<i>5,710</i>	<i>4,288</i>	<i>3,906</i>	<i>4,314</i>	<i>5,468</i>	<i>4,155</i>	4,365	<i>4,591</i>	<i>4,464</i>
Petroleum (thousand b/d)	75	5	9	4	12	<i>8</i>	<i>11</i>	<i>9</i>	<i>19</i>	<i>9</i>	<i>12</i>	<i>10</i>	23	<i>10</i>	<i>13</i>
South Census Region															
Coal (thousand st/d)	888	819	1,023	638	702	<i>702</i>	<i>896</i>	<i>672</i>	<i>744</i>	<i>717</i>	<i>922</i>	<i>693</i>	842	<i>743</i>	<i>769</i>
Natural Gas (million cf/d)	14,399	15,637	18,741	14,727	14,782	<i>17,370</i>	<i>19,951</i>	<i>14,431</i>	<i>14,324</i>	<i>16,841</i>	<i>19,753</i>	<i>14,265</i>	15,885	<i>16,637</i>	<i>16,305</i>
Petroleum (thousand b/d)	79	45	53	41	58	<i>54</i>	<i>60</i>	<i>47</i>	<i>67</i>	<i>57</i>	<i>62</i>	<i>48</i>	54	<i>55</i>	<i>58</i>
Midwest Census Region															
Coal (thousand st/d)	880	742	895	668	762	<i>706</i>	<i>876</i>	<i>727</i>	<i>800</i>	<i>691</i>	<i>859</i>	<i>718</i>	796	<i>768</i>	<i>767</i>
Natural Gas (million cf/d)	2,329	2,014	2,725	2,211	2,479	<i>2,583</i>	<i>3,263</i>	<i>2,378</i>	<i>2,529</i>	<i>2,664</i>	<i>3,319</i>	<i>2,461</i>	2,320	<i>2,676</i>	<i>2,745</i>
Petroleum (thousand b/d)	24	23	26	18	18	<i>21</i>	<i>23</i>	<i>21</i>	<i>22</i>	<i>21</i>	<i>23</i>	<i>20</i>	23	<i>20</i>	<i>22</i>
West Census Region															
Coal (thousand st/d)	285	280	331	293	265	<i>263</i>	<i>331</i>	<i>331</i>	<i>333</i>	<i>258</i>	<i>310</i>	<i>340</i>	297	<i>298</i>	<i>310</i>
Natural Gas (million cf/d)	3,651	4,513	6,541	5,100	4,178	<i>3,736</i>	<i>5,591</i>	<i>4,814</i>	<i>4,042</i>	<i>3,724</i>	<i>5,826</i>	<i>4,724</i>	4,960	<i>4,583</i>	<i>4,584</i>
Petroleum (thousand b/d)	37	36	39	37	36	<i>39</i>	<i>41</i>	<i>44</i>	<i>43</i>	<i>42</i>	<i>44</i>	<i>45</i>	37	<i>40</i>	<i>44</i>
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	155.1	167.2	162.8	197.2	183.2	<i>183.2</i>	<i>165.8</i>	<i>173.5</i>	<i>167.4</i>	<i>165.6</i>	<i>148.7</i>	<i>151.6</i>	197.2	<i>173.5</i>	<i>151.6</i>
Residual Fuel Oil (mmb)	10.2	10.5	10.6	12.4	13.7	<i>13.3</i>	<i>12.7</i>	<i>12.9</i>	<i>12.9</i>	<i>12.7</i>	<i>12.4</i>	<i>12.5</i>	12.4	<i>12.9</i>	<i>12.5</i>
Distillate Fuel Oil (mmb)	16.7	16.7	17.2	17.4	17.4	<i>17.2</i>	<i>17.2</i>	<i>17.4</i>	<i>17.5</i>	<i>17.4</i>	<i>17.3</i>	<i>17.5</i>	17.4	<i>17.4</i>	<i>17.5</i>
Petroleum Coke (mmb)	4.1	5.2	5.5	6.7	6.5	<i>6.3</i>	<i>6.2</i>	<i>6.0</i>	<i>5.9</i>	<i>5.8</i>	<i>5.7</i>	<i>5.5</i>	6.7	<i>6.0</i>	<i>5.5</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 - April 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)	0.684	0.594	0.538	0.560	0.656	<i>0.743</i>	<i>0.638</i>	<i>0.548</i>	<i>0.601</i>	<i>0.757</i>	<i>0.660</i>	<i>0.556</i>	2.376	<i>2.584</i>	<i>2.574</i>
