

Short-Term Energy Outlook (STEO)

Highlights

- North Sea Brent crude oil prices averaged \$31/barrel (b) in January, a \$7/b decrease from
 December and the lowest monthly average price since December 2003. Brent crude oil
 prices averaged \$52/b in 2015, down \$47/b from the average in 2014. Growth in global
 liquids inventories, which averaged 1.8 million barrels per day (b/d) in 2015, continues to
 put downward pressure on Brent prices.
- Brent crude oil prices are forecast to average \$38/b in 2016 and \$50/b in 2017. Forecast West Texas Intermediate (WTI) crude oil prices are expected to average the same as Brent in both years. However, the current values of futures and options contracts continue to suggest high uncertainty in the price outlook. For example, EIA's forecast for the average WTI price in May 2016 of \$36/b should be considered in the context of recent Nymex contract values for May 2016 delivery (Market Prices and Uncertainty Report) suggesting that the market expects WTI prices to range from \$21/b to \$58/b (at the 95% confidence interval).
- The U.S. retail regular gasoline price is forecast to average \$1.98/gallon (gal) in 2016 and \$2.21/gal in 2017, compared with \$2.43/gal in 2015. In January, the average retail regular gasoline price was \$1.95/gal, a decrease of 9 cents/gal from December and the first time monthly gasoline prices averaged below \$2/gal since March 2009. EIA expects the monthly average retail price of U.S. regular gasoline to reach a seven-year low of \$1.82/gal in February 2016, before rising during the spring.
- U.S. crude oil production averaged an estimated 9.4 million b/d in 2015, and it is forecast to average 8.7 million b/d in 2016 and 8.5 million b/d in 2017. EIA estimates that crude oil production in January was 70,000 b/d below the December level, which was 9.2 million b/d.
- Natural gas working inventories were 2,934 billion cubic feet (Bcf) on January 29, 20% higher than during the same week last year and 18% higher than the previous five-year average (2011-15) for that week. EIA forecasts that inventories will end the winter heating season (March 31) at 2,096 Bcf, which would be 41% above the level at the same time last year. Henry Hub spot prices are forecast to average \$2.64/million British thermal units (MMBtu) in 2016 and \$3.22/MMBtu in 2017, compared with an average of \$2.63/MMBtu in 2015.

Global Petroleum and Other Liquid Fuels

EIA estimates that global oil inventories increased by 1.8 million b/d in 2015, marking the second consecutive year of strong inventory builds. Persistent oversupply has contributed to oil prices dropping further in January and reaching the lowest monthly average level since the end of 2003. Global oil inventories are forecast to increase by an annual average of 1.0 million b/d in 2016 and by an additional 0.3 million b/d in 2017.

Global Petroleum and Other Liquids Consumption. EIA estimates that global consumption of petroleum and other liquid fuels grew by 1.4 million b/d in 2015, averaging 93.8 million b/d. EIA expects global consumption of petroleum and other liquid fuels to continue to grow by 1.2 million b/d in 2016 and by 1.5 million b/d in 2017. Forecast real gross domestic product (GDP) for the world weighted by oil consumption, which increased by an estimated 2.4% in 2015, rises by 2.6% in 2016 and by 3.1% in 2017.

Consumption of petroleum and other liquid fuels in countries outside the Organization for Economic Cooperation and Development (OECD) increased by an estimated 0.8 million b/d in 2015. Non-OECD consumption growth is expected to be 1.0 million b/d in 2016 and 1.1 million b/d in 2017, reflecting higher growth in the Middle East and 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 0.3 million b/d in 2017, led by increases in U.S. consumption. OECD Europe demand is expected to be flat through the forecast period. Forecast U.S. consumption increases by 0.1 million b/d in 2016 and by 0.3 million b/d in 2017. Consumption in Japan is forecast to decline by less than 0.1 million b/d in both 2016 and 2017.

Non-OPEC Petroleum and Other 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 1.4 million b/d in 2015. The 2015 growth occurred mainly in North America. EIA expects non-OPEC production to decline by 0.6 million b/d in 2016, which would be the first decline since 2008. Most of the forecast production decline in 2016 is expected to be in the United States. Non-OPEC production is forecast to decline by about 0.2 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, which make it among the most price-sensitive globally. Forecast total U.S. liquid fuels production declines by 0.5 million b/d in 2016, as low oil prices contribute to drilling rig counts falling below levels required to sustain current production. In 2017, U.S. liquid fuels production is relatively flat.

Outside the United States, forecast non-OPEC production declines by 0.1 million b/d in 2016 and by 0.3 million b/d in 2017. Despite low crude oil prices, production declines are relatively minor because of investments committed to projects when oil prices were higher. Although oil companies have reduced investments, most of the cuts have been in capital exploration budgets

that largely affect production levels beyond the forecast period. Additionally, recent strength in the U.S. dollar and cost reductions have moderated the effects of declining oil revenues on production in some countries. Because oil revenues are denominated in dollars, the appreciation of the dollar compared with the currencies of several large oil producers means each dollar of revenue has more purchasing power when production costs are denominated in local currency.

Among other non-OPEC producers, the largest declines are forecast to be in the North Sea and Russia. After increasing in 2015, production in the North Sea is expected to return to its long-term declining trend in 2016 and 2017, as the planned start of several projects is not enough to offset the region's steep decline rates. Production in Russia also increased in 2015, as international sanctions had little effect on Russia's oil production, but its production is expected to decline by 0.1 million b/d in 2016 and by 0.2 million b/d in 2017. However, Russia's exposure to low oil prices has been mitigated by the depreciation of the ruble relative to the dollar, given ruble-denominated production costs, and by Russia's taxation regime for the oil sector.

Some non-OPEC countries, led by Canada and Brazil, are expected to see continuing increases in oil production during the forecast period. Production in Canada is expected to increase by almost 0.2 million b/d in both 2016 and 2017, as several oil sands projects begin production, including the Imperial Oil and Cenovus projects scheduled to come online by the end of 2016. Producers commissioned these projects before the sharp decline in crude oil prices. Production in Brazil is expected to increase by about 30,000 b/d in 2016 and 20,000 b/d in 2017, down from growth of 190,000 b/d in 2015, despite Petrobras's high debt levels and the legal fallout from an ongoing corruption probe.

Non-OPEC unplanned supply disruptions averaged slightly less than 0.4 million b/d in 2015, 0.2 million b/d lower than in 2014. In January 2016, non-OPEC supply disruptions were 0.4 million b/d. A fire at an oil platform in Azerbaijan in December continues and has reduced production by 75,000 b/d at the Guneshli field. In Canada, the Nexen-operated Long Lake oil sands upgrader halted operations in mid-January because of an explosion at the upgrader's hydrocracker unit while it was undergoing maintenance. Approximately 35,000 b/d of production was shut in.

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 0.7 million b/d in 2016 and by 0.6 million b/d in 2017, with Iran accounting for most of the increase. EIA assumes that a collaborative production cut among OPEC members and other major producers does not occur in the forecast period, as major OPEC producers continue the strategy to maintain market share.

Implementation day for the Joint Comprehensive Plan of Action (JCPOA), an agreement among Iran, the P5+1 (the five permanent members of the United Nations Security Council and Germany), and the European Union (EU), occurred on January 16 when the International Atomic Energy Agency verified that Iran had completed the key physical steps required to trigger sanctions relief. With this milestone, the United States, the EU, and the United Nations have

lifted nuclear-related sanctions against Iran, which include oil-related sanctions that have limited Iran's ability to sell its oil on the global market since late 2011. Sanctions relief will lead to an increase in Iran's oil production and exports. Iran's crude oil production, which averaged 2.8 million b/d in 2015, is forecast to average more than 3.1 million b/d in 2016 and almost 3.6 million b/d in 2017, with the actual outcome dependent on Iran's ability to mitigate production decline rates, deal with technical challenges, and bring new oil fields online.

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 almost 1.9 million b/d in January 2016, 0.9 million b/d lower than in December 2015 because of changes to Iran's disruption and Libya's estimated production capacity. Iran's crude oil production disruption, which was estimated at 0.8 million b/d, ended in January 2016 when nuclear-related sanctions were lifted. Going forward, any difference between Iran's crude oil production capacity and its crude oil production level will henceforth be considered surplus capacity. Libya's disruption, which is calculated as the difference between effective production capacity and production, was 0.1 million b/d lower in January 2016 compared with the previous month, as Libya's capacity was revised downward while production was unchanged. Libya's crude oil production capacity is currently estimated at 1.3 million b/d, down from 1.4 million b/d in 2015 and almost 1.6 million b/d in 2014. The most recent reduction to Libya's production capacity reflects curtailed storage capacity at the Es Sidra and Ras Lanuf terminals, which were extensively damaged in January.

OPEC surplus crude oil production capacity, which averaged 1.6 million b/d in 2015, is expected to be 2.0 million b/d in 2016 and 1.9 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 3.03 billion barrels at the end of 2015, equivalent to roughly 66 days of consumption. Forecast OECD inventories rise to 3.14 billion barrels at the end of 2016, and are expected to be 3.16 billion barrels at the end of 2017.

Crude Oil Prices. Brent crude oil spot prices decreased by \$7/b in January to a monthly average of \$31/b, the lowest monthly average price since December 2003. Ongoing growth in global oil inventories and uncertainty over future global demand growth continued to put downward pressure on oil prices during January. After growing by an estimated 1.8 million b/d in 2015, global oil inventories are forecast to grow by 1.4 million b/d in the first quarter of 2016.

During January, daily changes in crude oil prices were highly correlated with daily changes in global equity indexes. The increased co-movement and higher volatility likely reflect increased uncertainty about future global economic growth. Changes in overall demand for risk assets, such as commodities and equities, by investors and market participants may also be playing a larger role in price discovery across global asset markets compared with previous months.

With global oil inventory builds expected to continue in 2016, upward pressure on crude oil prices will be limited. Forecast Brent prices will average \$38/b in 2016, \$3/b lower than forecast in last month's STEO. The largest inventory builds occur in the first half of 2016, helping keep Brent prices below \$40/b through August.

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

Forecast West Texas Intermediate (WTI) crude oil prices average the same as Brent crude oil prices through the forecast period, compared with \$2/b lower than Brent in 2016 and \$3/b lower in 2017 in the prior STEO. 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 current values of futures and options contracts continue to suggest both heightened volatility and high uncertainty in the price outlook (*Market Prices and Uncertainty Report*). WTI futures contracts for May 2016 delivery, traded during the five-day period ending February 4, averaged \$35/b, while implied volatility averaged 57%. These levels established the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in May 2016 at \$21/b and \$58/b, respectively. The 95% confidence interval for market expectations widens over time, with lower and upper limits of \$19/b and \$85/b for prices in December 2016. At this time last year, WTI for May 2015 delivery averaged \$52/b, and implied volatility averaged 52%. The corresponding lower and upper limits of the 95% confidence interval were \$33/b and \$81/b.

U.S. Petroleum and Other Liquid Fuels

Growing domestic and global consumption of gasoline contributed to high refinery wholesale gasoline margins (the difference between the wholesale price of gasoline and the price of Brent crude oil) for most of 2015. However, low crude oil prices have more than offset high wholesale gasoline margins, contributing to retail regular gasoline prices falling to an average of \$1.95/gal in January. Monthly average regional gasoline retail prices for January ranged from a low of \$1.69/gal in PADD 3 (Gulf Coast) to a high of \$2.57/gal in PADD 5 (West Coast), which continues to experience refinery disruptions. EIA expects the U.S. regular gasoline retail price to average \$1.82/gal in February 2016, which would be the lowest average monthly price since January 2009.

Liquid Fuels Consumption. Total U.S. liquid fuels consumption increased by an estimated 270,000 b/d (1.4%) in 2015. U.S. consumption has been stimulated by growth in employment and the economy and lower petroleum product prices. Liquid fuels consumption is forecast to increase by 120,000 b/d (0.6%) in 2016 and by an additional 260,000 b/d (1.3%) in 2017.

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

In 2015, jet fuel consumption increased by an estimated 70,000 b/d (4.7%). Forecast jet fuel consumption falls slightly in 2016, with improvement in average airline fleet fuel economy offsetting growth in freight and passenger travel. In 2017, jet fuel consumption is projected to rise by 20,000 b/d (1.0%).

Consumption of distillate fuel, which includes diesel fuel and heating oil, fell by an estimated 70,000 b/d (1.8%) in 2015. Based on expectations of economic growth, forecast distillate consumption grows by an average of 60,000 b/d (1.6%) per year over the next two years.

Hydrocarbon gas liquids (HGL) consumption is expected to be unchanged in 2016 and then increase by 130,000 b/d in 2017. The growth in 2017 is mainly because of increased ethane consumption resulting from the start-up of five ethane-fed petrochemical plants. New HGL export terminal capacity facilitates growth in HGL net exports of 1.3 million b/d in 2017, up from an estimated 830,000 b/d in 2015.

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

EIA estimates total U.S. production has fallen 0.6 million b/d since April 2015, to an average of 9.1 million b/d in January, with the entire production decline coming from Lower 48 onshore.

With WTI prices currently below \$40/b and projected to remain below that level through mid-2016, EIA expects oil production to decline in most Lower 48 onshore oil production regions. The expectation of reduced cash flows in 2016 and 2017 has prompted many companies to scale back investment programs, deferring major new undertakings until a sustained price recovery occurs. The prospect of higher interest rates and 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 anticipated to reduce the count of oil-directed rigs and well completions in 2016 and 2017.

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

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

EIA expects U.S. crude oil production to decline from 9.1 million b/d in January 2016, falling below 8.5 million b/d on average in the third quarter of 2016. Production is forecast to stay near 8.5 million b/d for most of 2017, with the exception of the third quarter, when the forecast includes some hurricane-related disruptions in the Gulf of Mexico. Production of 8.5 million b/d would be 1.2 million b/d below the April 2015 level, which was the highest monthly production since April 1971.

Although total U.S. crude oil production is expected to level off in late 2016, onshore Lower 48 production is expected to continue falling into the third quarter of 2017. However, productivity improvements, lower breakeven costs, and anticipated oil price increases are expected to end more than two years of declines in Lower 48 onshore production before the end of 2017. Onshore production averaged 7.6 million b/d in the second quarter of 2015, and it is forecast to fall below 6.2 million b/d in the third quarter of 2017 before increasing modestly in the fourth quarter of 2017. The forecast remains sensitive to actual wellhead prices and rapidly changing drilling economics that vary across regions and operators.

Projected crude oil production in the Gulf of Mexico rises during the forecast period, and oil production in Alaska falls. Production in these areas is less sensitive than onshore production in the Lower 48 states to short-term price movements and reflects anticipated growth from new projects in the Gulf of Mexico and declines from legacy fields in Alaska. Several projects in the Gulf that began operations or will begin operations in 2014-16 will push up production from an average of 1.5 million b/d in 2015 to 1.8 million b/d in the fourth quarter of 2017. It is possible some projects will start production later than expected, potentially shifting some of the anticipated production gains from late 2017 into early 2018.

Late in the forecast period EIA expects small crude oil sales from the U.S. Strategic Petroleum Reserve (SPR). Recent legislation authorized sales of SPR oil between fiscal years (FY) 2018 and 2025 for deficit reduction, SPR modernization, and highway funding purposes. EIA assumes 5 million barrels of SPR sales for deficit reduction purposes in FY 2018 (which starts in October 2017), equivalent to 14,000 b/d of SPR draws during the fourth quarter of 2017. EIA further assumes no SPR sales occur for SPR modernization during the forecast period.

EIA projects HGL production at natural gas processing plants will increase by 0.2 million b/d (5.7%) in 2016 and by 0.3 million b/d (8.9%) in 2017. Expected additions of natural gas processing and distribution infrastructure contribute to forecast HGL production growing at a faster pace than the natural gas streams from which it is produced. EIA expects higher ethane recovery rates in 2016 and 2017, following planned increases to petrochemical plant feedstock demand in the United States and abroad. Planned terminal builds and expansions and a growing

ship fleet allow more U.S. ethane, propane, and butanes to reach international markets, with forecast net HGL exports averaging 1.1 million b/d in 2016 and 1.3 million b/d in 2017.

Petroleum Product Prices. Lower crude oil prices contributed to U.S. regular gasoline retail prices declining to an average of \$1.95/gal in January, down from an average of \$2.04/gal in December. EIA projects regular gasoline retail prices to fall to \$1.82/gal in February 2016 and average \$1.88/gal in the first quarter of 2016, before rising during the spring.

The U.S. regular gasoline retail price, which averaged \$2.43/gal in 2015, is projected to average \$1.98/gal in 2016, which would be the lowest annual average since 2004, and \$2.21/gal in 2017.

The diesel fuel retail price, which averaged \$2.71/gal in 2015, is projected to average \$2.22/gal in 2016, 6 cents/gal lower than in last month's STEO, and \$2.58/gal in 2017.

Lower projected crude oil prices this winter (2015-16) and warmer temperatures compared with last winter have contributed to a reduction in forecast average household heating oil expenditures. Households that use heating oil as a primary space heating fuel are expected to pay an average of \$2.12/gal this winter, 92 cents/gal less than last winter. The average household is now expected to spend \$1,054 for heating oil this winter, \$798 less than last winter. The reduction in expenditures also reflects lower forecast consumption because warmer temperatures are forecast this winter compared with last winter.

Propane prices this winter are expected to be 10% lower than last winter in the Northeast and 22% lower in the Midwest, contributing to households spending 25% and 34% less on propane in those regions, respectively.

Natural Gas

Following a warm December, natural gas storage withdrawals picked up in January, when temperatures were seasonably cold. According to EIA's *Weekly Natural Gas Storage Report*, inventories fell by 211 billion cubic feet (Bcf) for the week ending January 22. This was the largest withdrawal so far in the 2015-16 heating season.

Natural Gas Consumption. EIA's forecast of U.S. total natural gas consumption averages 76.4 billion cubic feet/day (Bcf/d) in 2016 and 77.3 Bcf/d in 2017, compared with 75.4 Bcf/d in 2015. Increases in industrial sector consumption drive total consumption growth in 2016 and 2017. Industrial sector consumption of natural gas increases by 3.3% in 2016 and by 2.3% in 2017, as new projects in the fertilizer and chemicals sectors come online. EIA expects a 0.1 Bcf/d (0.2%) decline in consumption of natural gas for power generation in 2016 and a 0.9% decrease in 2017. Natural gas consumption in the residential and commercial sectors is projected to increase modestly in 2016 and 2017.

Natural Gas Production and Trade. In November, total marketed production of natural gas averaged 79.2 Bcf/d, a slight decline from its October level, according to EIA survey data. Small increases in onshore Lower 48 and Alaska production offset a 6% decline in Gulf of Mexico production in November. EIA estimates that marketed natural gas production averaged 79.1

Bcf/d in 2015, an increase of 4.2 Bcf/d (5.7%) from 2014. EIA projects growth will slow to 0.7% in 2016, as low natural gas prices and declining rig activity begin to affect production. In 2017, however, forecast production growth increases to 2.0%, as forecast prices rise, industrial demand grows, and liquefied natural gas (LNG) exports increase. Production of dry natural gas is forecast to grow by 0.4% in 2016 and by 2.0% in 2017.

EIA expects U.S. production growth in the forecast period will reduce demand for natural gas imports from Canada and will support growth in exports to Mexico. EIA expects natural gas exports to Mexico to increase because of growing demand from Mexico's electric power sector coupled with flat natural gas production in Mexico. EIA projects LNG gross exports will increase to an average of 0.5 Bcf/d in 2016, with the start-up of Cheniere's Sabine Pass LNG liquefaction plant in Louisiana planned for early this year. EIA projects gross LNG exports will average 1.3 Bcf/d in 2017, as Sabine Pass ramps up its capacity.

Natural Gas Inventories. On January 29, natural gas working inventories were 2,934 Bcf. Withdrawals during the heating season were relatively low until the end of December because of warmer-than-normal temperatures, but even as withdrawals accelerated in January, inventories remained well above the five-year (2011-15) average. January 29 inventories were 490 Bcf (20%) above year-ago levels and 445 Bcf (18%) above the five-year average for that week. Inventories are forecast to be 2,096 Bcf at the end of March 2016, which would be 474 Bcf above the five-year average for the end of March.

Natural Gas Prices. The Henry Hub natural gas spot price averaged \$2.28/MMBtu in January, an increase of 35 cents/MMBtu from the December price and the first monthly increase since July 2015. Warmer-than-normal temperatures in the first half of the heating season, record inventory levels, and production growth contributed to spot prices remaining low through December, but seasonably cold weather in the beginning of 2016 and increases in consumption likely contributed to the price increase in January. Monthly average Henry Hub spot prices are forecast to rise through 2016, but they remain lower than \$3/MMBtu until December. Forecast Henry Hub natural gas prices average \$2.64/MMBtu in 2016 and \$3.22/MMBtu in 2017.

Natural gas futures contracts for May 2016 delivery traded during the five-day period ending February 4 averaged \$2.23/MMBtu. Current options and futures prices imply that market participants place the lower and upper bounds for the 95% confidence interval for May 2016 contracts at \$1.57/MMBtu and \$3.16/MMBtu, respectively. In February 2015, the natural gas futures contract for May 2015 delivery averaged \$2.71/MMBtu, and the corresponding lower and upper limits of the 95% confidence interval were \$1.79/MMBtu and \$4.11/MMBtu.

Coal

Coal Supply. EIA estimates that U.S. coal production for January 2016 was 59 million short tons (MMst), a 7% (4 MMst) decrease from December 2015 and the lowest monthly production since July 1983. Forecast production declines continue in 2016, with coal production expected to average 834 MMst, a 6% decline from 2015. In 2016, forecast Appalachian and Western region

production declines by 8% and 7%, respectively, and Interior region production falls slightly. Total production in 2017 is forecast to increase by 7 MMst (1%).

Interior region production, which accounted for 13% of coal production 10 years ago, is projected to account for 20% of production in 2016 and 2017. This increase in share reflects the region's growing competitive advantages compared with other U.S. coal-producing regions. These advantages include Interior coal's higher heat content, closer proximity to major markets than Western region coal, and lower mining costs than Appalachia-produced coal.

Electric power sector coal stockpiles were 189 MMst in November, a 7% increase from October, which was a typical seasonal build. November coal inventories averaged 161 MMst during the previous 10 years (2005-14). Coal stockpiles are high because of the loss in market share to natural gas for power generation.

Coal Consumption. EIA estimates that coal consumption decreased by 12% in 2015, mainly as a result of a 12% drop in electric power sector consumption. Coal consumption in the electric power sector is forecast to remain relatively unchanged in 2016 and 2017, as increases in consumption because of rising natural gas prices are offset by reductions in consumption because of growing renewables generation and coal-plant retirements. Retirements of coal-fired power plants, because of increased competition with natural gas generation and the implementation of the Mercury and Air Toxics Standards (MATS), reduce coal-fired generation capacity in the forecast period. With flat absolute levels of coal generation and expected plant retirements, EIA forecasts higher utilization at coal plants in 2016-17.

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.

EIA estimates U.S. coal exports decreased 22 MMst (23%) in 2015, falling to 75 MMst. The current global coal market trends are expected to continue, and coal exports are forecast to decline by an additional 8 MMst (11%) in 2016 and by 2 MMst (3%) in 2017.

U.S. coal imports were estimated at 12 MMst in 2015. Atlantic and Gulf Coast power generators are forecast to generally maintain their current levels of coal imports, primarily from Latin America. Imports are projected to average about 11 MMst in 2016 and 2017.

Coal Prices. EIA estimates the delivered coal price averaged \$2.23/MMBtu in 2015. Forecast prices are \$2.18/MMBtu in 2016 and \$2.20/MMBtu in 2017.

Electricity

The severe winter storm that struck the East Coast in late January likely had a limited effect on electricity demand, as increased residential use was offset by lower commercial use because many businesses closed during the storm. However, some customers experienced power outages, with customers in North Carolina and New Jersey among the most affected.

Electricity Consumption. Many households, especially in the southern states, use electricity for space heating. Despite last month's snowstorm, average heating degree days during the first quarter of 2016 are expected to be 12% lower than in the same period last year, contributing to first-quarter electricity sales to the residential sector that are 6% lower. For the entire year, EIA forecasts residential electricity sales will fall by 0.3% in 2016 and then increase by 2.4% in 2017. Forecast U.S. retail electricity sales to the commercial sector rise by 0.9% in 2016 and by 1.2% in 2017. Forecast U.S. industrial sector sales increase by 0.9% in 2016 and by 1.0% in 2017.

Electricity Generation. Total U.S. electricity generation in 2016 is expected to average 11.2 terawatthours per day, 0.3% higher than in 2015. Forecast generation grows by an additional 1.6% in 2017. Natural gas prices are forecast to stay relatively low through most of the forecast period, with the average Henry Hub price remaining below \$3.50/MMBtu until December 2017. EIA expects that the share of total generation fueled by natural gas in 2016 will average 32.3%, while coal supplies 33.3% of generation, which is similar to their shares in 2015. The projected generation share for natural gas falls to 31.5% in 2017, and coal's share remains unchanged, as generation from renewable energy sources increases.

Electricity Retail Prices. The U.S. retail price of electricity to the residential sector is projected to average 12.2 cents per kilowatthour (kWh) in the first quarter of 2016 and 12.7 cents/kWh for the whole year, similar to 2015 levels. In 2016, the average residential electricity price is expected to be highest in New England at 18.4 cents/kWh. It is expected to be lowest in the West South Central region at 10.9 cents/kWh. In 2017, the U.S. residential electricity price is projected to average 13.1 cents/kWh.

Renewables and Carbon Dioxide Emissions

Electricity and Heat Generation from Renewables. EIA expects total renewables used in the electric power sector to increase by 8.1% in 2016. Forecast hydropower generation in the electric power sector increases by 3.6% in 2016. The current El Niño cycle has mixed implications for the hydroelectric generation outlook. This winter started off wet in the Pacific Northwest, where roughly half of the nation's hydropower is generated. In December 2015, most of the Pacific Northwest saw precipitation more than 30% above normal, which points to above-normal snowpack in the region. California also had above-normal precipitation in December. However, drought conditions persist in much of the state.

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

EIA expects little effect from these renewable electricity tax credit extensions in 2016 because most plants that will enter service in 2016 are already being developed. Impacts in 2017 depend

on how many wind and solar projects are already in the development queue but not yet under construction. The U.S. Environmental Protection Agency's (EPA) approval of the Clean Power Plan in August 2015 may also affect new renewable construction over the next several years, but these near-term effects will be less certain until states lay out their implementation plans.

EIA expects continued growth in utility-scale solar power generation, which is projected to average 128 gigawatthours per day (GWh/d) in 2017, an increase of 42% from the 2016 level. Forecast utility-scale solar power averages 1.1% of total U.S. electricity generation in 2017. Although solar growth has historically been concentrated in customer-sited, distributed generation installations (rooftop panels), EIA expects utility-scale solar capacity will increase by about 80% (10 GW) between the end of 2015 and the end of 2017, with 4.1 GW of new capacity being built in California. Other states leading in utility-scale solar capacity additions include Nevada, North Carolina, Texas, and Georgia, which, combined with California, account for almost 80% of the projected utility-scale capacity additions for 2016 and 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 14% in 2016 and by 3% in 2017.

Liquid Biofuels. On November 30, EPA finalized a rule setting Renewable Fuel Standard (RFS) volumes for 2014 through 2016. EIA used these finalized volumes to develop the current STEO forecast and assumes the 2016 targets for 2017, except the biomass-based diesel 2017 target of 2.0 billion gallons that was included in the November 30 rule. Ethanol production averaged an estimated 965,000 b/d in 2015, and it is forecast to average close to that level in both 2016 and 2017. Ethanol consumption averaged 910,000 b/d in 2015, and it is forecast to average more than 920,000 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 84,000 b/d in 2015 and is forecast to average 107,000 b/d in 2016 and 112,000 b/d in 2017. Net imports of biomass-based diesel are expected to rise from 28,000 b/d in 2015 to 47,000 b/d in 2016 and to remain at that level in 2017.

Energy-Related Carbon Dioxide Emissions. EIA estimates that emissions of CO2 declined by 2.2% in 2015. Emissions are projected to increase by 0.5% in 2016 and by 0.5% 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 0.7% in the fourth quarter of 2015, down from 2.0% growth in the third quarter. The fourth quarter increase reflected positive contributions from personal consumption expenditures, residential fixed investment, and federal government spending.

EIA used the January 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 grows at 2.5% in 2016 and 3.1% in 2017, up from 2.4% in 2015. Real disposable income grows by 3.1% in 2016 and by 3.3% in 2017. Total industrial production grows by 0.4% in 2016 and by 3.4% in 2017. Projected growth in nonfarm employment averages 1.6% in 2016 and 1.3% in 2017.

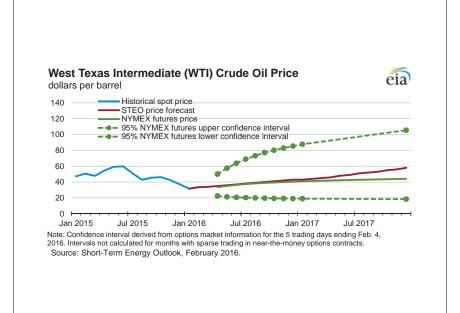
Expenditures. Forecast private real fixed investment growth is 5.7% and 6.5% in 2016 and 2017, respectively. Real consumption expenditures grow faster than real GDP at 2.9% in 2016 and at 3.4% in 2017. Durable goods expenditures drive consumption spending in both years. Forecast export growth is 2.3% in 2016 and 5.4% in 2017, and import growth is 4.7% and 8.1% over the same period. Total government expenditures rise by 2.3% in 2016 and by 0.4% in 2017.

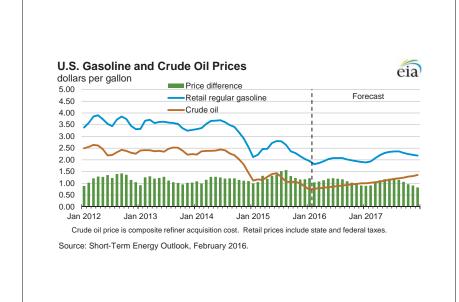
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views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

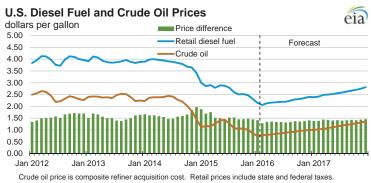


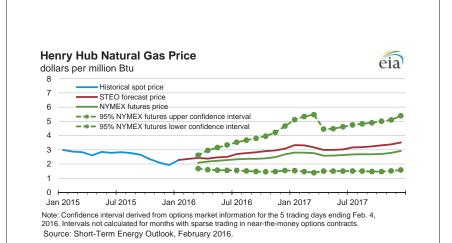
Short-Term Energy Outlook

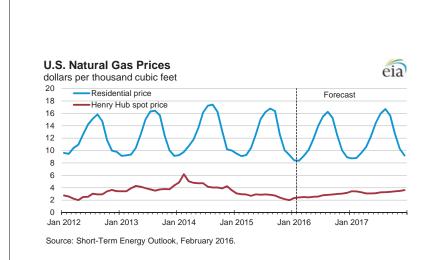
Chart Gallery for February 2016

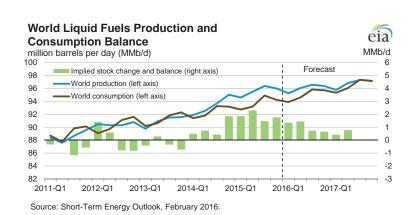


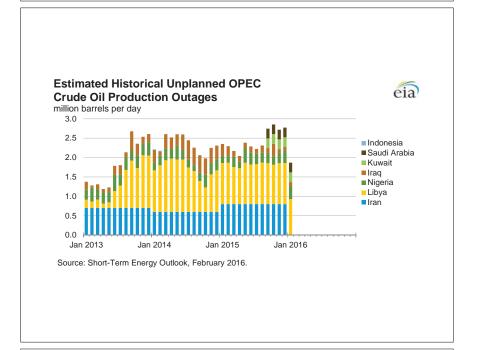


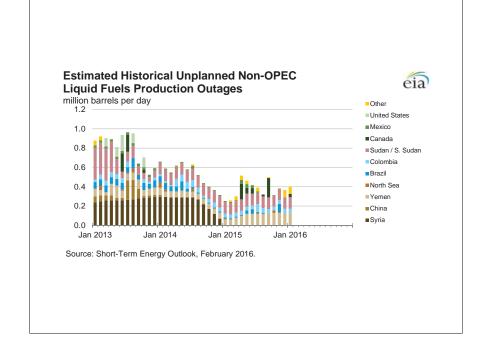


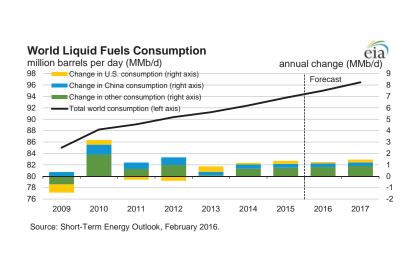


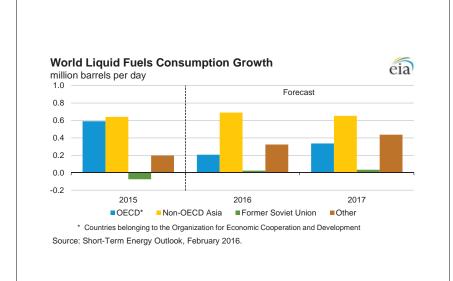


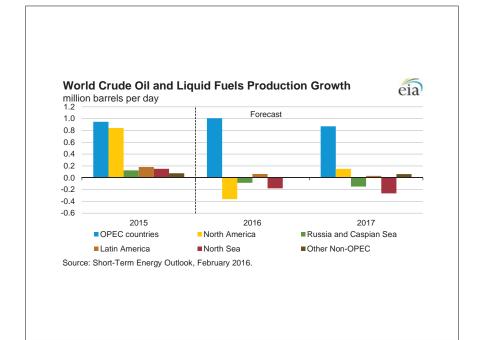


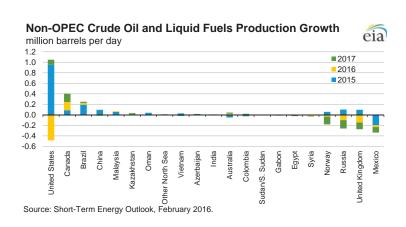


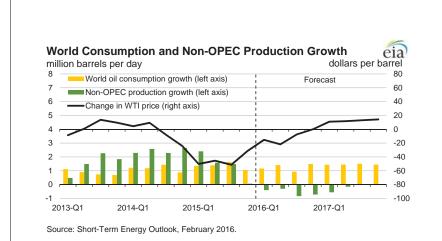


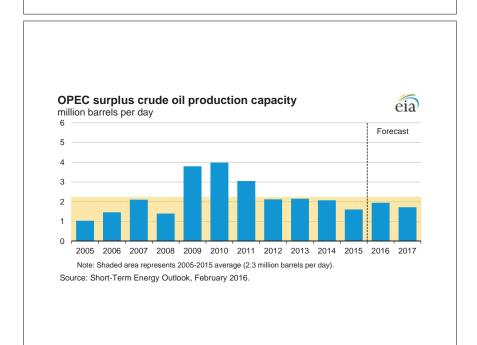


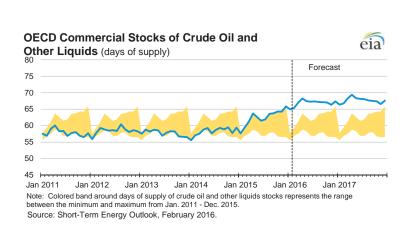


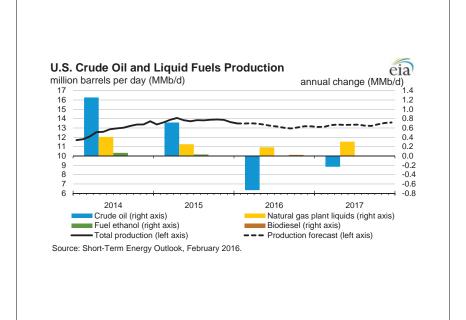


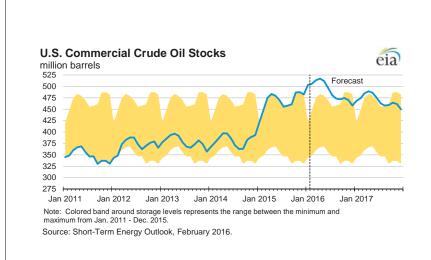


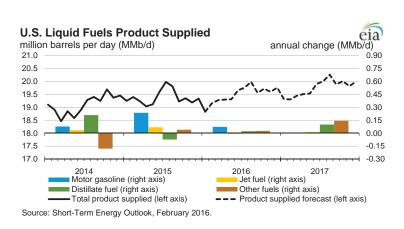


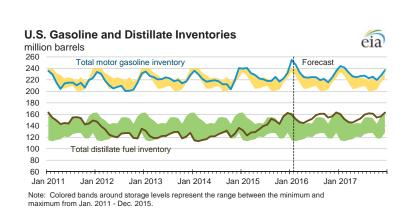


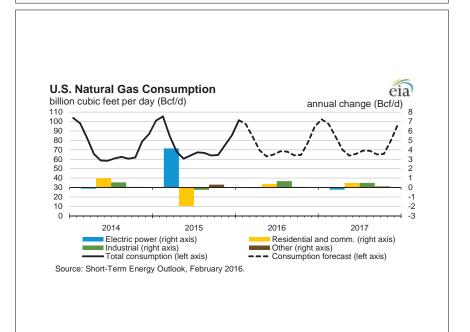


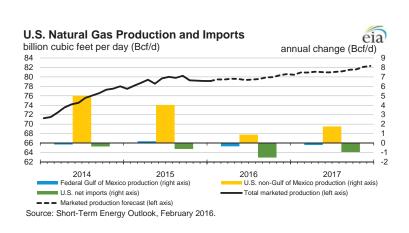


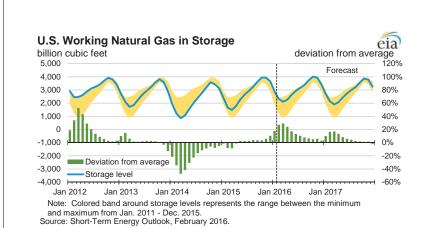


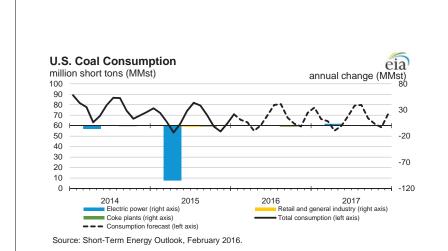


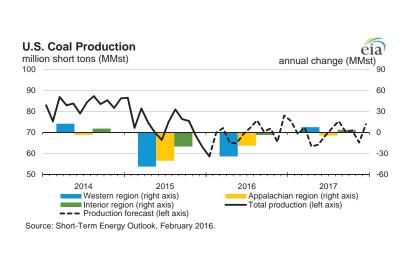


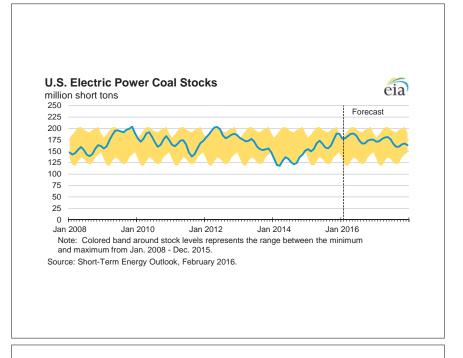


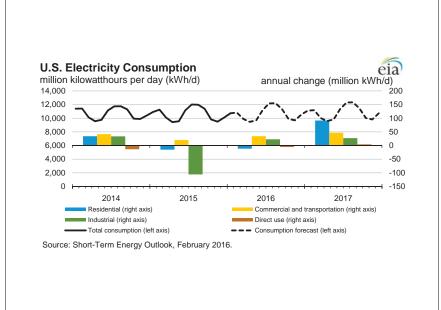


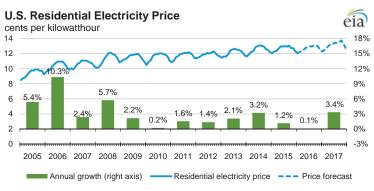


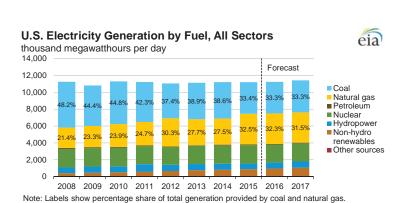


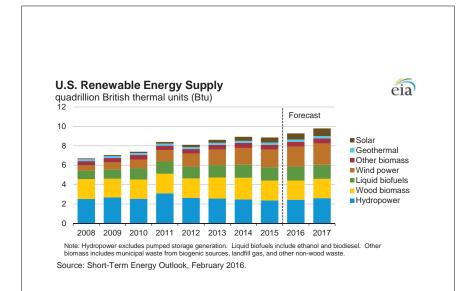


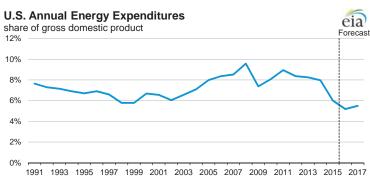




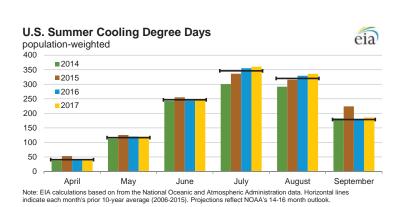


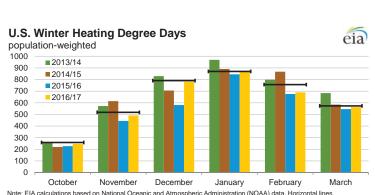






Source: Short-Term Energy Outlook, February 2016.