Wood Biomass (b)	0.063	0.057	0.067	0.060	0.060	<i>0.056</i>	<i>0.068</i>	<i>0.062</i>	<i>0.063</i>	<i>0.059</i>	<i>0.072</i>	<i>0.065</i>	0.246	<i>0.246</i>	<i>0.259</i>
Waste Biomass (c)	0.067	0.066	0.070	0.071	0.069	<i>0.068</i>	<i>0.071</i>	<i>0.068</i>	<i>0.066</i>	<i>0.068</i>	<i>0.070</i>	<i>0.068</i>	0.274	<i>0.277</i>	<i>0.272</i>
Wind	0.433	0.462	0.387	0.534	0.526	<i>0.566</i>	<i>0.418</i>	<i>0.529</i>	<i>0.563</i>	<i>0.611</i>	<i>0.451</i>	<i>0.578</i>	1.815	<i>2.040</i>	<i>2.202</i>
Geothermal	0.041	0.040	0.039	0.040	0.040	<i>0.040</i>	<i>0.042</i>	<i>0.042</i>	<i>0.041</i>	<i>0.041</i>	<i>0.042</i>	<i>0.042</i>	0.159	<i>0.164</i>	<i>0.166</i>
Solar	0.047	0.073	0.074	0.052	0.053	<i>0.092</i>	<i>0.099</i>	<i>0.071</i>	<i>0.075</i>	<i>0.141</i>	<i>0.137</i>	<i>0.090</i>	0.246	<i>0.316</i>	<i>0.444</i>
Subtotal	1.335	1.292	1.174	1.315	1.405	<i>1.565</i>	<i>1.336</i>	<i>1.321</i>	<i>1.410</i>	<i>1.676</i>	<i>1.432</i>	<i>1.399</i>	5.117	<i>5.627</i>	<i>5.916</i>
Industrial Sector															
Hydroelectric Power (a)	0.004	0.003	0.002	0.003	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>	0.013	<i>0.012</i>	<i>0.012</i>
Wood Biomass (b)	0.324	0.320	0.324	0.321	0.309	<i>0.301</i>	<i>0.310</i>	<i>0.311</i>	<i>0.303</i>	<i>0.299</i>	<i>0.310</i>	<i>0.312</i>	1.290	<i>1.232</i>	<i>1.223</i>
Waste Biomass (c)	0.046	0.049	0.050	0.049	0.048	<i>0.047</i>	<i>0.049</i>	<i>0.048</i>	<i>0.048</i>	<i>0.048</i>	<i>0.050</i>	<i>0.049</i>	0.195	<i>0.192</i>	<i>0.194</i>
Geothermal	0.001	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>	0.004	<i>0.004</i>	<i>0.004</i>
Biofuel Losses and Co-products (f)	0.189	0.192	0.195	0.200	0.198	<i>0.196</i>	<i>0.199</i>	<i>0.196</i>	<i>0.195</i>	<i>0.195</i>	<i>0.198</i>	<i>0.196</i>	0.776	<i>0.790</i>	<i>0.784</i>
Subtotal	0.568	0.570	0.576	0.578	0.563	<i>0.552</i>	<i>0.566</i>	<i>0.564</i>	<i>0.553</i>	<i>0.549</i>	<i>0.565</i>	<i>0.565</i>	2.292	<i>2.245</i>	<i>2.232</i>
Commercial Sector															
Wood Biomass (b)	0.019	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>0.020</i>	<i>0.020</i>	0.076	<i>0.077</i>	<i>0.078</i>
Waste Biomass (c)	0.013	0.010	0.010	0.012	0.011	<i>0.010</i>	<i>0.011</i>	<i>0.011</i>	<i>0.010</i>	<i>0.010</i>	<i>0.012</i>	<i>0.011</i>	0.045	<i>0.043</i>	<i>0.043</i>
Geothermal	0.005	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>	0.020	<i>0.020</i>	<i>0.020</i>
Subtotal	0.039	0.036	0.037	0.039	0.036	<i>0.035</i>	<i>0.037</i>	<i>0.037</i>	<i>0.036</i>	<i>0.036</i>	<i>0.037</i>	<i>0.037</i>	0.151	<i>0.144</i>	<i>0.146</i>
Residential Sector															
Wood Biomass (b)	0.110	0.111	0.113	0.113	0.103	<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	<i>0.418</i>	<i>0.426</i>