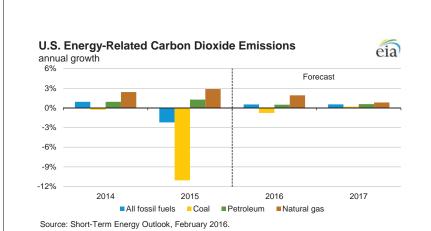


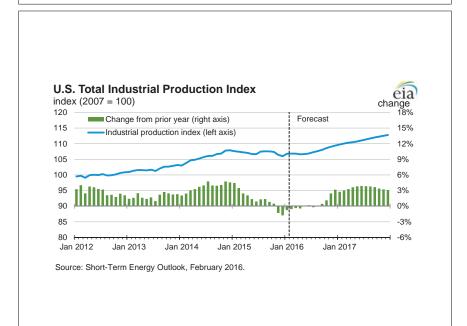


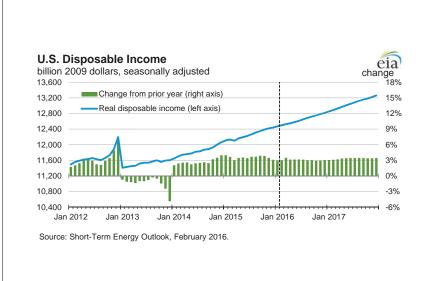
Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2005 - Mar 2015). Projections reflect NOAA's 14-16 month outlook. Source: Short-Term Energy Outlook, February 2016.

U.S. Census Regions and Divisions









STEO Current/Previous Forecast Comparisons: U.S. Energy Supply and Demand Summary

Current Forecast: February 9, 2016: Previous Forecast: January 12, 2015

Current Forecast: February	2, 2010;		s Foreca	ası. Jali	uary IZ,)16			20	117			V	ear			Growth Rate	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016	2017	2014-2015	2015-2016	
U.S. Energy Supply	Q1	QZ	QS	Q4	QΙ	Q2	પડ	Q4	QI	QZ	ųз	Q4	2014	2013	2010	2017	2014-2013	2013-2010	2010-2017
U.S. Crude Oil Production (million ba	rrole per de	n.d																	
Current	9.49	9.50	9.43	9.29	9.05	8.81	8.44	8.47	8.51	8.48	8.33	8.53	8.71	9.43	8.69	8.46	8.2%	-7.8%	-2.7%
Previous	9.49	9.50	9.43	9.30	9.03	8.86	8.48	8.49	8.52	8.48	8.34	8.52	8.71	9.43	8.73	8.46	8.3%	-7.4%	-3.1%
Percent Change	0.0%	0.0%	0.0%	-0.1%	-0.6%	-0.6%	-0.5%	-0.2%	-0.1%	-0.1%	0.0%	0.1%	0.0%	0.0%	-0.5%	0.0%	0.576	-7.470	-3.176
U.S. Dry Natural Gas Production (bill				-0.176	-0.078	-0.076	-0.576	-0.2 /6	-0.176	-0.176	0.076	0.176	0.076	0.076	-0.576	0.076			
Current	73.67	74.50	75.25	74.28	74.42	74.57	74.68	75.32	75.75	75.99	76.21	76.92	70.49	74.43	74.75	76.22	5.6%	0.4%	2.0%
Previous	73.67	74.50	75.26	74.36	74.50	74.65	74.75	75.39	75.82	76.02	76.14	76.84	70.49	74.45	74.82	76.21	5.6%	0.5%	1.8%
Percent Change	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	-0.1%	0.0%	0.070	0.070	1.070
U.S. Coal Production (million short to		0.070	0.070	0.170	0.170	0.170	0.170	0.170	0.170	0.070	0.170	0.170	0.070	0.070	0.170	0.070			
Current	240.2	211.1	232.4	206.8	200.6	199.2	218.5	215.5	217.2	195.9	217.8	210.2	999.7	890.5	833.8	841.0	-10.9%	-6.4%	0.9%
Previous	240.2	211.1	232.4	206.8	214.8	204.6	218.8	214.2	214.3	199.5	216.1	213.3	999.7	890.5	852.4	843.3	-10.9%	-4.3%	-1.1%
Percent Change	0.0%	0.0%	0.0%	0.0%	-6.6%	-2.6%	-0.2%	0.6%	1.3%	-1.8%	0.8%	-1.5%	0.0%	0.0%	-2.2%	-0.3%			,*
U.S. Energy Consumption	0.070	0.070	0.070	0.070	0.070	2.070	0.270	0.070		1.070	0.070	1.070	0.070	0.070	2.270	0.070			
U.S. Petroleum and Other Liquid Fue	els Consum	ption (millio	on barrels	per day)															
Current	19.29	19.25	19.68	19.29	19.08	19.42	19.77	19.69	19.36	19.65	20.05	19.94	19.11	19.38	19.49	19.75	1.4%	0.6%	1.3%
Previous	19.29	19.25	19.68	19.27	19.19	19.42	19.81	19.71	19.41	19.68	20.12	20.01	19.11	19.37	19.53	19.81	1.4%	0.8%	1.4%
Percent Change	0.0%	0.0%	0.0%	0.1%	-0.6%	0.0%	-0.2%	-0.1%	-0.3%	-0.2%	-0.4%	-0.3%	0.0%	0.0%	-0.2%	-0.3%	,*		
U.S. Natural Gas Consumption (billion																			
Current	96.67	64.11	66.04	75.03	94.14	65.78	66.94	78.99	94.56	66.53	67.78	80.55	73.14	75.38	76.44	77.29	3.1%	1.4%	1.1%
Previous	96.67	64.09	66.07	75.34	94.30	65.87	67.05	79.15	94.14	66.47	67.88	80.61	73.14	75.46	76.57	77.21	3.2%	1.5%	0.8%
Percent Change	0.0%	0.0%	0.0%	-0.4%	-0.2%	-0.1%	-0.2%	-0.2%	0.4%	0.1%	-0.1%	-0.1%	0.0%	-0.1%	-0.2%	0.1%			
U.S. Electricity Retail Sales (million k	ilowatthour	s per day)																	
Current	10,364	9,675	11,390	9,421	10,092	9,753	11,514	9,669	10,377	9,876	11,632	9,803	10,314	10,213	10,259	10,424	-1.0%	0.4%	1.6%
Previous	10,364	9,675	11,390	9,505	10,143	9,783	11,506	9,680	10,309	9,870	11,604	9,789	10,314	10,234	10,280	10,395	-0.8%	0.4%	1.1%
Percent Change	0.0%	0.0%	0.0%	-0.9%	-0.5%	-0.3%	0.1%	-0.1%	0.7%	0.1%	0.2%	0.1%	0.0%	-0.2%	-0.2%	0.3%			
U.S. Total Energy Consumption (qua	drillion Btu)																		
Current	26.38	23.01	24.48	23.66	25.62	22.97	24.34	24.54	25.87	23.28	24.61	24.83	98.49	97.53	97.47	98.59	-1.0%	-0.1%	1.1%
Previous	26.38	23.01	24.49	23.77	25.72	23.00	24.38	24.61	25.83	23.30	24.65	24.90	98.49	97.65	97.71	98.68	-0.9%	0.1%	1.0%
Percent Change	0.0%	0.0%	0.0%	-0.5%	-0.4%	-0.2%	-0.2%	-0.3%	0.1%	-0.1%	-0.2%	-0.3%	0.0%	-0.1%	-0.2%	-0.1%			
U.S. Macroeconomic and Weather																			
U.S. Real Gross Domestic Product	(billion chair	ned 2009 d	lollars)																
Current	16,177	16,334	16,414	16,458	16,569	16,679	16,818	16,972	17,095	17,228	17,353	17,455	15,962	16,346	16,759	17,283	2.4%	2.5%	3.1%
Previous	16,177	16,334	16,418	16,483	16,595	16,707	16,849	17,009	17,141	17,288	17,419	17,521	15,962	16,353	16,790	17,342	2.5%	2.7%	3.3%
Percent Change	0.0%	0.0%	0.0%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.3%	-0.3%	-0.4%	-0.4%	0.0%	0.0%	-0.2%	-0.3%			
U.S. Manufacturing Production Index	k (index 20°	12 = 100)																	
Current	105.5	105.8	106.7	106.8	106.8	106.4	107.3	108.9	109.9	110.5	111.4	112.3	103.9	106.2	107.3	111.0	2.2%	1.1%	3.5%
Previous	105.5	105.8	106.7	107.0	106.9	106.9	107.9	109.8	110.9	111.6	112.7	113.5	103.9	106.2	107.9	112.2	2.3%	1.5%	4.0%
Percent Change	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.5%	-0.6%	-0.8%	-0.9%	-1.0%	-1.1%	-1.1%	0.0%	0.0%	-0.5%	-1.0%			
U.S. Heating Degree Days																			
Current	2,342	443	50	1,252	2,066	448	69	1,518	2,120	476	76	1,549	4,552	4,087	4,101	4,221	-10.2%	0.3%	2.9%
Previous	2,343	443	49	1,247	2,063	453	69	1,516	2,121	477	76	1,550	4,551	4,082	4,101	4,223	-10.3%	0.5%	3.0%
Percent Change	0.0%	0.0%	0.4%	0.4%	0.2%	-1.2%	0.0%	0.2%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.1%	0.0%	0.0%			
U.S. Cooling Degree Days																			
Current	47	434	876	133	36	402	866	98	40	405	882	100	1,297	1,489	1,402	1,427	14.8%	-5.9%	1.8%
Previous	46	434	876	130	39	399	866	98	40	404	882	100	1,297	1,486	1,402	1,426	14.5%	-5.6%	1.7%
Percent Change	0.3%	0.0%	0.0%	2.4%	-8.2%	0.8%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.2%	0.0%	0.1%			