Geothermal	0.010	0.010	0.010	0.010	0.011	<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	<i>0.044</i>	<i>0.045</i>
Solar (d)	0.069	0.070	0.071	0.071	0.077	<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	<i>0.311</i>	<i>0.356</i>
Subtotal	0.189	0.191	0.194	0.194	0.191	<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	<i>0.773</i>	<i>0.827</i>
Transportation Sector															
Ethanol (e)	0.266	0.284	0.293	0.285	0.279	<i>0.291</i>	<i>0.299</i>	<i>0.291</i>	<i>0.275</i>	<i>0.291</i>	<i>0.298</i>	<i>0.291</i>	1.128	<i>1.159</i>	<i>1.155</i>
Biomass-based Diesel (e)	0.034	0.058	0.064	0.058	0.054	<i>0.069</i>	<i>0.079</i>	<i>0.078</i>	<i>0.067</i>	<i>0.071</i>	<i>0.081</i>	<i>0.080</i>	0.214	<i>0.280</i>	<i>0.300</i>
Subtotal	0.300	0.342	0.357	0.343	0.338	<i>0.360</i>	<i>0.378</i>	<i>0.369</i>	<i>0.342</i>	<i>0.363</i>	<i>0.379</i>	<i>0.372</i>	1.342	<i>1.445</i>	<i>1.455</i>
All Sectors Total															
Hydroelectric Power (a)	0.687	0.598	0.540	0.563	0.659	<i>0.746</i>	<i>0.641</i>	<i>0.552</i>	<i>0.604</i>	<i>0.760</i>	<i>0.664</i>	<i>0.559</i>	2.389	<i>2.597</i>	<i>2.586</i>
Wood Biomass (b)	0.517	0.507	0.522	0.513	0.491	<i>0.480</i>	<i>0.503</i>	<i>0.498</i>	<i>0.492</i>	<i>0.483</i>	<i>0.507</i>	<i>0.503</i>	2.059	<i>1.972</i>	<i>1.986</i>
Waste Biomass (c)	0.126	0.125	0.130	0.132	0.127	<i>0.125</i>	<i>0.131</i>	<i>0.128</i>	<i>0.124</i>	<i>0.125</i>	<i>0.131</i>	<i>0.128</i>	0.514	<i>0.511</i>	<i>0.509</i>
Wind	0.433	0.462	0.387	0.534	0.526	<i>0.566</i>	<i>0.418</i>	<i>0.529</i>	<i>0.563</i>	<i>0.611</i>	<i>0.451</i>	<i>0.578</i>	1.815	<i>2.040</i>	<i>2.202</i>
Geothermal	0.057	0.056	0.056	0.056	0.057	<i>0.057</i>	<i>0.059</i>	<i>0.059</i>	<i>0.059</i>	<i>0.058</i>	<i>0.059</i>	<i>0.059</i>	0.224	<i>0.232</i>	<i>0.235</i>
Solar	0.118	0.145	0.146	0.123	0.129	<i>0.171</i>	<i>0.179</i>	<i>0.151</i>	<i>0.164</i>	<i>0.231</i>	<i>0.228</i>	<i>0.182</i>	0.532	<i>0.630</i>	<i>0.805</i>
Ethanol (e)	0.271	0.289	0.298	0.290	0.285	<i>0.296</i>	<i>0.304</i>	<i>0.296</i>	<i>0.279</i>	<i>0.296</i>	<i>0.303</i>	<i>0.296</i>	1.147	<i>1.180</i>	<i>1.174</i>
Biomass-based Diesel (e)	0.034	0.058	0.064	0.058	0.054	<i>0.069</i>	<i>0.079</i>	<i>0.078</i>	<i>0.067</i>	<i>0.071</i>	<i>0.081</i>	<i>0.080</i>	0.214	<i>0.280</i>	<i>0.300</i>
Biofuel Losses and Co-products (f)	0.189	0.192	0.195	0.200	0.198	<i>0.196</i>	<i>0.199</i>	<i>0.196</i>	<i>0.195</i>	<i>0.195</i>	<i>0.198</i>	<i>0.196</i>	0.776	<i>0.790</i>	<i>0.784</i>
Total Consumption	2.431	2.432	2.337	2.469	2.538	<i>2.705</i>	<i>2.511</i>	<i>2.485</i>	<i>2.546</i>	<i>2.830</i>	<i>2.621</i>	<i>2.580</i>	9.670	<i>10.239</i>	<i>10.576</i>

- = 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 - April 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	16,414	16,455	16,550	16,631	16,735	16,858	16,982	17,120	17,250	17,361	16,345	16,694	17,178
Real Personal Consumption Expend. (billion chained 2009 dollars - SAAR)	11,081	11,179	11,262	11,319	11,398	11,471	11,552	11,644	11,748	11,839	11,932	12,021	11,210	11,516	11,885
Real Fixed Investment (billion chained 2009 dollars - SAAR)	2,701	2,736	2,761	2,762	2,789	2,823	2,856	2,891	2,938	2,991	3,041	3,087	2,740	2,840	3,014
Business Inventory Change (billion chained 2009 dollars - SAAR)	127	128	95	91	61	32	22	21	18	37	51	59	110	34	42
Real Government Expenditures (billion chained 2009 dollars - SAAR)	2,839	2,857	2,870	2,869	2,910	2,917	2,923	2,928	2,925	2,930	2,934	2,927	2,859	2,919	2,929
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR)	2,091	2,118	2,121	2,107	2,110	2,129	2,151	2,181	2,206	2,231	2,256	2,281	2,109	2,143	2,244
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR)	2,633	2,652	2,667	2,663	2,694	2,720	2,748	2,788	2,837	2,892	2,948	2,999	2,654	2,738	2,919
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	12,115	12,194	12,308	12,408	12,508	12,572	12,664	12,764	12,880	12,999	13,111	13,211	12,256	12,627	13,050
Non-Farm Employment (millions)	141.0	141.6	142.2	143.0	143.6	144.1	144.6	145.2	145.7	146.1	146.5	146.9	142.0	144.3	146.3
Civilian Unemployment Rate (percent)	5.6	5.4	5.2	5.0	4.9	4.8	4.8	4.7	4.7	4.6	4.6	4.6	5.3	4.8	4.6
Housing Starts (millions - SAAR)	0.98	1.16	1.16	1.12	1.13	1.18	1.20	1.25	1.33	1.39	1.42	1.46	1.10	1.19	1.40
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	107.4	106.8	107.5	106.6	106.6	105.8	105.6	106.4	107.7	108.4	109.6	110.6	107.1	106.1	109.1
Manufacturing	105.5	105.8	106.7	106.8	107.0	106.3	105.9	106.7	108.2	108.8	110.0	111.1	106.2	106.5	109.5
Food	104.7	104.7	105.9	105.9	106.7	107.1	107.5	108.1	108.8	109.4	110.0	110.6	105.3	107.4	109.7
Paper	97.2	97.1	95.9	95.6	94.1	93.3	93.0	92.8	93.0	92.8	92.9	93.1	96.5	93.3	93.0
Petroleum and Coal Products	107.9	108.9	109.3	110.4	109.7	110.1	110.7	111.5	112.3	112.9	113.4	113.8	109.1	110.5	113.1
Chemicals	102.8	103.1	103.3	104.1	105.4	105.3	105.8	106.4	107.4	108.2	109.3	110.7	103.3	105.7	108.9
Nonmetallic Mineral Products	111.3	111.1	112.2	116.3	116.8	117.2	117.9	118.9	120.2	121.4	122.7	124.1	112.7	117.7	122.1
Primary Metals	100.7	100.1	99.9	97.5	95.6	93.3	92.3	92.6	93.3	92.9	93.7	94.2	99.6	93.5	93.5
Coal-weighted Manufacturing (a)	103.6	103.8	104.0	104.3	103.9	103.2	103.2	103.7	104.6	104.9	105.8	106.7	103.9	103.5	105.5
Distillate-weighted Manufacturing (a)	106.6	106.5	107.5	108.6	108.9	108.9	109.2	110.0	111.1	111.9	113.0	114.0	107.3	109.3	112.5
Electricity-weighted Manufacturing (a)	104.7	105.0	105.6	105.4	105.4	104.8	104.9	105.7	106.9	107.4	108.5	109.7	105.2	105.2	108.1
Natural Gas-weighted Manufacturing (a)	104.5	105.4	105.6	105.8	105.9	105.5	105.9	106.7	108.0	108.7	110.0	111.4	105.3	106.0	109.5
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	2.40	2.41	2.42	2.44	2.45	2.46	2.37	2.39	2.44
Producer Price Index: All Commodities (index, 1982=1.00)	1.92	1.92	1.90	1.87	1.84	1.84	1.85	1.87	1.89	1.90	1.91	1.94	1.90	1.85	1.91
Producer Price Index: Petroleum (index, 1982=1.00)	1.71	1.96	1.85	1.53	1.24	1.34	1.32	1.22	1.26	1.39	1.46	1.47	1.76	1.28	1.40
GDP Implicit Price Deflator (index, 2009=100)	109.1	109.7	110.0	110.3	110.8	111.3	111.7	112.2	112.9	113.4	113.9	114.5	109.8	111.5	113.7
Miscellaneous															
Vehicle Miles Traveled (b) (million miles/day)	7,957	8,940	8,863	8,539	8,262	9,178	9,040	8,706	8,355	9,263	9,143	8,787	8,577	8,797	8,889
Air Travel Capacity (Available ton-miles/day, thousands)	517	574	585	560	523	566	583	556	524	568	585	560	559	557	559
Aircraft Utilization (Revenue ton-miles/day, thousands)	322	356	365	343	322	355	367	347	325	357	371	352	347	348	352
Airline Ticket Price Index (index, 1982-1984=100)	286.4	313.0	283.3	286.2	280.4	293.0	280.8	297.0	291.1	303.1	291.7	311.2	292.2	287.8	299.3
Raw Steel Production (million short tons per day)	0.247	0.242	0.248	0.226	0.238	0.244	0.233	0.202	0.201	0.213	0.188	0.157	0.241	0.229	0.190
Carbon Dioxide (CO₂) Emissions (million metric tons)															
Petroleum	562	568	584	572	561	571	582	577	559	573	586	582	2,285	2,291	2,300
Natural Gas	470	314	328	369	449	326	336	395	459	327	339	399	1,480	1,505	1,523
Coal	396	354	432	317	342	325	408	347	361	325	406	351	1,499	1,422	1,443
Total Energy (c)	1,429	1,237	1,345	1,260	1,353	1,223	1,327	1,321	1,380	1,227	1,332	1,333	5,271	5,225	5,273