STEO Current/Previous Forecast Comparisons: U.S. Energy Prices

Current Forecast: February 9, 2016; Previous Forecast: January 12, 2015

US. Petrolators WIT spoil (Scharrel) Current	
Mary Course	2016-2017
Current 48.48 57.85 46.55 41.94 33.11 30.02 39.09 40.02 41.03 44.77 25.00 56.29 93.17 48.67 37.59 50.00 47.8% 22.8%	
Persona Alsa	
Refiner composite crude all acquisitations cost (Survey) Refiner cost (Su	33.0%
Refines compositie crude oil acquisitivas (Sparrey) Current 47,98 67,47 47,68 40,81 32,04 37,91 33,68 37,98 41,02 43,01 46,69 50,98 53,68 52,08 48,52 35,53 46,11 47,3% 24,26% Previous 67,47 47,70 40,82 35,34 47,08 32,08 52,08 48,52 37,52 46,11 47,3% 24,26% Previous Current Change 0,0%	21.9%
Current	
Persions	
Percent Change	34.3%
Period parage (Sharrer)	22.9%
Current	
Previous	
Percent Change	33.3%
Gasoline, regular-grade retail including taxes (\$\sigmalsrade retail retail including taxes (\$\sigmalsrade retail retail including taxes (\$\sigmalsrade retail retail retail including taxes (\$\sigmalsrade retail re	24.5%
Current 2.27 2.67 2.60 2.61 1.85 2.02 2.06 1.94 1.97 2.28 2.34 2.22 3.36 2.43 1.98 2.21 2.78% -18.6% Previous 2.27 2.67 2.60 2.16 1.95 2.13 2.11 1.94 1.96 2.28 2.35 2.22 3.36 2.43 2.03 2.21 2.78% -16.2% Percent Change 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.5% 0.45% 2.6% 2.6% 0.2% 0.4% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	
Previous 2.7 2.67 2.67 2.60 2.16 1.95 2.13 2.11 1.94 1.96 2.28 2.35 2.22 3.36 2.43 2.03 2.21 2.78 2.78 1.62% Percent Change 0.0% 0.0% 0.0% 0.0% 0.0% 0.78 2.78 2.68 2.63 2.44 2.11 2.17 2.24 2.35 2.43 2.52 2.62 2.75 3.83 2.71 2.22 2.58 2.92 2.58 2.92 2.58 2.92 2.58 2.93 2.93 2.93 2.93 2.93 2.93 2.93 2.93	
Percent Change 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.3% 0.5% 0.6% 0.2% 0.0%	11.6%
Dissel, retail including taxes (\$\signallon \color \co	8.4%
Current 2.92 2.85 2.63 2.44 2.11 2.17 2.24 2.35 2.43 2.52 2.62 2.75 3.83 2.71 2.22 2.58 -29.2% -18.0% Previous 2.92 2.85 2.63 2.44 2.17 2.28 2.32 2.37 2.43 2.53 2.63 2.76 3.83 2.71 2.22 2.58 -29.2% -18.0% Previous 0.0% 0.0% 0.0% 0.0% -0.1% -2.8% -4.5% -3.3% -0.9% 0.0% 0.0% -0.3% -0.3% -0.2% 0.0% 0.0% 0.0% 0.0% -2.8% 0.2% -15.6% Prevent Change 0.0% 0.0% 0.0% -0.1% -2.8% -4.5% -3.3% -0.9% 0.0% 0.0% -0.3% -0.3% 0.2% 0.0% 0.0% 0.0% 0.0% 0.2% 0.0% 0.2% 0.0% -2.8% 0.2% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	
Current 2.92 2.85 2.63 2.44 2.11 2.17 2.24 2.35 2.43 2.52 2.62 2.75 3.83 2.71 2.22 2.58 -29.2% -18.0% Previous 2.92 2.85 2.63 2.44 2.17 2.28 2.32 2.37 2.43 2.53 2.63 2.76 3.83 2.71 2.22 2.58 -29.2% -18.0% Previous 0.0% 0.0% 0.0% 0.0% -0.1% -2.8% -4.5% -3.3% -0.9% 0.0% 0.0% -0.3% -0.3% -0.2% 0.0% 0.0% 0.0% 0.0% -2.8% 0.2% -15.6% Prevent Change 0.0% 0.0% 0.0% -0.1% -2.8% -4.5% -3.3% -0.9% 0.0% 0.0% -0.3% -0.3% 0.2% 0.0% 0.0% 0.0% 0.0% 0.2% 0.0% 0.2% 0.0% -2.8% 0.2% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	
Previous 2.92 2.85 2.63 2.44 2.17 2.28 2.32 2.37 2.43 2.53 2.63 2.76 3.83 2.71 2.29 2.59 2.59 2.92% -15.6% Percent Change 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.4 2.8% 4.5% -3.3% 0.9% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	16.2%
Heating Oil, residential retail including taxes (\$\struct\sqrt{\synt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\synt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\synt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\synt{\sqrt{\synt{\sqrt{\synt{\sqrt{\synt{\synt{\synt{\sqrt{\synt{\synt{\synt{\synt{\sqrt{\syn{\synt{\synt{\syn{\synt{\syn{\synt{\synt{\synt{\syn{\synt{\synt{\synt{\synt{\synt	13.2%
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Current 2.88 2.76 2.47 2.24 2.05 2.02 2.05 2.19 2.33 2.33 2.40 2.57 3.72 2.65 2.09 2.41 -28.6% -21.3% Previous 2.88 2.76 2.47 2.24 2.13 2.12 2.13 2.23 2.35 2.34 2.42 2.58 3.72 2.65 2.16 2.43 -28.6% -18.6% Percent Change 0.0% 0.0% 0.0% -0.1% -4.1% -4.8% -4.1% -1.9% -0.7% -0.6% -0.5% -0.6% -0.5% -0.4% 0.0% -0.1% -3.5% -0.6% -0.86%	
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Percent Change 0.0% 0.0% 0.0% 0.0% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.0%	12.4%
Henry Hub spot (\$ per million Btu) Current 2.90 2.75 2.76 2.12 2.36 2.45 2.77 2.98 3.27 3.00 3.20 3.40 4.39 2.63 2.64 3.22 -40.1% 0.3% Previous 2.90 2.75 2.76 2.12 2.37 2.47 2.78 2.98 3.27 3.00 3.20 3.41 4.39 2.63 2.65 3.22 -40.1% 0.3% Previous 2.90 2.75 2.76 2.12 2.37 2.47 2.78 2.98 3.27 3.00 3.20 3.41 4.39 2.63 2.65 3.22 -40.1% 0.8% Percent Change 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Residential Retail (\$ per thousand cubic feet)	
Henry Hub spot (\$ per million Btu) Current 2.90 2.75 2.76 2.12 2.36 2.45 2.77 2.98 3.27 3.00 3.20 3.40 4.39 2.63 2.64 3.22 -40.1% 0.3% Previous 2.90 2.75 2.76 2.12 2.37 2.47 2.78 2.98 3.27 3.00 3.20 3.41 4.39 2.63 2.65 3.22 -40.1% 0.8% Previous 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	
Current 2.90 2.75 2.76 2.12 2.36 2.45 2.77 2.98 3.27 3.00 3.20 3.40 4.39 2.63 2.64 3.22 -40.1% 0.3% Previous 2.90 2.75 2.76 2.12 2.37 2.47 2.78 2.98 3.27 3.00 3.20 3.41 4.39 2.63 2.65 3.22 -40.1% 0.8% Previous 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	
Previous 2.90 2.75 2.76 2.12 2.37 2.47 2.78 2.98 3.27 3.00 3.20 3.41 4.39 2.63 2.65 3.22 -40.1% 0.8% Percent Change 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% -0.6% -1.0% -0.5% 0.0% 0.1% 0.0% 0.0% -0.1% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	22.0%
Percent Change 0.0%	21.4%
Residential Retail (\$ per thousand cubic feet) Current 9.30 11.96 16.45 10.10 8.59 11.35 15.65 9.77 9.00 11.82 16.09 10.06 10.94 10.36 9.83 10.21 -5.3% -5.1% Previous 9.30 11.96 16.46 10.16 8.59 11.39 15.69 9.82 9.02 11.83 16.09 10.08 10.94 10.37 9.85 10.23 -5.2% -5.0% Percent Change 0.0% 0.0% -0.1% -0.6% 0.0% -0.3% -0.2% -0.5% -0.2% -0.5% -0.2% -0.1% 0.0% -0.2% 0.0% -0.1% -0.3% -0.2% U.S. Electric Utilities Fuel Costs (\$ per million Btu) Coal Current 2.27 2.25 2.22 2.15 2.14 2.20 2.20 2.16 2.16 2.16 2.21 2.23 2.19 2.36 2.23 2.18 2.20 -5.8% -2.2% Previous 2.27 2.25 2.22 2.18 2.18 2.18 2.21 2.21 2.21 2.17 2.17 2.22 2.23 2.19 2.36 2.23 2.19 2.20 -5.5% -1.8%	
Current 9.30 11.96 16.45 10.10 8.59 11.35 15.65 9.77 9.00 11.82 16.09 10.06 10.94 10.36 9.83 10.21 -5.3% -5.1% Previous 9.30 11.96 16.46 10.16 8.59 11.39 15.69 9.82 9.02 11.83 16.09 10.08 10.94 10.37 9.85 10.23 -5.2% -5.0% Percent Change 0.0% 0.0% -0.1% -0.6% 0.0% -0.3% -0.2% -0.5% -0.2% -0.5% -0.2% -0.1% 0.0% -0.2% 0.0% -0.1% -0.3% -0.2% U.S. Electric Utilities Fuel Costs (\$ per million Btu) Coal Current 2.27 2.25 2.22 2.15 2.14 2.20 2.20 2.16 2.16 2.16 2.21 2.23 2.19 2.36 2.23 2.18 2.20 -5.8% -2.2% Previous 2.27 2.25 2.22 2.18 2.18 2.18 2.21 2.21 2.21 2.17 2.17 2.22 2.23 2.19 2.36 2.23 2.19 2.20 -5.5% -1.8%	
Previous 9.30 11.96 16.46 10.16 8.59 11.39 15.69 9.82 9.02 11.83 16.09 10.08 10.94 10.37 9.85 10.23 -5.2% -5.0% Percent Change 0.0% 0.0% -0.6% 0.0% -0.3% -0.2% -0.5% -0.2% -0.1% 0.0% -0.2% -0.3% -0.2% -0.5% -0.2% -0.1% 0.0% -0.0% -0.1% -0.3% -0.2% -5.0% -0.5% -0.2% -0.1% 0.0% -0.1% -0.3% -0.2% -5.0% -0.2% -0.1% 0.0% -0.2% -0.0% -0.2% -0.1% -0.2% -0.1% -0.2% -0.1% -0.2% -0.1% -0.2% -0.2% -0.2% -0.2% -0.1% -0.2% -0.1% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2% -0.2%	3.9%
Percent Change 0.0% 0.0% -0.1% -0.6% 0.0% -0.3% -0.2% -0.5% -0.2% -0.5% -0.2% -0.1% 0.0% -0.2% 0.0% -0.1% -0.3% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0.2% -0.5% -0.2% -0	3.9%
U.S. Electric Utilities Fuel Costs (\$ per million Btu/ Coal Current 2.27 2.25 2.22 2.15 2.14 2.20 2.20 2.16 2.16 2.16 2.21 2.23 2.19 2.36 2.23 2.18 2.20 -5.8% -2.2% Previous 2.27 2.25 2.22 2.18 2.18 2.18 2.21 2.21 2.17 2.17 2.17 2.22 2.23 2.19 2.36 2.23 2.19 2.20 2.5% -1.8%	
Coal Current 2.27 2.25 2.22 2.15 2.14 2.20 2.20 2.16 2.16 2.21 2.23 2.19 2.36 2.23 2.18 2.20 -5.8% -2.2% Previous 2.27 2.25 2.22 2.18 2.18 2.21 2.21 2.17 2.17 2.12 2.23 2.19 2.36 2.23 2.19 2.20 -5.5% -1.8%	
Current 2.27 2.25 2.22 2.15 2.14 2.20 2.20 2.16 2.16 2.21 2.23 2.19 2.36 2.23 2.18 2.20 -5.8% -2.2% Previous 2.27 2.25 2.22 2.18 2.18 2.21 2.21 2.17 2.17 2.22 2.23 2.19 2.36 2.23 2.19 2.20 -5.5% -1.8%	
Previous 2.27 2.25 2.22 2.18 2.18 2.21 2.21 2.17 2.17 2.22 2.23 2.19 2.36 2.23 2.19 2.20 -5.5% -1.8%	1.0%
	0.4%
FEIGER CHARLES U.U% U.U% U.U% 1.0% 1.7% 1.7% 1.7% 1.4% 10.4% 10.4% 10.2% 10.2% 10.2% 10.1% 10.0% 10.0% 10.0% 10.1% 10.0% 10.1% 10.0%	
Natural Gas	
Current 4.09 3.11 3.09 2.86 3.56 3.24 3.35 4.08 4.43 3.74 3.74 4.45 4.98 3.26 3.54 4.05 -34.7% 8.7%	14.6%
Previous 4.09 3.11 3.09 2.99 3.52 3.25 3.36 4.07 4.43 3.74 3.74 4.45 4.98 3.29 3.53 4.05 -34.1% 7.4%	14.8%
Percent Change 0.0% 0.0% 0.0% -4.3% 1.0% -0.1% -0.1% 0.2% 0.2% -0.1% 0.1% 0.0% -0.9% 0.3% 0.1%	
Residual Fuel Oil	
Current 10.82 11.64 10.48 8.29 7.47 7.74 7.70 7.99 8.23 9.31 9.55 10.05 19.19 10.42 7.72 9.27 -45.7% -26.0%	20.1%
Previous 10.82 11.64 10.48 8.97 7.86 8.41 8.44 8.48 8.58 9.63 9.87 10.37 19.19 10.56 8.29 9.59 -45.0% -21.5%	15.7%
Percent Change 0.0% 0.0% 0.0% -7.6% -5.0% -8.0% -8.8% -5.8% -4.1% -3.3% -3.2% -3.0% 0.0% -1.3% -6.9% -3.4%	
U.S. Residential Retail Electricity (cents per kilowatthour)	
Current 12.23 12.85 12.99 12.57 12.19 12.72 12.99 12.76 12.48 13.20 13.46 13.24 12.52 12.66 12.68 13.10 1.2% 0.1%	3.4%
Previous 12.23 12.85 12.99 12.50 12.16 12.70 13.00 12.68 12.48 13.14 13.40 13.04 12.52 12.65 12.65 13.02 1.0% 0.0%	3.0%
Percent Change 0.0% 0.0% 0.0% 0.5% 0.2% 0.1% 0.0% 0.6% 0.1% 0.5% 0.5% 1.5% 0.0% 0.0% 0.0% 0.6%	

Prices are not adjusted for inflation.

STEO Current/Previous Forecast Comparisons: International Crude Oil and Liquid Fuels

Current Forecast: February 9, 2016: Previous Forecast: January 12, 2015

Current Forecast: Februar	y 9, 2016;		S Forec	ast: Jan	uary 12		016		l	20)17		1	V.	ear			Growth Pote	
	- 04								- 0.4				2011			2047	2011 2015	Growth Rate	
Wanta Conda Cil and Linnid Engla	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016	2017	2014-2015	2015-2016	2016-201
World Crude Oil and Liquid Fuels																			
OECD (Organization for Economic					00.54	00.00	05.04	00.05	00.00	00.40	00.00	00.04	05.70	00.00	00.40	00.40	2.00/	4.00/	0.00/
Current	26.64 26.65	26.42 26.48	26.80 26.79	26.89 26.59	26.54 26.30	26.23 26.05	25.91 25.80	26.05 25.98	26.03 25.88	26.12 25.88	26.03 25.91	26.21 26.16	25.76 25.76	26.69 26.63	26.18 26.03	26.10 25.96	3.6% 3.4%	-1.9% -2.2%	-0.3% -0.3%
Previous		-0.2%															3.4%	-2.270	-0.3%
Percent Change	0.0%		0.1%	1.1%	0.9%	0.7%	0.4%	0.3%	0.6%	0.9%	0.5%	0.2%	0.0%	0.2%	0.6%	0.5%			
OPEC (Organization of the Petrole	eum Exporting 37.46	Countries 38.22		38.45	38.52	39.08	39.63	39.55	39.58	40.01	40.34	40.33	37.24	38.19	39.20	40.07	2.5%	2.6%	2.2%
Current Previous	37.46	38.24	38.61 38.75	38.67	38.50	38.94	39.66	39.52	39.44	40.01 39.90	40.34	40.33	37.24	38.30	39.20	40.07	2.5%	2.0%	2.2%
	-0.2%	-0.1%	-0.4%	-0.6%	0.0%	0.4%	-0.1%	0.1%	0.4%	0.3%	-0.1%	0.0%	0.0%	-0.3%	0.1%	0.1%	2.070	2.270	2.270
Percent Change	-0.2%	-0.1%	-0.4%	-0.6%	0.0%	0.4%	-0.1%	0.1%	0.4%	0.3%	-0.1%	0.0%	0.0%	-0.3%	0.1%	0.1%			
Non-OPEC Supply	57.14	57.28	57.77	57.54	56.74	56.98	56.94	56.83	56.18	56.82	56.97	56.82	56.06	57.43	56.87	56.70	2.5%	-1.0%	-0.3%
Current Previous	57.14 57.16	57.26 57.34	57.77	57.54	56.57	56.84	56.87	56.81	56.08	56.64	56.98	56.98	56.09	57.43 57.41	56.77	56.68	2.5%	-1.0% -1.1%	-0.3%
																0.0%	2.4%	-1.176	-0.2%
Percent Change	0.0%	-0.1%	-0.1%	0.4%	0.3%	0.2%	0.1%	0.0%	0.2%	0.3%	0.0%	-0.3%	-0.1%	0.0%	0.2%	0.0%			
Total World Supply	94.60	95.50	96.38	96.00	95.25	96.06	96.57	96.38	95.76	96.83	97.32	97.14	93.30	95.62	96.07	96.77	2.5%	0.5%	0.7%
Current																	2.5%	0.5%	0.7%
Previous	94.69	95.58	96.60	95.95	95.07	95.78	96.53	96.33	95.52	96.54	97.36	97.30	93.33	95.71	95.93	96.69	2.0%	0.2%	0.6%
Percent Change	-0.1%	-0.1%	-0.2%	0.0%	0.2%	0.3%	0.0%	0.1%	0.2%	0.3%	0.0%	-0.2%	0.0%	-0.1%	0.1%	0.1%			
World Crude Oil and Liquid Fuels		•		• •															
OECD (Organization for Economic Current						45.70	46.62	47.08	47.00	46.04	46.98	47.44	45.73	46.22	46.50	46.06	4.20/	0.40/	0.7%
	46.50	45.38	46.75	46.64	46.65	45.73				46.04		47.41		46.32	46.52	46.86	1.3%	0.4%	
Previous	46.62	45.36	46.51	46.65	46.83	45.80	46.73	47.17	47.12	46.15	47.12	47.55	45.73	46.28	46.63	46.99	1.2%	0.8%	0.8%
Percent Change	-0.3%	0.0%	0.5%	0.0%	-0.4%	-0.1%	-0.2%	-0.2%	-0.3%	-0.2%	-0.3%	-0.3%	0.0%	0.1%	-0.2%	-0.3%			
Non-OECD Consumption Current	46.24	47.82	48.16	47.60	47.25	48.87	49.22	48.64	48.34	50.01	50.36	49.76	46.69	47.46	48.50	49.62	1.6%	2.2%	2.3%
Previous	46.24	47.85	48.19	47.60	47.25	48.93	49.22	48.70	48.34	50.01	50.36	49.76	46.69	47.46 47.49	48.56	49.62	1.7%	2.2%	2.3%
																	1.7 70	2.370	2.270
Percent Change China Consumption	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%			
Current	10.77	11.36	11.32	11.27	11.08	11.69	11.64	11.59	11.37	11.99	11.94	11.89	10.85	11.18	11.50	11.80	3.0%	2.8%	2.6%
Previous	10.77	11.36	11.32	11.27	11.08	11.69	11.64	11.59	11.37	11.99	11.94	11.89	10.85	11.18	11.50	11.80	3.0%	2.8%	2.6%
Percent Change	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.078	2.070	2.076
Total World Consumption	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Current	92.74	93.19	94.90	94.24	93.90	94.61	95.83	95.72	95.34	96.05	97.34	97.17	92.42	93.78	95.02	96.48	1.5%	1.3%	1.5%
Previous	92.89	93.21	94.69	94.28	94.14	94.73	96.01	95.87	95.45	96.16	97.49	97.31	92.42	93.77	95.19	96.61	1.5%	1.5%	1.5%
Percent Change	-0.2%	0.0%	0.2%	0.0%	-0.3%	-0.1%	-0.2%	-0.2%	-0.1%	-0.1%	-0.2%	-0.1%	0.0%	0.0%	-0.2%	-0.1%	1.570	1.570	1.570
Closing Stocks (million barrels)	-0.2 /6	0.076	0.276	0.076	-0.576	-0.176	-0.2 /6	-0.2 /6	-0.176	-0.176	-0.2 /6	-0.176	0.076	0.076	-0.2 /0	-0.176			
OECD Commercial Inventory																			
Current	2,797	2,888	2,961	3,029	3,067	3,127	3,148	3,137	3,146	3,190	3,193	3,159	2,721	3,029	3,137	3,159	11.3%	3.6%	0.7%
Previous	2,800	2,918	2,998	3,061	3,080	3,132	3,149	3,132	3,132	3,166	3,167	3,131	2,721	3,061	3,132	3,131	12.5%	2.3%	0.0%
Percent Change	-0.1%	-1.0%	-1.2%	-1.0%	-0.4%	-0.2%	0.0%	0.1%	0.4%	0.7%	0.8%	0.9%	0.0%	-1.0%	0.1%	0.9%	12.070	2.070	0.076
OPEC Surplus Production Capaci				- 1.0 /0	-0.770	-0.2/0	0.070	0.170	0.770	0.1 /0	0.070	0.578	0.070	-1.070	0.176	0.576			
OPEC Surplus Crude Oll Producti	-			d)															
Current	1.94	1.55	1.34	1.61	2.11	2.05	1.68	1.95	1.97	1.72	1.50	1.70	2.07	1.61	1.95	1.72	-22.4%	21.0%	-11.6%
Previous	1.94	1.55	1.34	1.53	1.81	2.03	1.83	2.05	2.17	1.72	1.69	1.70	2.07	1.59	1.97	1.72	-22.4%	24.0%	-2.7%
Percent Change	-0.2%	0.6%	0.6%	5.0%	16.5%	-5.8%	-8.2%	-4.9%	-9.2%	-10.4%	-11.0%	-9.6%	0.0%	1.4%	-1.0%	-10.0%	-23.370	24.0 /0	-2.1 /0
					10.5%	-3.0%	-0.270	-4.370	-3.270	-10.470	-11.070	-3.076	0.076	1.470	-1.070	-10.0%			
World Oil-Consumption-Weighted	2.58	(annualize 2.50	d percent of 2.34	change) 2.08	2.28	2.42	2.57	2.92	3.02	3.13	3.22	3.19	2.71	2.37	2.55	3 1/1			
Current Previous		2.50		2.08			2.57 2.71	2.92			3.22			2.37		3.14			
FIEVIOUS	2.58	∠.49	2.34	2.13	2.37	2.56	Z./ T	2.99	3.13	3.14	3.24	3.25	2.71	∠.38	2.66	3.19	<u> </u>		

STEO Current/Previous Forecast Comparisons: U.S. Petroleum and Other Liquid Fuels Current Forecast: February 9, 2016; Previous Forecast: January 12, 2015