- = 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 - April 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	854	863	868	867	872	875	880	885	890	896	901	906	863	878	898
Middle Atlantic	2,409	2,437	2,446	2,454	2,465	2,477	2,489	2,502	2,515	2,533	2,547	2,560	2,437	2,483	2,539
E. N. Central	2,198	2,220	2,234	2,239	2,247	2,255	2,266	2,280	2,294	2,308	2,322	2,333	2,223	2,262	2,314
W. N. Central	1,028	1,038	1,049	1,051	1,056	1,061	1,067	1,074	1,081	1,089	1,097	1,103	1,041	1,064	1,092
S. Atlantic	2,868	2,899	2,913	2,926	2,948	2,966	2,986	3,011	3,033	3,059	3,082	3,102	2,901	2,978	3,069
E. S. Central	736	742	746	748	753	756	761	766	771	777	782	787	743	759	779
W. S. Central	2,021	2,025	2,028	2,029	2,038	2,046	2,062	2,080	2,100	2,122	2,145	2,166	2,026	2,057	2,133
Mountain	1,043	1,053	1,058	1,061	1,069	1,076	1,085	1,095	1,105	1,116	1,127	1,136	1,054	1,081	1,121
Pacific	2,919	2,954	2,969	2,977	2,998	3,015	3,036	3,060	3,087	3,113	3,138	3,160	2,955	3,027	3,124
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	101.7	102.4	103.8	103.6	103.7	102.9	102.5	103.1	104.4	104.9	106.0	107.0	102.9	103.0	105.6
Middle Atlantic	102.1	102.7	103.3	103.2	103.1	102.4	101.9	102.5	103.8	104.2	105.3	106.3	102.8	102.5	104.9
E. N. Central	107.7	108.5	109.4	109.8	109.9	109.2	108.9	110.0	111.5	112.0	113.1	114.2	108.9	109.5	112.7
W. N. Central	105.6	105.7	106.5	106.7	106.8	106.2	105.9	106.7	108.2	108.8	109.9	111.0	106.1	106.4	109.5
S. Atlantic	106.3	106.8	108.0	108.5	108.9	108.2	107.9	108.6	110.0	110.5	111.6	112.6	107.4	108.4	111.2
E. S. Central	108.0	108.2	109.5	110.1	110.4	109.8	109.5	110.3	111.8	112.4	113.5	114.5	109.0	110.0	113.0
W. S. Central	104.7	103.6	103.2	102.3	102.2	101.4	100.9	101.6	103.1	103.8	105.1	106.3	103.4	101.5	104.6
Mountain	107.2	107.9	109.2	110.1	110.6	110.0	109.9	110.8	112.6	113.5	115.0	116.3	108.6	110.3	114.3
Pacific	105.3	106.0	106.6	106.4	106.5	105.8	105.5	106.4	107.9	108.6	109.9	111.1	106.1	106.0	109.4
Real Personal Income (Billion \$2009)															
New England	741	748	755	761	767	771	775	780	786	792	798	803	751	773	795
Middle Atlantic	1,896	1,914	1,932	1,948	1,960	1,969	1,979	1,991	2,005	2,019	2,033	2,045	1,922	1,975	2,026
E. N. Central	2,011	2,023	2,043	2,062	2,077	2,086	2,096	2,109	2,126	2,142	2,158	2,170	2,035	2,092	2,149
W. N. Central	969	972	984	992	1,000	1,004	1,009	1,015	1,024	1,032	1,039	1,046	979	1,007	1,035
S. Atlantic	2,621	2,645	2,668	2,695	2,721	2,738	2,757	2,780	2,807	2,834	2,859	2,881	2,657	2,749	2,846
E. S. Central	759	764	770	777	783	787	791	797	803	810	817	822	768	789	813
W. S. Central	1,710	1,705	1,718	1,731	1,745	1,752	1,764	1,779	1,798	1,818	1,836	1,852	1,716	1,760	1,826
Mountain	922	929	938	947	957	962	969	978	989	999	1,009	1,018	934	967	1,004
Pacific	2,219	2,253	2,275	2,292	2,315	2,326	2,342	2,361	2,384	2,405	2,426	2,445	2,260	2,336	2,415
Households (Thousands)															
New England	5,831	5,838	5,843	5,849	5,857	5,865	5,870	5,875	5,882	5,890	5,898	5,908	5,849	5,875	5,908
Middle Atlantic	15,986	16,005	16,014	16,027	16,045	16,064	16,075	16,084	16,096	16,110	16,127	16,145	16,027	16,084	16,145
E. N. Central	18,606	18,613	18,623	18,640	18,660	18,683	18,700	18,717	18,736	18,754	18,777	18,800	18,640	18,717	18,800
W. N. Central	8,448	8,464	8,478	8,493	8,512	8,532	8,549	8,567	8,587	8,606	8,626	8,648	8,493	8,567	8,648
S. Atlantic	24,611	24,700	24,787	24,879	24,982	25,084	25,177	25,268	25,360	25,453	25,547	25,644	24,879	25,268	25,644
E. S. Central	7,517	7,524	7,532	7,543	7,557	7,573	7,586	7,600	7,614	7,629	7,645	7,661	7,543	7,600	7,661