-	9, 2016; I)15				16			20	17			Ye	ar			Growth Rate)
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016	2017	2014-2015	2015-2016	2016-2017
U.S. Supply (million barrels per da	ıy)						<u> </u>		<u> </u>										
U.S. Crude Oil Production																			
Current	9.49	9.50	9.43	9.29	9.05	8.81	8.44	8.47	8.51	8.48	8.33	8.53	8.71	9.43	8.69	8.46	8.2%	-7.8%	-2.7%
Previous	9.49	9.50	9.43	9.30	9.11	8.86	8.48	8.49	8.52	8.48	8.34	8.52	8.71	9.43	8.73	8.46	8.3%	-7.4%	-3.1%
Percent Change	0.0%	0.0%	0.0%	-0.1%	-0.6%	-0.6%	-0.5%	-0.2%	-0.1%	-0.1%	0.0%	0.1%	0.0%	0.0%	-0.5%	0.0%			
U.S. Natural Gas Plant Liquids Pro	duction																		
Current	3.09	3.27	3.31	3.39	3.34	3.43	3.48	3.56	3.58	3.76	3.82	3.87	3.01	3.27	3.45	3.76	8.4%	5.7%	8.9%
Previous	3.09	3.27	3.31	3.35	3.35	3.44	3.49	3.56	3.56	3.75	3.80	3.86	3.01	3.26	3.46	3.74	8.0%	6.3%	8.1%
Percent Change	0.0%	0.0%	0.0%	1.2%	-0.3%	-0.3%	-0.4%	0.1%	0.6%	0.3%	0.7%	0.4%	0.0%	0.3%	-0.2%	0.5%			
U.S. Ethanol Production																			
Current	0.96	0.96	0.96	0.98	0.97	0.97	0.98	0.96	0.97	0.96	0.97	0.96	0.93	0.96	0.97	0.97	3.3%	0.5%	-0.3%
Previous	0.96	0.96	0.96	0.98	0.97	0.96	0.98	0.96	0.98	0.96	0.98	0.96	0.93	0.96	0.97	0.97	3.3%	0.5%	0.0%
Percent Change	0.0%	0.0%	0.0%	0.2%	-0.4%	0.3%	-0.3%	0.2%	-0.5%	-0.2%	-0.6%	0.1%	0.0%	0.0%	0.0%	-0.3%			
U.S. Total Petroleum and Other Liq	uid Fuel Net	Imports																	
Current	4.95	4.61	4.74	4.25	4.10	4.84	5.15	4.52	4.63	5.15	5.29	4.36	5.07	4.64	4.65	4.86	-8.5%	0.4%	4.4%
Previous	4.95	4.61	4.74	4.23	3.98	4.86	5.20	4.53	4.71	5.23	5.40	4.41	5.07	4.63	4.64	4.94	-8.6%	0.3%	6.4%
Percent Change	0.0%	0.0%	0.0%	0.5%	3.0%	-0.5%	-0.9%	-0.2%	-1.8%	-1.7%	-1.9%	-1.3%	0.0%	0.1%	0.2%	-1.7%			
.S. Consumption (million barrels	per day)																		
U.S. Gasoline	,																		
Current	8.81	9.26	9.39	9.15	8.82	9.36	9.49	9.25	8.90	9.33	9.45	9.24	8.92	9.16	9.23	9.23	2.6%	0.8%	0.0%
Previous	8.81	9.26	9.39	9.15	8.89	9.33	9.49	9.21	8.95	9.35	9.49	9.22	8.92	9.16	9.23	9.25	2.6%	0.8%	0.2%
Percent Change	0.0%	0.0%	0.0%	0.0%	-0.8%	0.3%	0.0%	0.4%	-0.5%	-0.2%	-0.4%	0.1%	0.0%	0.0%	0.0%	-0.2%			
U.S. Distillate																			
Current	4.27	3.88	3.93	3.79	3.99	3.96	3.94	4.06	4.19	4.05	4.02	4.09	4.04	3.96	3.99	4.09	-1.8%	0.6%	2.5%
Previous	4.27	3.88	3.93	3.77	4.11	3.98	3.95	4.08	4.21	4.08	4.05	4.13	4.04	3.96	4.03	4.12	-1.9%	1.9%	2.0%
Percent Change	0.0%	0.0%	0.0%	0.4%	-3.1%	-0.6%	-0.4%	-0.5%	-0.5%	-0.8%	-0.7%	-0.8%	0.0%	0.1%	-1.2%	-0.7%			
U.S. Jet Fuel																			
Current	1.45	1.54	1.59	1.57	1.48	1.56	1.56	1.51	1.50	1.58	1.58	1.53	1.47	1.54	1.53	1.55	4.7%	-0.5%	1.0%
Previous	1.45	1.54	1.59	1.58	1.47	1.55	1.56	1.52	1.49	1.58	1.59	1.54	1.47	1.54	1.53	1.55	4.8%	-0.8%	1.3%
Percent Change	0.0%	0.0%	0.0%	-0.5%	0.7%	0.7%	-0.3%	-0.6%	0.2%	0.3%	-0.6%	-0.6%	0.0%	-0.1%	0.1%	-0.2%			
U.S. Hydrocarbon Gas Liquids																			
Current	2.72	2.27	2.29	2.55	2.68	2.23	2.29	2.64	2.66	2.38	2.49	2.83	2.45	2.46	2.46	2.59	0.4%	0.0%	5.4%
Previous	2.72	2.27	2.29	2.52	2.61	2.24	2.31	2.66	2.64	2.36	2.49	2.86	2.45	2.45	2.46	2.59	0.1%	0.2%	5.4%
Percent Change	0.0%	0.0%	0.0%	1.2%	2.3%	-0.6%	-0.9%	-0.7%	0.7%	0.5%	0.3%	-1.0%	0.0%	0.3%	0.1%	0.1%			
U.S. Total Petroleum and Other Lig	uid Fuels																		
Current	19.29	19.25	19.68	19.29	19.08	19.42	19.77	19.69	19.36	19.65	20.05	19.94	19.11	19.38	19.49	19.75	1.4%	0.6%	1.3%
Previous	19.29	19.25	19.68	19.27	19.19	19.42	19.81	19.71	19.41	19.68	20.12	20.01	19.11	19.37	19.53	19.81	1.4%	0.8%	1.4%
Percent Change	0.0%	0.0%	0.0%	0.1%	-0.6%	0.0%	-0.2%	-0.1%	-0.3%	-0.2%	-0.4%	-0.3%	0.0%	0.0%	-0.2%	-0.3%			
.S. Closing Stocks (million barrel	s)																		
U.S. Crude Oil	-,																		
Current	474.8	469.5	460.8	482.3	513.5	496.6	471.6	458.1	484.8	475.1	459.1	449.7	393.3	482.3	458.1	449.7	22.6%	-5.0%	-1.8%
Previous	474.8	469.5	460.8	482.3	503.6	489.7	466.7	454.7	481.8	472.3	456.7	447.7	393.3	482.3	454.7	447.7	22.6%	-5.7%	-1.5%
Percent Change	0.0%	0.0%	0.0%	0.0%	2.0%	1.4%	1.0%	0.8%	0.6%	0.6%	0.5%	0.5%	0.0%	0.0%	0.8%	0.5%			
U.S. Total Gasoline																			
Current	231.5	221.0	225.1	232.0	232.8	224.9	221.4	235.3	233.3	226.5	225.6	236.8	240.4	232.0	235.3	236.8	-3.5%	1.4%	0.7%
Previous	231.5	221.0	225.1	232.0	224.8	222.8	221.5	234.7	231.1	225.1	224.9	236.2	240.4	232.0	234.7	236.2	-3.5%	1.2%	0.6%
Percent Change	0.0%	0.0%	0.0%	0.0%	3.5%	0.9%	0.0%	0.2%	1.0%	0.6%	0.3%	0.3%	0.0%	0.0%	0.2%	0.3%	0.070	,	3.576
U.S. Distillate Fuel Oil	3.3,0	0.070	0.075	0.073	0.070	3.573	0.073	3.273	,3	0.070	0.070	0.075	0.070	0.070	3.2,3	3.570			
Current	128.3	139.4	148.8	162.4	145.9	151.9	160.9	163.2	146.3	152.7	161.1	162.8	136.3	162.4	163.2	162.8	19.2%	0.5%	-0.2%
Previous	128.3	139.4	148.8	159.4	144.3	150.5	159.6	161.4	144.5	150.9	159.2	160.5	136.3	159.4	161.4	160.5	17.0%	1.2%	-0.6%
Percent Change	0.0%	0.0%	0.0%	1.9%	1.1%	0.9%	0.9%	1.1%	1.3%	1.2%	1.2%	1.5%	0.0%	1.9%	1.1%	1.5%		/0	3.070

STEO Current/Previous Forecast Comparisons: U.S. Natural Gas

Current Forecast: February 9, 2016; Previous Forecast: January 12, 2015

		20)15			20	16			20	17	·		Ye	ar	·		Growth Rate	,
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016	2017	2014-2015	2015-2016	2016-201
J.S. Supply (billion cubic feet p	er day)																		
U.S. Total Marketed Production																			
Current	78.11	79.20	80.01	79.20	79.34	79.50	79.61	80.30	80.76	81.02	81.24	82.00	74.89	79.13	79.69	81.26	5.7%	0.7%	2.0%
Previous	78.11	79.20	80.01	79.21	79.34	79.50	79.61	80.29	80.75	80.96	81.08	81.83	74.89	79.14	79.68	81.16	5.7%	0.7%	1.8%
Percent Change	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.1%			
U.S. Federal GOM Marketed Pr	oduction																		
Current	3.37	3.68	3.95	3.55	3.43	3.38	3.21	3.17	3.22	3.17	3.00	3.03	3.44	3.64	3.30	3.10	5.8%	-9.3%	-6.0%
Previous	3.37	3.68	3.95	3.58	3.43	3.38	3.21	3.17	3.22	3.17	3.00	3.03	3.44	3.65	3.30	3.10	6.1%	-9.5%	-6.0%
Percent Change	0.0%	0.0%	-0.1%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.2%	0.0%	0.0%			
U.S. Lower 48 ex GOM Markete	ed Production																		
Current	73.75	74.58	75.19	74.68	74.91	75.27	75.64	76.19	76.56	77.02	77.49	78.04	70.51	74.55	75.51	77.28	5.7%	1.3%	2.4%
Previous	73.75	74.58	75.20	74.67	74.91	75.27	75.64	76.19	76.56	76.97	77.34	77.89	70.51	74.55	75.51	77.19	5.7%	1.3%	2.2%
Percent Change	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.1%			
U.S. Pipeline Gross Imports																			
Current	8.4	6.7	6.7	7.1	7.2	6.2	6.5	6.7	7.2	6.2	6.5	6.8	7.2	7.2	6.7	6.7	-0.3%	-7.4%	0.1%
Previous	8.4	6.7	6.7	6.8	7.2	6.2	6.5	6.7	7.2	6.2	6.5	6.8	7.2	7.1	6.7	6.7	-1.4%	-6.4%	0.2%
Percent Change	0.0%	0.0%	0.0%	5.0%	0.2%	-0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%			
U.S. LNG Gross Imports																			
Current	0.43	0.08	0.26	0.22	0.14	0.16	0.17	0.15	0.12	0.12	0.12	0.12	0.16	0.25	0.15	0.12	51.2%	-37.7%	-21.6
Previous	0.43	0.08	0.26	0.20	0.14	0.16	0.17	0.15	0.12	0.12	0.12	0.12	0.16	0.24	0.15	0.12	48.9%	-36.7%	-21.6
Percent Change	0.0%	0.0%	0.0%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%			
U.S. Gross Exports																			
Current	4.92	4.43	4.91	5.07	5.13	5.21	6.03	6.54	6.30	6.27	6.72	7.30	4.15	4.83	5.73	6.65	16.4%	18.7%	16.09
Previous	4.92	4.43	4.91	5.13	5.37	5.51	6.11	6.35	6.30	6.34	6.71	7.27	4.15	4.85	5.84	6.66	16.8%	20.5%	14.09
Percent Change	0.0%	0.0%	0.0%	-1.2%	-4.4%	-5.5%	-1.3%	3.0%	-0.1%	-1.0%	0.2%	0.4%	0.0%	-0.3%	-1.8%	-0.1%			
I.S. Consumption (billion cubic	c feet per day)																		
U.S. Residential																			
Current	27.52	6.91	3.46	13.00	25.35	7.34	3.58	15.62	26.17	7.64	3.59	15.86	13.94	12.66	12.96	13.26	-9.2%	2.4%	2.3%
Previous	27.52	6.90	3.46	13.24	25.38	7.32	3.63	15.88	25.94	7.56	3.63	16.02	13.94	12.72	13.03	13.23	-8.8%	2.5%	1.5%
Percent Change	0.0%	0.1%	0.0%	-1.9%	-0.1%	0.3%	-1.4%	-1.6%	0.9%	1.1%	-1.1%	-1.0%	0.0%	-0.5%	-0.6%	0.2%			
U.S. Commercial																			
Current	16.01	5.87	4.43	9.07	14.56	5.95	4.53	10.57	14.96	6.10	4.58	10.71	9.50	8.81	8.90	9.06	-7.2%	0.9%	1.9%
Previous	16.01	5.85	4.44	9.06	14.51	5.94	4.57	10.56	14.90	6.06	4.61	10.71	9.50	8.81	8.89	9.05	-7.2%	0.8%	1.8%
Percent Change	0.0%	0.2%	-0.4%	0.2%	0.4%	0.2%	-0.8%	0.1%	0.4%	0.8%	-0.7%	0.0%	0.0%	0.0%	0.1%	0.2%			
U.S. Industrial																			
Current	22.68	19.61	19.18	21.11	22.74	20.31	20.08	22.14	23.17	20.80	20.61	22.65	20.89	20.64	21.32	21.80	-1.2%	3.3%	2.3%
Previous	22.69	19.62	19.19	21.09	22.76	20.35	20.14	22.21	23.25	20.89	20.72	22.76	20.89	20.64	21.36	21.90	-1.2%	3.5%	2.5%
Percent Change	0.0%	0.0%	0.0%	0.1%	-0.1%	-0.2%	-0.3%	-0.3%	-0.3%	-0.4%	-0.5%	-0.5%	0.0%	0.0%	-0.2%	-0.4%			
U.S. Electric Power Sector																			
Current	23.05	25.28	32.41	25.05	24.05	25.67	32.19	23.68	22.73	25.38	32.33	24.19	22.32	26.47	26.41	26.18	18.6%	-0.2%	-0.9%
Previous	23.05	25.28	32.41	25.12	24.19	25.72	32.14	23.50	22.50	25.34	32.24	23.97	22.32	26.49	26.40	26.04	18.7%	-0.3%	-1.49
Percent Change	0.0%	0.0%	0.0%	-0.2%	-0.6%	-0.2%	0.1%	0.8%	1.0%	0.1%	0.3%	0.9%	0.0%	-0.1%	0.0%	0.6%			
U.S. Total Consumption																			
Current	96.67	64.11	66.04	75.03	94.14	65.78	66.94	78.99	94.56	66.53	67.78	80.55	73.14	75.38	76.44	77.29	3.1%	1.4%	1.1%
Previous	96.67	64.09	66.07	75.34	94.30	65.87	67.05	79.15	94.14	66.47	67.88	80.61	73.14	75.46	76.57	77.21	3.2%	1.5%	0.8%
Percent Change	0.0%	0.0%	0.0%	-0.4%	-0.2%	-0.1%	-0.2%	-0.2%	0.4%	0.1%	-0.1%	-0.1%	0.0%	-0.1%	-0.2%	0.1%			
I.S. Working Gas in Storage (b																			
Current	1,483	2,658	3,625	3,659	2,096	2,932	3,725	3,413	1,899	2,746	3,561	3,252	3,141	3,659	3,413	3,252	16.5%	-6.7%	-4.79
Previous	1,483	2,658	3,625	3,637	2,043	2,867	3,688	3,389	1,883	2,715	3,548	3,272	3,141	3,637	3,389	3,272	15.8%	-6.8%	-3.49
Percent Change	0.0%	0.0%	0.0%	0.6%	2.6%	2.3%	1.0%	0.7%	0.9%	1.1%	0.4%	-0.6%	0.0%	0.6%	0.7%	-0.6%			
.S. Balancing Item (billion cub			mption - S																
Current	0.48	0.10	-0.93	-1.25	0.15	-0.92	0.04	-0.21	0.76	-0.37	0.35	0.53	-0.06	-0.41	-0.24	0.32			
Previous	0.48	0.09	-0.91	-0.87	0.15	-0.74	0.47	-0.17	0.36	-0.54	0.71	0.99	-0.06	-0.31	-0.07	0.38			

STEO Current/Previous Forecast Comparisons: U.S. Electricity

Current Forecast: February 9, 2016; Previous Forecast: January 12, 2015

Current Forecast: February	ĺ		15				16			20	17			Y	ear			Growth Rate)
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016	2017	2014-2015	2015-2016	2016-2017
U.S. Electricity Generation, All Sect	ors (thous	and mega	watthours	per day)	•	•						•							
U.S. Total Generation																			
Current	11,355	10,766	12,444	10,276	10,953	10,878	12,519	10,640	11,221	11,023	12,656	10,791	11,215	11,211	11,250	11,425	0.0%	0.3%	1.6%
Previous	11,355	10,766	12,444	10,367	11,026	10,914	12,517	10,652	11,153	11,018	12,629	10,775	11,215	11,234	11,279	11,396	0.2%	0.4%	1.0%
Percent Change	0.0%	0.0%	0.0%	-0.9%	-0.7%	-0.3%	0.0%	-0.1%	0.6%	0.0%	0.2%	0.1%	0.0%	-0.2%	-0.3%	0.3%			
U.S. Coal																			
Current	4,091	3,512	4,276	3,125	3,739	3,467	4,249	3,536	3,997	3,457	4,236	3,516	4,333	3,750	3,749	3,801	-13.5%	0.0%	1.4%
Previous	4,091	3,512	4,276	3,304	3,825	3,509	4,251	3,575	3,915	3,424	4,193	3,528	4,333	3,795	3,791	3,765	-12.4%	-0.1%	-0.7%
Percent Change	0.0%	0.0%	0.0%	-5.4%	-2.2%	-1.2%	0.0%	-1.1%	2.1%	0.9%	1.0%	-0.3%	0.0%	-1.2%	-1.1%	1.0%			
U.S. Natural gas																			
Current	3,248	3,476	4,378	3,482	3,369	3,487	4,330	3,325	3,183	3,447	4,347	3,394	3,087	3,649	3,629	3,595	18.2%	-0.5%	-0.9%
Previous	3,248	3,476	4,378	3,503	3,390	3,497	4,328	3,304	3,156	3,446	4,339	3,368	3,087	3,654	3,631	3,580	18.4%	-0.6%	-1.4%
Percent Change	0.0%	0.0%	0.0%	-0.6%	-0.6%	-0.3%	0.0%	0.6%	0.8%	0.0%	0.2%	0.8%	0.0%	-0.1%	-0.1%	0.4%			
U.S. Petroleum																			
Current	123	61	72	60	79	71	79	70	85	72	79	69	83	79	75	76	-5.1%	-4.9%	1.9%
Previous	123	61	72	61	81	71	78	70	83	71	78	69	83	79	75	75	-4.7%	-5.2%	0.3%
Percent Change	0.0%	0.0%	0.0%	-2.2%	-2.5%	0.2%	1.3%	1.0%	2.6%	1.2%	1.2%	0.9%	0.0%	-0.4%	-0.1%	1.5%			
U.S. Nuclear																			
Current	2,248	2,133	2,286	2,082	2,159	2,002	2,257	2,126	2,197	2,024	2,266	2,135	2,184	2,187	2,136	2,156	0.1%	-2.3%	0.9%
Previous	2,248	2,133	2,286	2,086	2,140	2,002	2,257	2,126	2,197	2,024	2,266	2,135	2,184	2,188	2,132	2,156	0.2%	-2.6%	1.1%
Percent Change	0.0%	0.0%	0.0%	-0.2%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%			
U.S. Conventional Hydroelectric																			
Current	802	690	616	604	661	817	717	613	727	875	757	639	711	677	702	749	-4.7%	3.6%	6.8%
Previous	802	690	616	531	647	803	717	594	735	873	761	624	711	659	690	748	-7.2%	4.7%	8.4%
Percent Change	0.0%	0.0%	0.0%	13.6%	2.1%	1.7%	-0.1%	3.2%	-1.2%	0.2%	-0.5%	2.4%	0.0%	2.8%	1.7%	0.2%			
U.S. Other Renewables																			
Current	787	835	755	867	888	976	824	915	976	1,091	907	982	765	811	901	989	6.0%	11.1%	9.7%
Previous	787	835	755	828	887	975	823	928	1,011	1,122	928	995	765	801	903	1,014	4.7%	12.7%	12.3%
Percent Change	0.0%	0.0%	0.0%	4.7%	0.2%	0.2%	0.2%	-1.3%	-3.5%	-2.8%	-2.3%	-1.3%	0.0%	1.2%	-0.2%	-2.5%			
U.S. Electricity Sales (million kilowa	atthours pe	r day)																	
U.S. Residential																			
Current	4,202	3,348	4,505	3,308	3,933	3,386	4,537	3,455	4,136	3,436	4,577	3,531	3,855	3,840	3,829	3,920	-0.4%	-0.3%	2.4%
Previous	4,202	3,348	4,505	3,372	3,957	3,405	4,527	3,458	4,070	3,449	4,569	3,524	3,855	3,856	3,838	3,903	0.0%	-0.5%	1.7%
Percent Change	0.0%	0.0%	0.0%	-1.9%	-0.6%	-0.6%	0.2%	-0.1%	1.6%	-0.4%	0.2%	0.2%	0.0%	-0.4%	-0.2%	0.4%			
U.S. Commercial																			
Current	3,598	3,646	4,114	3,537	3,596	3,676	4,176	3,583	3,642	3,719	4,229	3,625	3,705	3,725	3,758	3,805	0.5%	0.9%	1.2%
Previous	3,598	3,646	4,114	3,523	3,606	3,673	4,171	3,569	3,643	3,709	4,215	3,610	3,705	3,721	3,756	3,795	0.4%	0.9%	1.1%
Percent Change	0.0%	0.0%	0.0%	0.4%	-0.3%	0.1%	0.1%	0.4%	0.0%	0.3%	0.3%	0.4%	0.0%	0.1%	0.1%	0.3%			
U.S. Industrial																			
Current	2,541	2,660	2,751	2,556	2,539	2,670	2,779	2,610	2,576	2,699	2,804	2,626	2,733	2,627	2649.82	2,677	-3.9%	0.9%	1.0%
Previous	2,541	2,660	2,751	2,589	2,557	2,683	2,786	2,630	2,573	2,691	2,797	2,634	2,733	2,636	2,664	2,674	-3.6%	1.1%	0.4%
Percent Change	0.0%	0.0%	0.0%	-1.3%	-0.7%	-0.5%	-0.2%	-0.8%	0.1%	0.3%	0.3%	-0.3%	0.0%	-0.3%	-0.5%	0.1%			
U.S. Total																			
Current	10,364	9,675	11,390	9,421	10,092	9,753	11,514	9,669	10,377	9,876	11,632	9,803	10,314	10,213	10,259	10,424	-1.0%	0.4%	1.6%
Previous	10,364	9,675	11,390	9,505	10,143	9,783	11,506	9,680	10,309	9,870	11,604	9,789	10,314	10,234	10,280	10,395	-0.8%	0.4%	1.1%
Percent Change	0.0%	0.0%	0.0%	-0.9%	-0.5%	-0.3%	0.1%	-0.1%	0.7%	0.1%	0.2%	0.1%	0.0%	-0.2%	-0.2%	0.3%			