W. S. Central	14,319	14,373	14,420	14,470	14,526	14,585	14,640	14,692	14,744	14,798	14,853	14,909	14,470	14,692	14,909
Mountain	8,783	8,817	8,851	8,886	8,927	8,966	9,005	9,043	9,082	9,122	9,163	9,205	8,886	9,043	9,205
Pacific	18,402	18,459	18,508	18,560	18,621	18,683	18,735	18,790	18,843	18,898	18,954	19,012	18,560	18,790	19,012
Total Non-farm Employment (Millions)															
New England	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.4	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	19.3	19.3	19.4	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	21.9
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	10.7	10.5	10.6	10.7
S. Atlantic	26.7	26.9	27.0	27.3	27.4	27.6	27.7	27.8	27.9	28.0	28.1	28.2	27.0	27.6	28.1
E. S. Central	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.0	8.0	8.1	8.1	8.1	7.8	8.0	8.1
W. S. Central	16.6	16.6	16.7	16.7	16.8	16.8	16.9	17.0	17.1	17.1	17.2	17.3	16.6	16.9	17.2
Mountain	9.9	10.0	10.0	10.1	10.2	10.2	10.3	10.3	10.4	10.4	10.5	10.5	10.0	10.2	10.5
Pacific	21.8	21.9	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.8	22.9	22.0	22.5	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 - April 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	3,853	821	58	1,791	2,815	<i>807</i>	<i>127</i>	<i>2,205</i>	<i>3,065</i>	<i>810</i>	<i>131</i>	<i>2,150</i>	6,523	<i>5,953</i>	<i>6,156</i>
Middle Atlantic	3,581	612	41	1,545	2,616	<i>625</i>	<i>80</i>	<i>1,997</i>	<i>2,850</i>	<i>648</i>	<i>90</i>	<i>1,989</i>	5,779	<i>5,318</i>	<i>5,578</i>
E. N. Central	3,690	659	75	1,740	2,846	<i>677</i>	<i>113</i>	<i>2,239</i>	<i>3,104</i>	<i>721</i>	<i>129</i>	<i>2,268</i>	6,164	<i>5,876</i>	<i>6,222</i>
W. N. Central	3,375	653	95	1,965	2,893	<i>654</i>	<i>140</i>	<i>2,415</i>	<i>3,223</i>	<i>688</i>	<i>155</i>	<i>2,462</i>	6,088	<i>6,102</i>	<i>6,528</i>
South Atlantic	1,673	155	8	662	1,375	<i>201</i>	<i>14</i>	<i>976</i>	<i>1,443</i>	<i>208</i>	<i>16</i>	<i>981</i>	2,499	<i>2,566</i>	<i>2,648</i>
E. S. Central	2,146	184	14	879	1,742	<i>258</i>	<i>19</i>	<i>1,297</i>	<i>1,847</i>	<i>263</i>	<i>22</i>	<i>1,313</i>	3,223	<i>3,316</i>	<i>3,445</i>
W. S. Central	1,402	70	2	617	1,052	<i>96</i>	<i>4</i>	<i>777</i>	<i>1,199</i>	<i>101</i>	<i>5</i>	<i>748</i>	2,091	<i>1,929</i>	<i>2,053</i>
Mountain	1,900	704	122	1,867	2,036	<i>656</i>	<i>130</i>	<i>1,804</i>	<i>2,248</i>	<i>677</i>	<i>134</i>	<i>1,850</i>	4,594	<i>4,626</i>	<i>4,909</i>
Pacific	1,083	525	77	1,193	1,251	<i>459</i>	<i>81</i>	<i>1,112</i>	<i>1,498</i>	<i>534</i>	<i>87</i>	<i>1,265</i>	2,880	<i>2,904</i>	<i>3,385</i>
U.S. Average	2,342	443	49	1,252	1,924	<i>448</i>	<i>69</i>	<i>1,517</i>	<i>2,120</i>	<i>476</i>	<i>76</i>	<i>1,549</i>	4,086	<i>3,957</i>	<i>4,221</i>
Heating Degree Days, Prior 10-year Average															
New England	3,166	838	134	2,147	3,212	<i>824</i>	<i>133</i>	<i>2,104</i>	<i>3,198</i>	<i>821</i>	<i>127</i>	<i>2,133</i>	6,285	<i>6,273</i>	<i>6,280</i>
Middle Atlantic	2,935	666	90	1,976	2,983	<i>651</i>	<i>90</i>	<i>1,926</i>	<i>2,977</i>	<i>648</i>	<i>85</i>	<i>1,950</i>	5,667	<i>5,650</i>	<i>5,661</i>
E. N. Central	3,192	694	123	2,262	3,246	<i>689</i>	<i>125</i>	<i>2,205</i>	<i>3,252</i>	<i>693</i>	<i>121</i>	<i>2,217</i>	6,272	<i>6,266</i>	<i>6,283</i>
W. N. Central	3,273	691	150	2,433	3,298	<i>693</i>	<i>150</i>	<i>2,392</i>	<i>3,302</i>	<i>706</i>	<i>145</i>	<i>2,408</i>	6,546	<i>6,534</i>	<i>6,562</i>
South Atlantic	1,481	196	14	1,013	1,502	<i>185</i>	<i>14</i>	<i>975</i>	<i>1,504</i>	<i>188</i>	<i>13</i>	<i>980</i>	2,704	<i>2,676</i>	<i>2,685</i>
E. S. Central	1,853	236	19	1,358	1,898	<i>225</i>	<i>19</i>	<i>1,308</i>	<i>1,904</i>	<i>233</i>	<i>17</i>	<i>1,306</i>	3,466	<i>3,450</i>	<i>3,461</i>
W. S. Central	1,188	86	5	834	1,221	<i>83</i>	<i>5</i>	<i>815</i>	<i>1,227</i>	<i>90</i>	<i>4</i>	<i>815</i>	2,113	<i>2,124</i>	<i>2,136</i>
Mountain	2,258	730	150	1,873	2,231	<i>724</i>	<i>147</i>	<i>1,880</i>	<i>2,211</i>	<i>731</i>	<i>139</i>	<i>1,871</i>	5,012	<i>4,981</i>	<i>4,952</i>
Pacific	1,534	621	92	1,205	1,495	<i>610</i>	<i>88</i>	<i>1,211</i>	<i>1,456</i>	<i>596</i>	<i>87</i>	<i>1,200</i>	3,453	<i>3,404</i>	<i>3,338</i>
U.S. Average	2,183	493	77	1,567	2,199	<i>483</i>	<i>76</i>	<i>1,535</i>	<i>2,190</i>	<i>484</i>	<i>73</i>	<i>1,538</i>	4,319	<i>4,293</i>	<i>4,285</i>
Cooling Degree Days															
New England	0	71	487	0	0	<i>99</i>	<i>437</i>	<i>0</i>	<i>0</i>	<i>99</i>	<i>444</i>	<i>0</i>	557	<i>536</i>	<i>543</i>
Middle Atlantic	0	185	612	3	0	<i>181</i>	<i>580</i>	<i>6</i>	<i>0</i>	<i>177</i>	<i>577</i>	<i>5</i>	799	<i>767</i>	<i>759</i>
E. N. Central	0	221	498	9	0	<i>234</i>	<i>573</i>	<i>9</i>	<i>0</i>	<i>221</i>	<i>553</i>	<i>8</i>	728	<i>815</i>	<i>782</i>
W. N. Central	3	266	660	13	0	<i>285</i>	<i>711</i>	<i>12</i>	<i>3</i>	<i>275</i>	<i>688</i>	<i>11</i>	942	<i>1,008</i>	<i>977</i>
South Atlantic	136	762	1,155	334	130	<i>632</i>	<i>1,158</i>	<i>233</i>	<i>114</i>	<i>632</i>	<i>1,167</i>	<i>234</i>	2,387	<i>2,152</i>	<i>2,147</i>
E. S. Central	23	579	1,019	98	18	<i>509</i>	<i>1,067</i>	<i>72</i>	<i>27</i>	<i>507</i>	<i>1,069</i>	<i>69</i>	1,719	<i>1,665</i>	<i>1,672</i>
W. S. Central	51	854	1,566	265	102	<i>826</i>	<i>1,500</i>	<i>212</i>	<i>72</i>	<i>863</i>	<i>1,609</i>	<i>227</i>	2,736	<i>2,641</i>	<i>2,770</i>
Mountain	46	433	922	88	25	<i>443</i>	<i>972</i>	<i>87</i>	<i>19</i>	<i>439</i>	<i>973</i>	<i>88</i>	1,489	<i>1,527</i>	<i>1,520</i>
Pacific	53	229	682	122	30	<i>204</i>	<i>586</i>	<i>76</i>	<i>32</i>	<i>211</i>	<i>613</i>	<i>77</i>	1,086	<i>896</i>	<i>933</i>
U.S. Average	46	434	874	133	46	<i>402</i>	<i>866</i>	<i>98</i>	<i>40</i>	<i>405</i>	<i>882</i>	<i>100</i>	1,487	<i>1,412</i>	<i>1,427</i>
Cooling Degree Days, Prior 10-year Average															
New England	0	85	420	1	0	<i>81</i>	<i>420</i>	<i>1</i>	<i>0</i>	<i>83</i>	<i>423</i>	<i>1</i>	506	<i>501</i>	<i>507</i>
Middle Atlantic	0	168	557	5	0	<i>168</i>	<i>548</i>	<i>5</i>	<i>0</i>	<i>172</i>	<i>551</i>	<i>6</i>	731	<i>722</i>	<i>729</i>
E. N. Central	3	234	545	6	3	<i>229</i>	<i>528</i>	<i>6</i>	<i>3</i>	<i>235</i>	<i>529</i>	<i>7</i>	787	<i>766</i>	<i>774</i>
W. N. Central	7	282	683	9	7	<i>279</i>	<i>674</i>	<i>9</i>	<i>6</i>	<i>278</i>	<i>672</i>	<i>10</i>	981	<i>969</i>	<i>967</i>
South Atlantic	110	635	1,154	210	113	<i>659</i>	<i>1,143</i>	<i>221</i>	<i>116</i>	<i>662</i>	<i>1,145</i>	<i>225</i>	2,108	<i>2,137</i>	<i>2,147</i>
E. S. Central	33	526	1,053	52	32	<i>541</i>	<i>1,038</i>	<i>56</i>	<i>31</i>	<i>542</i>	<i>1,038</i>	<i>60</i>	1,663	<i>1,667</i>	<i>1,669</i>
W. S. Central	94	883	1,519	184	90	<i>890</i>	<i>1,517</i>	<i>191</i>	<i>88</i>	<i>876</i>	<i>1,518</i>	<i>193</i>	2,679	<i>2,688</i>	<i>2,674</i>
Mountain	17	423	930	75	21	<i>430</i>	<i>931</i>	<i>76</i>	<i>22</i>	<i>423</i>	<i>940</i>	<i>78</i>	1,445	<i>1,457</i>	<i>1,463</i>
Pacific	26	170	601	65	29	<i>180</i>	<i>612</i>	<i>72</i>	<i>30</i>	<i>178</i>	<i>608</i>	<i>74</i>	863	<i>894</i>	<i>891</i>
U.S. Average	40	396	849	83	42	<i>404</i>	<i>845</i>	<i>88</i>	<i>42</i>	<i>404</i>	<i>847</i>	<i>91</i>	1,369	<i>1,379</i>	<i>1,384</i>