STEO Current/Previous Forecast Comparisons: U.S. Coal and Carbon Dioxide Emissions

Current Forecast: February 9, 2016; Previous Forecast: January 12, 2015

		20)15			20	16			20	17			Υe	ear			Growth Rate)
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016	2017	2014-2015	2015-2016	2016-2017
U.S. Coal (million short tons)																			
U.S. Production																			
Current	240.2	211.1	232.4	206.8	200.6	199.2	218.5	215.5	217.2	195.9	217.8	210.2	1,000	890	834	841	-10.9%	-6.4%	0.9%
Previous	240.2	211.1	232.4	206.8	214.8	204.6	218.8	214.2	214.3	199.5	216.1	213.3	1,000	890	852	843	-10.9%	-4.3%	-1.1%
Percent Change	0.0%	0.0%	0.0%	0.0%	-6.6%	-2.6%	-0.2%	0.6%	1.3%	-1.8%	0.8%	-1.5%	0.0%	0.0%	-2.2%	-0.3%			
U.S. Exports																			
Current	22.0	19.8	16.9	16.2	15.5	18.2	15.5	17.3	11.7	17.4	16.4	18.9	97.3	74.9	66.4	64.4	-23.0%	-11.3%	-3.0%
Previous	22.0	19.8	16.9	18.3	15.9	18.5	15.7	17.4	11.8	17.7	16.5	19.1	97.3	76.9	67.6	65.1	-20.9%	-12.1%	-3.7%
Percent Change	0.0%	0.0%	0.0%	-11.2%	-2.6%	-2.0%	-1.7%	-1.0%	-0.9%	-1.3%	-1.1%	-1.1%	0.0%	-2.7%	-1.8%	-1.1%			
U.S. Imports																			
Current	3.0	2.6	3.0	2.9	2.3	2.4	3.3	2.9	2.2	2.4	3.3	2.9	11.3	11.6	10.9	10.8	1.8%	-5.8%	-1.2%
Previous	3.0	2.6	3.0	2.7	2.2	2.4	3.3	2.9	2.2	2.4	3.3	2.9	11.3	11.3	10.7	10.8	-0.6%	-5.1%	0.4%
Percent Change	0.0%	0.0%	0.0%	10.3%	6.3%	1.4%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	1.7%	0.0%			
U.S. Electric Power Demand																			
Current	196.4	174.7	215.6	160.1	184.2	171.0	212.9	178.1	192.7	169.5	211.3	176.5	852	747	746	750	-12.3%	-0.1%	0.5%
Previous	196.4	174.7	215.6	167.3	187.4	172.8	212.9	180.1	189.0	167.9	209.2	177.3	852	754	753	743	-11.5%	-0.1%	-1.3%
Percent Change	0.0%	0.0%	0.0%	-4.3%	-1.7%	-1.1%	0.0%	-1.1%	1.9%	0.9%	1.0%	-0.4%	0.0%	-1.0%	-0.9%	0.9%			
U.S. Secondary Stocks																			
Current	161.0	173.7	169.8	196.0	190.2	191.5	175.2	183.7	184.0	184.3	168.3	171.8	158.6	196.0	183.7	171.8	23.6%	-6.3%	-6.4%
Previous	161.0	173.7	169.8	185.9	185.7	190.2	174.0	178.9	179.7	184.6	168.4	173.7	158.6	185.9	178.9	173.7	17.2%	-3.8%	-2.9%
Percent Change	0.0%	0.0%	0.0%	5.4%	2.4%	0.7%	0.7%	2.6%	2.4%	-0.1%	0.0%	-1.1%	0.0%	5.4%	2.6%	-1.1%			
U.S. Carbon Dioxide Emissions																			
Petroleum																			
Current	561.6	567.7	583.8	567.5	558.5	571.1	583.1	579.2	560.3	575.0	587.5	582.4	2,252	2,281	2,292	2,305	1.3%	0.5%	0.6%
Previous	561.6	567.8	583.9	569.0	562.1	570.8	584.3	579.4	562.6	576.8	590.3	584.0	2,252	2,282	2,297	2,314	1.3%	0.6%	0.7%
Percent Change	0.0%	0.0%	0.0%	-0.3%	-0.7%	0.1%	-0.2%	0.0%	-0.4%	-0.3%	-0.5%	-0.3%	0.0%	-0.1%	-0.2%	-0.4%			
Coal																			
Current	396.5	353.8	431.9	341.4	374.2	347.1	426.3	364.3	388.6	344.1	422.3	359.9	1713.1	1523.7	1512.0	1514.9	-11.1%	-0.8%	0.2%
Previous	396.5	353.8	431.9	350.0	380.6	351.1	427.2	366.6	382.8	342.2	419.6	360.0	1713.1	1532.3	1525.5	1504.6	-10.6%	-0.4%	-1.4%
Percent Change	0.0%	0.0%	0.0%	-2.5%	-1.7%	-1.1%	-0.2%	-0.6%	1.5%	0.5%	0.7%	0.0%	0.0%	-0.6%	-0.9%	0.7%			
Natural Gas																			
Current	469.0	312.9	326.4	367.4	461.9	321.0	330.8	390.4	458.8	324.7	334.9	398.2	1434.2	1475.7	1504.1	1516.6	2.9%	1.9%	0.8%
Previous	469.1	312.9	326.7	374.7	462.7	321.5	331.5	391.4	456.8	324.5	335.6	398.7	1434.2	1483.3	1507.1	1515.5	3.4%	1.6%	0.6%
Percent Change	0.0%	0.0%	-0.1%	-2.0%	-0.2%	-0.2%	-0.2%	-0.3%	0.4%	0.1%	-0.2%	-0.1%	0.0%	-0.5%	-0.2%	0.1%			
Total Fossil Fuel																			
Current	1427.1	1234.4	1342.2	1276.2	1394.6	1239.2	1340.2	1333.9	1407.7	1243.8	1344.7	1340.5	5,399	5,280	5,308	5,337	-2.2%	0.5%	0.5%
Previous	1427.2	1234.4	1342.5	1293.7	1405.4	1243.5	1343.0	1337.4	1402.2	1243.5	1345.4	1342.7	5,399	5,298	5,329	5,334	-1.9%	0.6%	0.1%
Percent Change	0.0%	0.0%	0.0%	-1.3%	-0.8%	-0.3%	-0.2%	-0.3%	0.4%	0.0%	-0.1%	-0.2%	0.0%	-0.3%	-0.4%	0.1%			

STEO Current/Previous Forecast Comparisons: U.S. Renewable Energy Consumption and Capacity

Current Forecast: February 9, 2016: Previous Forecast: January 12, 2015

		20	15			20	16			201	17			Υe	ear			Growth Rate)
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016	2017	2014-2015	2015-2016	2016-2017
U.S. Renewable Energy Consumption	on, All Sect	ors (quad	rillion btu)															
U.S. Wind Power																			
Current	0.433	0.460	0.385	0.518	0.529	0.566	0.419	0.533	0.565	0.611	0.450	0.577	1.727	1.796	2.047	2.204	4.0%	14.0%	7.7%
Previous	0.433	0.460	0.385	0.489	0.528	0.566	0.418	0.544	0.594	0.637	0.468	0.588	1.727	1.768	2.056	2.287	2.4%	16.3%	11.2%
Percent Change	0.0%	0.0%	0.0%	5.8%	0.1%	0.1%	0.2%	-2.0%	-4.8%	-4.0%	-3.8%	-1.9%	0.0%	1.6%	-0.4%	-3.6%			
U.S. Wood Biomass																			
Current	0.517	0.508	0.523	0.509	0.490	0.481	0.505	0.501	0.495	0.486	0.510	0.506	2.230	2.056	1.976	1.997	-7.8%	-3.9%	1.1%
Previous	0.517	0.508	0.523	0.508	0.488	0.480	0.504	0.500	0.494	0.486	0.510	0.506	2.230	2.056	1.972	1.996	-7.8%	-4.1%	1.2%
Percent Change	0.0%	0.0%	0.0%	0.1%	0.4%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%	0.1%			
U.S. Solar Power																			
Current	0.118	0.145	0.146	0.115	0.123	0.170	0.180	0.152	0.165	0.233	0.230	0.174	0.421	0.524	0.624	0.802	24.7%	19.1%	28.4%
Previous	0.118	0.145	0.146	0.114	0.123	0.169	0.179	0.152	0.167	0.234	0.230	0.174	0.421	0.523	0.622	0.806	24.3%	19.0%	29.4%
Percent Change	0.0%	0.0%	0.0%	1.3%	0.4%	0.6%	0.2%	0.0%	-0.9%	-0.5%	-0.3%	-0.2%	0.0%	0.3%	0.3%	-0.5%			
U.S. Ethanol																			
Current	0.271	0.289	0.298	0.291	0.279	0.295	0.304	0.296	0.277	0.294	0.302	0.295	1.107	1.148	1.174	1.167	3.7%	2.3%	-0.6%
Previous	0.271	0.289	0.298	0.289	0.280	0.295	0.305	0.295	0.278	0.294	0.304	0.295	1.107	1.146	1.175	1.171	3.5%	2.5%	-0.3%
Percent Change	0.0%	0.0%	0.0%	0.8%	-0.5%	0.3%	-0.3%	0.2%	-0.6%	-0.2%	-0.6%	0.1%	0.0%	0.2%	0.0%	-0.3%			
U.S. Biodiesel																			
Current	0.034	0.058	0.064	0.059	0.068	0.072	0.081	0.081	0.070	0.074	0.084	0.083	0.198	0.215	0.302	0.310	8.8%	40.0%	2.9%
Previous	0.034	0.058	0.064	0.063	0.068	0.072	0.081	0.081	0.070	0.074	0.084	0.083	0.198	0.219	0.302	0.310	10.8%	37.5%	2.9%
Percent Change	0.0%	0.0%	0.0%	-6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.8%	0.0%	0.0%			
U.S. Renewable Electric Power Sec	tor Generat	ion Capac	ity (MW)																
Wind Power																			
Current	64,959	66,530	68,743	72,506	73,497	74,401	74,557	79,198	79,688	79,827	80,115	85,156	64,426	72,506	79,198	85,156	12.5%	9.2%	7.5%
Previous	64,959	66,530	68,743	72,956	73,805	74,210	74,503	83,298	83,298	83,298	83,406	85,409	64,426	72,956	83,298	85,409	13.2%	14.2%	2.5%
Percent Change	0.0%	0.0%	0.0%	-0.6%	-0.4%	0.3%	0.1%	-4.9%	-4.3%	-4.2%	-3.9%	-0.3%	0.0%	-0.6%	-4.9%	-0.3%			
Wood Biomass																			
Current	3,041	3,041	3,041	3,041	3,041	3,041	3,041	3,065	3,065	3,065	3,107	3,107	3,041	3,041	3,065	3,107	0.0%	0.8%	1.4%
Previous	2,978	2,978	2,978	3,001	3,001	3,001	3,001	3,001	3,001	3,001	3,043	3,043	3,028	3,001	3,001	3,043	-0.9%	0.0%	1.4%
Percent Change	2.1%	2.1%	2.1%	1.3%	1.3%	1.3%	1.3%	2.1%	2.1%	2.1%	2.1%	2.1%	0.4%	1.3%	2.1%	2.1%			
Solar Power																			
Current	10,477	11,000	11,402	13,057	13,885	14,907	17,743	22,548	22,608	22,896	23,036	23,311	10,124	13,057	22,548	23,311	29.0%	72.7%	3.4%
Previous	10,478	11,000	11,391	13,109	13,737	14,922	17,559	22,930	22,990	22,995	23,015	23,269	10,125	13,109	22,930	23,269	29.5%	74.9%	1.5%
Percent Change	0.0%	0.0%	0.1%	-0.4%	1.1%	-0.1%	1.0%	-1.7%	-1.7%	-0.4%	0.1%	0.2%	0.0%	-0.4%	-1.7%	0.2%			

Source: Energy Information Administration, Short-Term Energy Outlook (http://www.eia.gov/forecasts/steo/)

Table WF01. Average Consumer Prices and Expenditures for Heating Fuels During the Winter U.S. Energy Information Administration | Short-Term Energy Outlook - February 2016

U.S. Energy Information Admir	I C	more renni		utlook - Fe Winter of	bruary 201	<u> </u>		Fo	recast
Fuel / Region	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	% Change
Natural Gas									
Northeast									
Consumption (Mcf**)	80.3	75.7	80.7	66.4	76.1	84.0	84.7	69.7	-17.7
Price (\$/mcf)	15.83	13.31	12.66	12.21	11.71	11.53	10.85	10.80	-17.7 -0.5
Expenditures (\$)	1,272	1,007	1,022	812	891	969	919	752	-0.5 -18.2
Midwest	1,272	1,007	1,022		091				
Consumption (Mcf)	80.7	78.6	80.2	65.4	77.6	88.1	83.1	69.8	-15.9
Price (\$/mcf)	11.47	9.44	9.23	8.99	8.36	8.69	8.55	7.62	-10.9
Expenditures (\$) South	926	742	740	587	648	766	711	532	-25.1
Consumption (Mcf)	47.3	53.3	49.3	40.9	46.5	52.1	50.5	42.5	-15.9
Price (\$/mcf)	14.07	11.52	11.02	11.45	10.71	10.77	10.84	11.59	7.0
Expenditures (\$)	665	614	544	468	498	562	548	492	-10.1
West									
Consumption (Mcf)	47.8	49.9	49.4	49.1	48.6	46.4	41.4	46.2	11.7
Price (\$/mcf)	10.86	9.91	9.67	9.35	9.13	9.96	10.67	8.87	-16.9
Expenditures (\$) U.S. Average	519	494	478	459	444	462	441	410	-7.2
Consumption (Mcf)	64.2	64.4	65.0	55.7	62.5	68.0	64.8	57.3	-11.6
Price (\$/mcf)	12.87	10.83	10.46	10.25	9.72	9.97	9.91	9.31	-6.0
Expenditures (\$)	826	698	680	571	607	678	642	533	-16.9
Heating Oil									
U.S. Average									
Consumption (gallons)	576.7	544.8	580.7	471.2	545.5	606.9	609.0	497.9	-18.3
Price (\$/gallon)	2.65	2.85	3.38	3.73	3.87	3.88	3.04	2.12	-30.3
Expenditures (\$)	1,530	1,552	1,966	1,757	2,113	2,352	1,852	1,054	-43.1
Electricity									
Northeast									
Consumption (kWh***)	7,063	6,847	7,076	6,436	6,862	7,221	7,251	6,579	-9.3
Price (\$/kwh)	0.152	0.152	0.154	0.154	0.152	0.163	0.168	0.168	-0.4
Expenditures (\$) Midwest	1,071	1,039	1,091	993	1,046	1,177	1,221	1,103	-9.6
Consumption (kWh)	8,751	8,660	8,733	7,897	8,588	9,168	8,859	8,159	-7.9
Price (\$/kwh)	0.097	0.099	0.105	0.111	0.112	0.112	0.118	0.120	1.8
Expenditures (\$)	851	856	914	875	958	1,031	1,043	978	-6.2
South Consumption (kWh)	0.057	0 406	0 224	7 474	7 077	0 206	0 200	7 500	0.2
Consumption (kWh)	8,057	8,486	8,224	7,471	7,977	8,386	8,289 0.111	7,598	-8.3
Price (\$/kwh)	0.109 878	0.103 873	0.104 856	0.107 798	0.107 851	0.109 913	920	0.110 839	-0.6 -8.9
Expenditures (\$) West	0/0	0/3	636	190	031	913	920	039	-0.9
Consumption (kWh)	7,084	7,239	7,216	7,190	7,150	6,980	6,590	6,969	5.8
Price (\$/kwh)	0.107	0.110	0.112	0.115	0.119	0.123	0.126	0.129	2.2
Expenditures (\$)	755	799	809	825	848	860	833	900	8.1
U.S. Average									
Consumption (kWh)	7,725	7,937	7,844	7,253	7,672	7,983	7,804	7,345	-5.9
Price (\$/kwh)	0.112	0.110	0.113	0.116	0.117	0.120	0.123	0.124	0.5
Expenditures (\$)	866	873	884	843	895	956	960	908	-5.5

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

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

C.C. Energy Information Admin				Ninter of	bruary 201			Fo	recast
Fuel / Region	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	% Change
Propane									
Northeast									
Consumption (gallons)	714.7	672.0	717.5	595.6	675.8	745.1	751.6	624.3	-16.9
Price* (\$/gallon)	2.84	2.98	3.24	3.34	3.00	3.56	3.00	2.70	-10.0
Expenditures (\$)	2,031	2,004	2,321	1,990	2,031	2,653	2,255	1,686	-25.2
Midwest									
Consumption (gallons)	795.0	779.6	791.9	644.3	766.4	868.6	813.4	690.6	-15.1
Price* (\$/gallon)	2.11	1.99	2.11	2.23	1.74	2.61	1.91	1.49	-22.0
Expenditures (\$)	1,678	1,548	1,674	1,437	1,333	2,267	1,554	1,029	-33.8
Normalism of horses had a late has not									
Number of households by pri	mary space	e neating i	uei (thous	sanas)					
Northeast	10 000	40.002	44 440	44 226	44 245	11 101	11 612	11 601	0.6
Natural gas	10,889	10,992	11,118	11,236	11,345	11,484	11,612	11,681	0.6
Heating oil	6,280 713	6,016 733	5,858 744	5,701 761	5,458 813	5,218 844	5,084 839	4,931	-3.0
Propane Electricity						_		845 3,149	0.8
•	2,563 474	2,645 501	2,776	2,894 548	3,011 582	3,028 579	3,064 581	596	2.8
Wood Other/None	307	311	512 245	346 324	377	434		433	2.6
Midwest	307	311	315	324	311	434	432	433	0.3
	18,288	18,050	17,977	10 010	18,054	18,098	18,176	18,095	-0.4
Natural gas	491	451	419	18,019 393	360	337	316	291	
Heating oil	_	_						2,012	-8.0
Propane Floatricity	2,131	2,098 4.715	2,073	2,037	2,063	2,096 5.420	2,056 5.516	,	-2.2 2.5
Electricity	4,570	4,715	4,922	5,119	5,333	5,430	5,516	5,710	3.5
Wood Other/None	584 264	616 283	618 289	631 282	640 319	630 354	630 348	635 348	0.8 0.0
South	204	203	209	202	319	334	340	340	0.0
	12.050	12 721	42 CE7	12 626	12 601	12 775	12 907	12 001	0.1
Natural gas	13,958 956	13,731 906	13,657 853	13,636 790	13,681 738	13,775 700	13,897 662	13,881 614	-0.1 -7.3
Heating oil	2,220	2,165	2,098	2,024	1,982	1,946	1,887	1,802	-7.3 -4.5
Propane Electricity	25,258	2,165 25,791	26,555	27,283	27,857	28,203	28,655	29,225	2.0
Wood	593	586	20,555 599	609	612	611	612	627	2.4
Other/None	314	314	309	304	367	420	395	387	-2.0
West	314	314	309	304	301	420	393	301	-2.0
	15,027	14,939	15,020	15,021	15,008	15,043	15,198	15,251	0.3
Natural gas	294	289	279	261	247	234	226	219	-3.3
Heating oil Propane	936	940	914	885	909	931	900	879	-3.3 -2.3
Electricity	7,768	7,877	8,126	8,439	8,671	8,745	8,905	9,180	3.1
Wood	7,708	7,877 721	725	736	728	741	759	757	-0.3
Other/None	837	850	850	829	903	1,023	1,018	985	-3.2
U.S. Totals	037	030	030	023	303	1,023	1,010	300	-3.2
Natural gas	58,162	57,713	57,771	57,912	58,088	58,400	58,882	58,908	0.0
Heating oil	8,021	7,662	7,408	7,145	6,803	6,489	6,288	6,054	-3.7
Propane	5,999	5,936	5,829	5,707	5,766	5,816	5,682	5,538	-2.5
Electricity	40,159	41,029	42,380	43,734	44,872	45,405	46,139	47,264	2.4
Wood	2,353	2,424	2,454	2,524	2,563	2,561	2,583	2,616	1.3
Other/None	1,723	1,758	1,763	1,739	1,965	2,231	2,192	2,153	-1.8
- Caronatono	1,723	1,730	1,703	1,133	1,505	2,231	۷, ۱۵۷	۷, ۱۵۵	1.0
Heating degree days									
Northeast	5,313	4,933	5,337	4,217	4,964	5,594	5,648	4,472	-20.8
Midwest	5,810	5,639	5,773	4,484	5,544	6,451	6,005	4,877	-18.8
South	2,493	2,870	2,632	2,023	2,430	2,787	2,695	2,129	-21.0
West	3,116	3,285	3,258	3,229	3,181	2,989	2,562	2,982	16.4
U.S. Average	3,869	3,937	3,939	3,224	3,721	4,109	3,883	3,319	-14.5
Note: Winter covers the period Oct	obor 1 throug	h March 21	Fuel price	o oro nomin	ol prioco E	iual aanaum	ntion nor h	ougobold in	boood only on

Note: Winter covers the period October 1 through March 31. Fuel prices are nominal prices. Fuel consumption per household is based only on households that use that fuel as the primary space-heating fuel. Included in fuel consumption is consumption for water heating, appliances, and lighting (electricity). Per-household consumption based on an average of EIA 2005 and 2009 Residential Energy Consumption Surveys corrected for actual and projected heating degree days. Number of households using heating oil includes kerosene.

^{*} Prices exclude taxes

^{**} thousand cubic feet

^{***} kilowatthour

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administra	ation S			gy Outlo	ok - Fel			Г				1			
	1st	20 ²	15 3rd	4th	1st	20 ⁻ 2nd	16 3rd	4th	1st	20 ⁻ 2nd	17 3rd	4th	2015	Year 2016	2017
Energy Supply	131	ZIIG	Jiu	401	131	ZIIU	Jiu	401	131	ZIIU	Jiu	401	2013	2010	2017
Crude Oil Production (a) (million barrels per day)	9.49	9.50	9.43	9.29	9.05	8.81	8.44	8.47	8.51	8.48	8.33	8.53	9.43	8.69	8.46
Dry Natural Gas Production (billion cubic feet per day)	73.67	74.50	75.25	74.28	74.42	74.57	74.68	75.32	75.75	75.99	76.21	76.92	74.43	74.75	76.22
Coal Production (million short tons)	240	211	232	207	201	199	218	215	217	196	218	210	890	834	841
Energy Consumption															
Liquid Fuels (million barrels per day)	19.29	19.25	19.68	19.29	19.08	19.42	19.77	19.69	19.36	19.65	20.05	19.94	19.38	19.49	19.75
Natural Gas (billion cubic feet per day)	96.67	64.11	66.04	75.03	94.14	65.78	66.94	78.99	94.56	66.53	67.78	80.55	75.38	76.44	77.29
Coal (b) (million short tons)	212	189	231	176	200	185	228	193	208	184	226	192	809	807	809
Electricity (billion kilowatt hours per day)	10.74	10.04	11.79	9.80	10.47	10.11	11.90	10.05	10.75	10.24	12.03	10.19	10.59	10.63	10.80
Renewables (c) (quadrillion Btu)	2.43	2.43	2.34	2.38	2.44	2.67	2.50	2.48	2.57	2.83	2.63	2.58	9.58	10.09	10.60
Total Energy Consumption (d) (quadrillion Btu)	26.38	23.01	24.48	23.66	25.62	22.97	24.34	24.54	25.87	23.28	24.61	24.83	97.53	97.47	98.59
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	48.48	57.85	46.55	41.94	33.11	36.02	39.02	42.02	44.03	47.72	52.00	56.29	48.67	37.59	50.00
Natural Gas Henry Hub Spot (dollars per million Btu)	2.90	2.75	2.76	2.12	2.36	2.45	2.77	2.98	3.27	3.00	3.20	3.40	2.63	2.64	3.22
Coal (dollars per million Btu)	2.27	2.25	2.22	2.15	2.14	2.20	2.20	2.16	2.16	2.21	2.23	2.19	2.23	2.18	2.20
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR) Percent change from prior year	16,177 2.9	16,334 2.7	16,414 2.1	16,458 1.9	16,569 2.4	16,679 2.1	16,818 2.5	16,972 3.1	17,095 3.2	17,228 3.3	17,353 3.2	17,455 2.8	16,346 2.4	16,759 2.5	17,283 3.1
GDP Implicit Price Deflator (Index, 2009=100) Percent change from prior year	109.1 1.0	109.7 1.0	110.0 0.9	110.5 1.3	111.1 1.8	111.6 1.7	112.0 1.8	112.5 1.9	113.2 1.9	113.7 1.9	114.2 1.9	114.7 1.9	109.8 1.0	111.8 1.8	114.0 1.9
Real Disposable Personal Income (billion chained 2009 dollars - SAAR) Percent change from prior year	12,115 3.6	12,194 3.5	12,308 3.8	12,415 3.5	12,498 3.2	12,579 3.2	12,686 3.1	12,785 3.0	12,888 3.1	13,007 3.4	13,123 3.4	13,222 3.4	12,258 3.6	12,637 3.1	13,060 3.3
Manufacturing Production Index (Index, 2012=100) Percent change from prior year	105.5 3.5	105.8 2.3	106.7 2.0	106.8 1.1	106.8 1.2	106.4 0.5	107.3 0.6	108.9 1.9	109.9 3.0	110.5 3.9	111.4 3.9	112.3 3.1	106.2 2.2	107.3 1.1	111.0 3.5
Weather															
U.S. Heating Degree-Days U.S. Cooling Degree-Days	2,342 47	443 434	50 876	1,252 133	2,066 36	448 402	69 866	1,518 98	2,120 40	476 405	76 882	1,549 100	4,087 1,489	4,101 1,402	4,221 1,427

^{- =} no data available

Prices are not adjusted for inflation.

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

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

Petroleum Supply Annual, DOE/EIA-0340/2; Weekly Petroleum Status Report, DOE/EIA-0208; Petroleum Marketing Monthly, DOE/EIA-0380; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; Quarterly Coal Report, DOE/EIA-0121; and International Petroleum Monthly, DOE/EIA-0520.

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

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

Weather projections from National Oceanic and Atmospheric Administration.

⁽a) Includes lease condensate.

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

⁽c) Renewable energy includes minor components of non-marketed renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy.

EIA does not estimate or project end-use consumption of non-marketed renewable energy.

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

Table 2. Energy Prices

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

0.5. Energy information Administration Onort-1		201		<u> </u>		201	16			20	17			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	33.11	36.02	39.02	42.02	44.03	47.72	52.00	56.29	48.67	37.59	50.00
Brent Spot Average	53.91	61.65	50.43	43.53	32.81	36.02	39.02	42.02	44.03	47.72	52.00	56.29	52.32	37.52	50.00
U.S. Imported Average	46.40	56.12	45.60	38.01	29.50	32.49	35.50	38.51	40.51	44.17	48.49	52.84	46.42	34.15	46.63
U.S. Refiner Average Acquisition Cost	47.98	57.47	47.68	40.81	32.04	35.01	37.98	41.02	43.01	46.69	50.98	55.36	48.50	36.58	49.12
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	159	201	184	143	112	130	131	120	127	157	162	148	172	124	149
Diesel Fuel	176	189	161	140	110	121	131	141	146	154	166	178	167	126	161
Heating Oil	178	180	151	126	105	112	123	137	144	144	158	174	153	119	155
Refiner Prices to End Users															
Jet Fuel	172	186	156	134	107	116	125	135	141	148	160	173	162	121	156
No. 6 Residual Fuel Oil (a)	137	154	123	103	85	86	94	101	107	113	124	135	126	92	120
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	227	267	260	216	188	202	206	194	197	228	234	222	243	198	221
Gasoline All Grades (b)	236	275	269	226	198	211	215	204	206	237	243	231	252	207	230
On-highway Diesel Fuel	292	285	263	244	211	217	224	235	243	252	262	275	271	222	258
Heating Oil	288	276	247	224	205	202	205	219	233	233	240	257	265	209	241
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	2.99	2.83	2.84	2.18	2.43	2.52	2.85	3.07	3.37	3.09	3.29	3.51	2.71	2.72	3.32
Henry Hub Spot (dollars per million Btu)	2.90	2.75	2.76	2.12	2.36	2.45	2.77	2.98	3.27	3.00	3.20	3.40	2.63	2.64	3.22
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	4.57	3.68	3.66	3.38	3.58	3.33	3.70	4.17	4.56	3.98	4.19	4.63	3.84	3.70	4.35
Commercial Sector	7.94	8.13	8.42	7.39	7.21	7.61	8.36	7.76	7.94	8.33	8.92	8.25	7.88	7.56	8.20
Residential Sector	9.30	11.96	16.45	10.10	8.59	11.35	15.65	9.77	9.00	11.82	16.09	10.06	10.36	9.83	10.21
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.27	2.25	2.22	2.15	2.14	2.20	2.20	2.16	2.16	2.21	2.23	2.19	2.23	2.18	2.20
Natural Gas	4.09	3.11	3.09	2.86	3.56	3.24	3.35	4.08	4.43	3.74	3.74	4.45	3.26	3.54	4.05
Residual Fuel Oil (c)	10.82	11.64	10.48	8.29	7.47	7.74	7.70	7.99	8.23	9.31	9.55	10.05	10.42	7.72	9.27
Distillate Fuel Oil	15.61	15.16	13.18	11.88	10.38	11.17	11.79	12.92	13.44	13.81	14.58	15.82	14.48	11.52	14.34
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.78	6.81	7.31	6.65	6.78	6.84	7.37	6.78	6.95	6.95	7.48	6.89	6.90	6.95	7.07
Commercial Sector	10.47	10.53	10.95	10.39	10.51	10.65	11.11	10.62	10.75	10.85	11.31	10.83	10.60	10.74	10.95
Residential Sector	12.23	12.85	12.99	12.57	12.19	12.72	12.99	12.76	12.48	13.20	13.46	13.24	12.66	12.68	13.10

^{- =} 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.

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).

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

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.

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

		201	15			201	6			201	17			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Supply (million barrels per day) (a)	•			•		•	•	<u> </u>	•				<u> </u>	-	
OECD	26.64	26.42	26.80	26.89	26.54	26.23	25.91	26.05	26.03	26.12	26.03	26.21	26.69	26.18	26.10
U.S. (50 States)	14.81	15.10	15.13	15.06	14.73	14.63	14.35	14.47	14.45	14.64	14.61	14.85	15.03	14.54	14.64
Canada	4.69	4.16	4.55	4.53	4.57	4.60	4.66	4.72	4.77	4.77	4.83	4.82	4.48	4.64	4.80
Mexico	2.68	2.58	2.62	2.62	2.60	2.59	2.58	2.57	2.55	2.52	2.45	2.41	2.62	2.59	2.48
North Sea (b)	3.00	3.10	2.96	3.16	3.11	2.88	2.77	2.74	2.70	2.63	2.56	2.55	3.05	2.87	2.61
Other OECD	1.47	1.48	1.54	1.52	1.53	1.53	1.54	1.55	1.55	1.56	1.58	1.58	1.50	1.54	1.57
Non-OECD		69.07	69.58	69.11	68.72	69.82	70.65	70.33	69.73	70.71	71.28	70.94	68.93	69.89	70.67
OPEC	37.46	38.22	38.61	38.45	38.52	39.08	39.63	39.55	39.58	40.01	40.34	40.33	38.19	39.20	40.07
Crude Oil Portion		31.65	32.03	31.81	31.73	32.21	32.69	32.56	32.47	32.85	33.11	33.04	31.60	32.30	32.87
Other Liquids (c)	6.55	6.57	6.58	6.64	6.79	6.87	6.94	7.00	7.11	7.16	7.23	7.29	6.59	6.90	7.20
Eurasia	14.09	14.01	13.98	13.92	13.89	13.91	13.93	13.96	13.80	13.81	13.75	13.69	14.00	13.92	13.76
China	4.66	4.73	4.71	4.69	4.65	4.68	4.69	4.69	4.66	4.69	4.69	4.70	4.70	4.68	4.68
Other Non-OECD	11.75	12.11	12.28	12.04	11.66	12.15	12.41	12.13	11.70	12.20	12.49	12.22	12.04	12.09	12.16
Total World Supply	94.60	95.50	96.38	96.00	95.25	96.06	96.57	96.38	95.76	96.83	97.32	97.14	95.62	96.07	96.77
Non-OPEC Supply	57.14	57.28	57.77	57.54	56.74	56.98	56.94	56.83	56.18	56.82	56.97	56.82	57.43	56.87	56.70
Consumption (million barrels per day	() (d)														
OECD		45.38	46.75	46.64	46.65	45.73	46.62	47.08	47.00	46.04	46.98	47.41	46.32	46.52	46.86
U.S. (50 States)		19.25	19.68	19.29	19.08	19.42	19.77	19.69	19.36	19.65	20.05	19.94	19.38	19.49	19.75
U.S. Territories		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		2.26	2.38	2.41	2.38	2.32	2.43	2.41	2.38	2.32	2.43	2.41	2.35	2.38	2.38
Europe		13.50	14.12	13.83	13.67	13.41	13.85	13.80	13.69	13.43	13.88	13.82	13.72	13.68	13.71
Japan		3.89	3.94	4.28	4.58	3.85	3.88	4.25	4.54	3.82	3.85	4.22	4.22	4.14	4.11
Other OECD		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		47.82	48.16	47.60	47.25	48.87	49.22	48.64	48.34	50.01	50.36	49.76	47.46	48.50	49.62
		47.62	46.16	4.90	4.73	4.66	49.22	46.04	46.34	4.68	4.96	49.76	47.40	46.50	4.83
Eurasia		0.72	0.74	4.90 0.74	4.73 0.72					4.00 0.74	4.96 0.76	4.9 4 0.76	0.73	4.61 0.73	
Europe						0.73	0.75	0.75	0.73						0.74
China		11.36	11.32	11.27	11.08	11.69	11.64	11.59	11.37	11.99	11.94	11.89	11.18	11.50	11.80
Other Asia		12.33	11.87	12.19	12.49	12.71	12.23	12.56	12.84	13.07	12.57	12.92	12.13	12.50	12.85
Other Non-OECD	17.93	18.76	19.32	18.50	18.24	19.09	19.67	18.82	18.65	19.53	20.13	19.25	18.63	18.96	19.39
Total World Consumption	92.74	93.19	94.90	94.24	93.90	94.61	95.83	95.72	95.34	96.05	97.34	97.17	93.78	95.02	96.48
Total Crude Oil and Other Liquids Inv	entory Ne	t Withdra	wals (mill	ion barrel	s per day)									
U.S. (50 States)	-0.54	-0.69	-0.32	-0.14	0.11	-0.23	0.05	0.56	0.09	-0.33	-0.07	0.58	-0.42	0.12	0.07
Other OECD	-0.32	-0.34	-0.40	-0.59	-0.54	-0.43	-0.28	-0.44	-0.18	-0.15	0.03	-0.20	-0.41	-0.42	-0.13
Other Stock Draws and Balance	-0.99	-1.27	-0.76	-1.03	-0.93	-0.79	-0.51	-0.78	-0.32	-0.30	0.06	-0.36	-1.01	-0.75	-0.23
Total Stock Draw	-1.86	-2.30	-1.48	-1.76	-1.35	-1.45	-0.74	-0.66	-0.42	-0.78	0.02	0.03	-1.85	-1.05	-0.28
End-of-period Commercial Crude Oil	and Other	Liquids I	nventorie	s											
U.S. Commercial Inventory	1,217	1,277	1,306	1,319	1,309	1,330	1,325	1,274	1,266	1,296	1,302	1,250	1,319	1,274	1,250
OECD Commercial Inventory	2,797	2,888	2,961	3,029	3,067	3,127	3,148	3,137	3,146	3,190	3,193	3,159	3,029	3,137	3,159

^{- =} no data available

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

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.

 $\textbf{Historical data:} \ Latest \ data \ available \ from \ Energy \ Information \ Administration \ international \ energy \ statistics.$

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

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.

⁽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 prodessing 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 EIRetroleum Supply Monthly, DOE/EIA-0109.