- = 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>).

Appendix

This appendix is prepared in fulfillment of section 1245(d)(4)(A) of the National Defense Authorization Act (NDAA) for Fiscal Year 2012, as amended. The law requires the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy, to submit to Congress a report on the availability and price of petroleum and petroleum products produced in countries other than Iran in the two-month period preceding the submission of the report. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The data in this appendix, therefore, should not be construed as representing those of the U.S. Department of Energy or other federal agencies.

EIA consulted with the U.S. Department of the Treasury, the U.S. Department of State, and the intelligence community in the process of developing the NDAA report, which was previously published as a stand-alone report. Detailed background and contextual information not repeated here can be found in [early editions of the NDAA report](#).

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	February 2016	March 2016	February – March 2016 Average	February – March 2015 Average	2013 – 2015 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	95.4	95.4	95.4	94.8	93.3
Global Petroleum and Other Liquids Consumption (b)	94.2	93.9	94.0	93.1	92.5
Biofuels Production (c)	1.7	1.7	1.7	1.7	2.0
Biofuels Consumption (c)	2.0	2.1	2.1	2.0	2.0
Iran Liquid Fuels Production	3.8	4.0	3.9	3.5	3.3
Iran Liquid Fuels Consumption	1.8	1.8	1.8	1.8	1.9
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	89.9	89.7	89.8	89.7	88.0
Consumption (d)	90.4	90.1	90.2	89.3	88.7
Production minus Consumption	-0.5	-0.4	-0.4	0.4	-0.7
World Inventory Net Withdrawals Including Iran	-1.2	-1.4	-1.3	-1.7	-0.9
Estimated OECD Inventory Level (e) (million barrels)	3,107	3,128	3,118	2,771	2,740
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	2.0	2.3	2.1	1.9	2.0

Note: The term "petroleum and other liquids" encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.

(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.

(b) Consumption of petroleum by the OECD countries is synonymous with "products 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.

(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.

(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.

(e) Estimated inventory level is for OECD countries only.

(f) EIA defines surplus oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field. It also does not include additional capacity that may be available in Iran, but which is currently offline due to the impacts of U.S. and EU sanctions on Iran's ability to sell its oil.

Source: U.S. Energy Information Administration.

Table a2. Crude Oil and Petroleum Product Price Data

Item	February 2016	March 2016	February – March 2016 Average	February – March 2015 Average	2013 – 2015 Average
Brent Front Month Futures Price (\$ per barrel)	33.53	39.79	36.81	57.80	87.25
WTI Front Month Futures Price (\$ per barrel)	30.62	37.96	34.46	49.18	79.91
Dubai Front Month Futures Price (\$ per barrel)	30.22	36.57	33.55	55.86	84.58
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-7.36	-5.33	-6.30	-8.15	0.15
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-10.03	-6.14	-7.99	-10.46	1.52
RBOB Front Month Futures Price (\$ per gallon)	1.00	1.42	1.22	1.72	2.37
Heating Oil Front Month Futures Price (\$ per gallon)	1.04	1.19	1.12	1.86	2.47
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.20	0.47	0.34	0.35	0.29
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.24	0.25	0.25	0.49	0.40

(a) Brent refers to Brent crude oil traded on the Intercontinental Exchange (ICE).

(b) WTI refers to West Texas Intermediate crude oil traded on the New York Mercantile Exchange (NYMEX), owned by Chicago Mercantile Exchange (CME) Group.

(c) RBOB refers to reformulated blendstock for oxygenate blending traded on the NYMEX.

Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE), and Dubai Mercantile Exchange (DME).