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

U.S. Energy Information Administration	Short-	Term Ene		look - F	ebruary										
		201				20				20				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
North America	22.18	21.84	22.31	22.21	21.90	21.82	21.60	21.76	21.78	21.93	21.90	22.08	22.13	21.77	21.92
Canada	4.69	4.16	4.55	4.53	4.57	4.60	4.66	4.72	4.77	4.77	4.83	4.82	4.48	4.64	4.80
Mexico	2.68	2.58	2.62	2.62	2.60	2.59	2.58	2.57	2.55	2.52	2.45	2.41	2.62	2.59	2.48
United States	14.81	15.10	15.13	15.06	14.73	14.63	14.35	14.47	14.45	14.64	14.61	14.85	15.03	14.54	14.64
Central and South America	4.95	5.42	5.65	5.37	4.97	5.49	5.74	5.46	5.00	5.51	5.77	5.49	5.35	5.41	5.45
Argentina	0.70	0.71	0.72	0.74	0.70	0.72	0.76	0.76	0.72	0.74	0.77	0.77	0.72	0.74	0.75
Brazil	2.75	3.23	3.50	3.15	2.77	3.27	3.53	3.21	2.78	3.29	3.55	3.23	3.16	3.19	3.22
Colombia	1.06	1.05	1.00	1.04	1.05	1.04	0.99	1.02	1.03	1.02	0.97	1.00	1.03	1.03	1.01
Other Central and S. America	0.45	0.43	0.43	0.45	0.45	0.45	0.46	0.47	0.47	0.47	0.48	0.48	0.44	0.46	0.47
Europe	3.95	4.05	3.90	4.11	4.05	3.82	3.72	3.68	3.64	3.57	3.51	3.50	4.00	3.82	3.55
Norway	1.94	1.94	1.92	2.02	2.00	1.90	1.92	1.87	1.84	1.79	1.76	1.71	1.96	1.92	1.78
United Kingdom (offshore)	0.88	0.97	0.85	0.96	0.92	0.81	0.67	0.68	0.67	0.64	0.61	0.65	0.92	0.77	0.64
Other North Sea	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.18	0.18	0.19
Eurasia	14.11	14.03	14.00	13.94	13.90	13.92	13.95	13.97	13.81	13.83	13.77	13.71	14.02	13.94	13.78
Azerbaijan	0.86	0.87	0.88	0.88	0.88	0.88	0.87	0.87	0.87	0.86	0.86	0.85	0.87	0.87	0.86
Kazakhstan	1.76	1.72	1.70	1.70	1.71	1.72	1.72	1.75	1.76	1.76	1.75	1.74	1.72	1.73	1.75
Russia	10.99	10.98	10.95	10.87	10.83	10.84	10.86	10.87	10.70	10.73	10.68	10.64	10.95	10.85	10.69
Turkmenistan	0.29	0.27	0.28	0.27	0.28	0.29	0.29	0.28	0.29	0.29	0.29	0.29	0.28	0.29	0.29
Other Eurasia	0.20	0.19	0.19	0.20	0.21	0.20	0.20	0.20	0.19	0.19	0.19	0.19	0.20	0.20	0.19
Middle East	1.18	1.13	1.13	1.13	1.15	1.13	1.13	1.13	1.12	1.10	1.10	1.09	1.14	1.13	1.10
Oman	0.97	0.98	1.00	1.01	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.99	0.99	0.98
Syria	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.03	0.01	0.00
Yemen	0.11	0.04	0.02	0.02	0.06	0.06	0.06	0.06	0.06	0.04	0.04	0.04	0.05	0.06	0.05
Asia and Oceania	8.43	8.48	8.46	8.48	8.48	8.51	8.52	8.51	8.51	8.53	8.55	8.54	8.46	8.51	8.53
Australia	0.39	0.39	0.45	0.43	0.44	0.44	0.44	0.45	0.45	0.46	0.46	0.47	0.42	0.44	0.46
China	4.66	4.73	4.71	4.69	4.65	4.68	4.69	4.69	4.66	4.69	4.69	4.70	4.70	4.68	4.68
India	1.01	1.00	1.01	1.01	1.01	1.00	1.01	1.00	1.01	1.01	1.02	1.01	1.01	1.01	1.01
Malaysia	0.78	0.75	0.70	0.74	0.75	0.76	0.76	0.75	0.76	0.75	0.74	0.74	0.74	0.75	0.75
Vietnam	0.36	0.34	0.35	0.36	0.35	0.35	0.34	0.34	0.34	0.33	0.33	0.33	0.35	0.35	0.33
Africa	2.33	2.32	2.32	2.32	2.28	2.29	2.29	2.31	2.31	2.35	2.38	2.41	2.32	2.29	2.36
Egypt	0.71	0.70	0.71	0.70	0.70	0.70	0.69	0.69	0.69	0.68	0.68	0.68	0.71	0.69	0.68
Equatorial Guinea	0.27	0.27	0.27	0.26	0.24	0.24	0.25	0.25	0.24	0.24	0.24	0.24	0.27	0.24	0.24
Gabon	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.21	0.21	0.20
Sudan and South Sudan	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.25	0.26	0.26	0.25
Total non-OPEC liquids	57.14	57.28	57.77	57.54	56.74	56.98	56.94	56.83	56.18	56.82	56.97	56.82	57.43	56.87	56.70
OPEC non-crude liquids	6.55	6.57	6.58	6.64	6.79	6.87	6.94	7.00	7.11	7.16	7.23	7.29	6.59	6.90	7.20
Non-OPEC + OPEC non-crude	63.68	63.85	64.35	64.19	63.53	63.85	63.88	63.83	63.29	63.98	64.21	64.11	64.02	63.77	63.90
Unplanned non-OPEC Production Outages	0.27	0.46	0.40	0.35	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.37	n/a	n/a

^{- =} 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.

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

0.3. Energy information Administration		20	15			•)16			20	17			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Crude Oil															
Algeria	1.10	1.10	1.10	1.10	-	-	-	-	-	-	-	-	1.10	-	-
Angola	1.77	1.78	1.81	1.76	-	-	-	-	-	-	-	-	1.78	-	-
Ecudaor	0.55	0.54	0.54	0.56	-	-	-	-	-	-	-	-	0.55	-	-
Indonesia	0.67	0.69	0.69	0.71	-	-	-	-	-	-	-	-	0.69	-	-
Iran	2.80	2.80	2.80	2.80	-	-	-	-	-	-	-	-	2.80	-	-
Iraq	3.51	4.02	4.33	4.37	-	-	-	-	-	-	-	-	4.06	-	-
Kuwait	2.57	2.53	2.50	2.45	-	-	-	-	-	-	-	-	2.51	-	-
Libya	0.40	0.45	0.38	0.39	-	-	-	-	-	-	-	-	0.40	-	-
Nigeria	2.03	1.88	1.88	1.90	-	-	-	-	-	-	-	-	1.92	-	-
Qatar	0.68	0.68	0.68	0.68	-	-	-	-	-	-	-	-	0.68	-	-
Saudi Arabia	9.73	10.07	10.22	10.00	-	-	-	-	-	-	-	-	10.01	-	-
United Arab Emirates	2.70	2.70	2.70	2.70	-	-	-	-	-	-	-	-	2.70	-	-
Venezuela	2.40	2.40	2.40	2.40	-	-	-	-	-	-	-	-	2.40	-	-
OPEC Total	30.92	31.65	32.03	31.81	31.73	32.21	32.69	32.56	32.47	32.85	33.11	33.04	31.60	32.30	32.87
Other Liquids (a)	6.55	6.57	6.58	6.64	6.79	6.87	6.94	7.00	7.11	7.16	7.23	7.29	6.59	6.90	7.20
Total OPEC Supply	37.46	38.22	38.61	38.45	38.52	39.08	39.63	39.55	39.58	40.01	40.34	40.33	38.19	39.20	40.07
Crude Oil Production Capacity															
Africa	5.31	5.21	5.17	5.15	5.03	5.10	5.15	5.23	5.23	5.30	5.37	5.41	5.21	5.13	5.33
South America	2.95	2.94	2.95	2.97	2.87	2.86	2.86	2.89	2.77	2.76	2.66	2.69	2.95	2.87	2.72
Middle East	23.90	24.33	24.56	24.60	25.22	25.57	25.60	25.63	25.71	25.79	25.87	25.94	24.35	25.51	25.83
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	33.37	33.42	33.84	34.26	34.37	34.51	34.44	34.57	34.61	34.74	33.21	34.24	34.59
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South America	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	1.92	1.53	1.33	1.60	2.11	2.05	1.68	1.95	1.97	1.72	1.50	1.70	1.59	1.95	1.72
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	1.34	1.61	2.11	2.05	1.68	1.95	1.97	1.72	1.50	1.70	1.61	1.95	1.72
Unplanned OPEC Production Outages	2.57	2.64	2.76	2.78	n/a	2.69	n/a	n/a							

^{- =} no data available

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

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.

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

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

0.3. Energy information Administration C	11011 101	20	•		ua.y 20.	20	16			20	17				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2015	2016	2017
North America	22.57	22.46	24.11	22.65	22.44	22.70	24.42	24.05	22.60	22.02	24.44	24.29	22.70	22.02	24.00
North America	23.57 2.36	23.46 2.26	24.11	23.65 2.41	23.41 2.38	23.70 2.32	24.13 2.43	24.05 2.41	23.68 2.38	23.93 2.32	24.41 2.43	24.29	23.70 2.35	23.82 2.38	24.08 2.38
Mexico		1.95	2.04	1.93	1.93	1.95	1.92	1.93	1.93	1.95	1.92	1.93	1.96	1.93	1.93
United States		19.25	19.68	19.29	19.08	19.42	19.77	19.69	19.36	19.65	20.05	19.94	19.38	19.49	19.75
Central and South America	7.05	7.30	7.32	7.35	7.06	7.33	7.36	7.34	7.08	7.34	7.37	7.35	7.26	7.27	7.28
Brazil	3.00	3.11	3.18	3.17	2.95	3.06	3.13	3.12	2.92	3.03	3.10	3.09	3.12	3.06	3.04
Europe	14.13	14.22	14.86	14.56	14.39	14.13	14.60	14.55	14.42	14.17	14.64	14.58	14.44	14.42	14.45
Eurasia	4.74	4.68	4.95	4.93	4.76	4.69	4.97	4.95	4.79	4.71	4.99	4.98	4.83	4.84	4.87
Russia	3.39	3.34	3.54	3.53	3.35	3.30	3.50	3.48	3.31	3.26	3.45	3.44	3.45	3.41	3.37
Middle East	7.93	8.52	9.08	8.29	8.17	8.78	9.38	8.50	8.45	9.08	9.70	8.79	8.46	8.71	9.01
Asia and Oceania	31.42	31.14	30.75	31.60	32.07	31.95	31.41	32.33	32.73	32.64	32.08	33.01	31.23	31.94	32.61
China	10.77	11.36	11.32	11.27	11.08	11.69	11.64	11.59	11.37	11.99	11.94	11.89	11.18	11.50	11.80
Japan	4.79	3.89	3.94	4.28	4.58	3.85	3.88	4.25	4.54	3.82	3.85	4.22	4.22	4.14	4.11
India	4.08	4.06	3.72	4.02	4.25	4.23	3.88	4.19	4.42	4.41	4.04	4.37	3.97	4.14	4.31
Africa	3.89	3.88	3.84	3.86	4.04	4.03	3.99	4.01	4.20	4.19	4.14	4.17	3.86	4.02	4.17
Total OECD Liquid Fuels Consumption	46.50	45.38	46.75	46.64	46.65	45.73	46.62	47.08	47.00	46.04	46.98	47.41	46.32	46.52	46.86
Total non-OECD Liquid Fuels Consumption	46.24	47.82	48.16	47.60	47.25	48.87	49.22	48.64	48.34	50.01	50.36	49.76	47.46	48.50	49.62
Total World Liquid Fuels Consumption	92.74	93.19	94.90	94.24	93.90	94.61	95.83	95.72	95.34	96.05	97.34	97.17	93.78	95.02	96.48
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	116.1	116.9	117.5	118.0	118.8	119.7	120.5	121.5	122.4	123.4	124.4	125.4	117.1	120.1	123.9
Percent change from prior year		2.5	2.3	2.1	2.3	2.4	2.6	2.9	3.0	3.1	3.2	3.2	2.4	2.6	3.1
OECD Index, 2010 Q1 = 100	109.2	109.8	110.3	110.7	111.3	111.9	112.6	113.4	114.2	114.7	115.4	116.0	110.0	112.3	115.1
Percent change from prior year		2.1	2.0	1.8	1.9	1.9	2.1	2.5	2.6	2.5	2.4	2.2	2.0	2.1	2.4
Non-OECD Index, 2010 Q1 = 100		125.8	126.6	127.5	128.4	129.6	130.6	131.9	132.9	134.7	136.0	137.6	126.2	130.1	135.3
Percent change from prior year	3.3	2.9	2.7	2.4	2.7	3.0	3.2	3.4	3.5	3.9	4.2	4.3	2.8	3.1	4.0
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100		119.54	122.98	124.76	128.49	129.55	129.74	129.20	128.97	128.46	128.29	128.02	121.64	129.24	128.44
Percent change from prior year	10.4	10.8	12.8	9.8	7.7	8.4	5.5	3.6	0.4	-0.8	-1.1	-0.9	10.9	6.2	-0.6

^{- =} no data available

OECD = Organisation for Economic Co-operation and Development: Australia, Australia, 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.

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

U.S. Energy Information Administration Sr	nort-Term			- Febru	ary 2016		16			20/	17	1		Vaar	
	1st	201 2nd	3rd	4th	1st	201 2nd	3rd	4th	1st	20 ⁻ 2nd	3rd	4th	2015	Year 2016	2017
Supply (million barrels per day)	131	Ziiu	Jiu	701	131	Ziiu	Jiu	701	131	Ziiu	Jiu	701	2013	2010	2017
Crude Oil Supply															
Domestic Production (a)	9.49	9.50	9.43	9.29	9.05	8.81	8.44	8.47	8.51	8.48	8.33	8.53	9.43	8.69	8.46
Alaska	0.50	0.48	0.44	0.51	0.50	0.48	0.43	0.49	0.48	0.46	0.43	0.49	0.48	0.48	0.46
Federal Gulf of Mexico (b)	1.46	1.47	1.64	1.59	1.61	1.64	1.56	1.70	1.79	1.81	1.72	1.84	1.54	1.63	1.79
Lower 48 States (excl GOM)	7.52	7.55	7.35	7.20	6.94	6.68	6.45	6.28	6.23	6.20	6.19	6.20	7.40	6.59	6.21
Crude Oil Net Imports (c)	6.84	6.74	6.93	6.99	6.84	7.39	7.85	7.59	7.28	7.90	8.18	7.67	6.87	7.42	7.76
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	-0.23	-0.34	0.19	0.27	0.15	-0.30	0.11	0.17	0.10	-0.24	0.07	0.02
Crude Oil Adjustment (d)	0.11	0.22	0.13	0.12	0.14	0.19	0.21	0.15	0.19	0.19	0.21	0.15	0.15	0.17	0.19
Total Crude Oil Input to Refineries	15.53	16.48	16.58	16.17	15.69	16.57	16.78	16.36	15.68	16.67	16.90	16.47	16.19	16.35	16.44
Other Supply															
Refinery Processing Gain	0.99	1.02	1.08	1.04	1.03	1.05	1.08	1.09	1.04	1.06	1.09	1.10	1.03	1.06	1.07
Natural Gas Plant Liquids Production	3.09	3.27	3.31	3.39	3.34	3.43	3.48	3.56	3.58	3.76	3.82	3.87	3.27	3.45	3.76
Renewables and Oxygenate Production (e)	1.05	1.10	1.10	1.12	1.10	1.10	1.12	1.10	1.11	1.10	1.12	1.11	1.09	1.11	1.11
Fuel Ethanol Production	0.96	0.96	0.96	0.98	0.97	0.97	0.98	0.96	0.97	0.96	0.97	0.96	0.96	0.97	0.97
Petroleum Products Adjustment (f)	0.20	0.21	0.21	0.22	0.21	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	-2.74	-2.74	-2.55	-2.70	-3.08	-2.66	-2.76	-2.89	-3.32	-2.24	-2.77	-2.91
Hydrocarbon Gas Liquids	-0.68	-0.80	-0.93	-0.91	-1.08	-1.08	-1.20	-1.21	-1.26	-1.29	-1.37	-1.35	-0.83	-1.14	-1.32
Unfinished Oils	0.26	0.28	0.38	0.28	0.33	0.22	0.35	0.33	0.38	0.27	0.38	0.36	0.30	0.31	0.35
Other HC/Oxygenates	-0.08	-0.09	-0.06	-0.07	-0.07	-0.05	-0.03	-0.03	-0.07	-0.05	-0.03	-0.03	-0.08	-0.04	-0.04
Motor Gasoline Blend Comp	0.41	0.52	0.60	0.27	0.34	0.61	0.50	0.44	0.44	0.63	0.52	0.42	0.45	0.47	0.50
Finished Motor Gasoline	-0.44	-0.32	-0.40	-0.45	-0.53	-0.38	-0.33	-0.56	-0.52	-0.52	-0.43	-0.63	-0.40	-0.45	-0.52
Jet Fuel	-0.06	0.01	-0.05	-0.06	-0.03	0.00	-0.04	-0.13	-0.01	-0.02	-0.06	-0.12	-0.04	-0.05	-0.05
Distillate Fuel Oil	-0.67	-1.05	-1.12	-1.11	-1.01	-1.18	-1.25	-1.13	-0.92	-1.10	-1.22	-1.17	-0.99	-1.14	-1.10
Residual Fuel Oil	-0.13	-0.21	-0.11	-0.09	-0.18	-0.25	-0.22	-0.19	-0.22	-0.25	-0.21	-0.21	-0.14	-0.21	-0.22
Other Oils (g)	-0.50	-0.46	-0.50	-0.60	-0.52	-0.44	-0.48	-0.60	-0.48	-0.44	-0.48	-0.59	-0.51	-0.51	-0.50
Product Inventory Net Withdrawals	0.36	-0.72	-0.41	0.09	0.46	-0.41	-0.22	0.41	0.38	-0.43	-0.24	0.46	-0.17	0.06	0.04
Total Supply	19.32	19.25	19.68	19.29	19.08	19.42	19.77	19.69	19.36	19.65	20.05	19.94	19.39	19.49	19.75
,															
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	2.72	2.27	2.29	2.55	2.68	2.23	2.29	2.64	2.66	2.38	2.49	2.83	2.46	2.46	2.59
Unfinished Oils	-0.05	0.05	-0.03	-0.02	0.00	0.00	0.01	0.02	-0.01	0.00	0.01	0.02	-0.01	0.01	0.01
Motor Gasoline	8.81	9.26	9.39	9.15	8.82	9.36	9.49	9.25	8.90	9.33	9.45	9.24	9.16	9.23	9.23
Fuel Ethanol blended into Motor Gasoline	0.87	0.92	0.93	0.91	0.89	0.94	0.95	0.93	0.89	0.93	0.95	0.93	0.91	0.93	0.92
Jet Fuel	1.45	1.54	1.59	1.57	1.48	1.56	1.56	1.51	1.50	1.58	1.58	1.53	1.54	1.53	1.55
Distillate Fuel Oil	4.27	3.88	3.93	3.79	3.99	3.96	3.94	4.06	4.19	4.05	4.02	4.09	3.96	3.99	4.09
Residual Fuel Oil	0.24	0.19	0.31	0.30	0.23	0.20	0.23	0.21	0.21	0.19	0.22	0.20	0.26	0.22	0.20
Other Oils (g)	1.85	2.06	2.20	1.94	1.89	2.10	2.25	2.00	1.92	2.12	2.28	2.03	2.01	2.06	2.09
Total Consumption	19.29	19.25	19.68	19.29	19.08	19.42	19.77	19.69	19.36	19.65	20.05	19.94	19.38	19.49	19.75
Total Petroleum and Other Liquids Net Imports	4.95	4.61	4.74	4.25	4.10	4.84	5.15	4.52	4.63	5.15	5.29	4.36	4.64	4.65	4.86
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	474.8	469.5	460.8	482.3	513.5	496.6	471.6	458.1	484.8	475.1	459.1	449.7	482.3	458.1	449.7
Hydrocarbon Gas Liquids	138.8	196.3	228.7	196.1	152.6	199.3	224.4	177.5	143.3	187.5	210.2	161.3	196.1	436. i 177.5	161.3
Unfinished Oils	84.7	86.0	88.8	84.6	92.7	89.6	87.2	81.7	92.1	89.5	87.5	82.0	84.6	81.7	82.0
		25.0	23.8	26.5	28.7	27.4	26.7	27.0	92.1 29.1	27.9	27.1	27.4	26.5	27.0	62.0 27.4
Other HC/Oxygenates															
Total Motor Gasoline	231.5	221.0	225.1	232.0	232.8	224.9	221.4	235.3	233.3	226.5	225.6	236.8	232.0	235.3	236.8
Finished Motor Gasoline	26.9	25.7	29.0	28.8	24.5	25.2	25.7	27.4	27.0	25.3	26.3	27.7	28.8	27.4	27.7
Motor Gasoline Blend Comp.	204.6	195.4	196.1	203.2	208.3	199.7	195.7	207.8	206.4	201.2	199.2	209.1	203.2	207.8	209.1
Jet Fuel	37.2	43.7	40.4	40.2	41.1	42.0 151.0	44.1 160.0	40.4	40.1	41.3	43.7	40.0	40.2	40.4	40.0
Distillate Fuel Oil	128.3	139.4	148.8	162.4	145.9	151.9	160.9	163.2	146.3	152.7	161.1	162.8	162.4	163.2	162.8
Residual Fuel Oil	38.1	41.8	41.3	42.1	43.1	42.0	38.9	39.0	39.6	40.0	38.3	38.7	42.1	39.0	38.7
Other Oils (g)	57.3	54.6	48.3	53.1	58.6	56.1	50.0	51.6	57.4	55.2	49.3	51.1	53.1	51.6	51.1
Total Commercial Inventory	1,217	1,277	1,306	1,319	1,309	1,330	1,325	1,274	1,266	1,296	1,302	1,250	1,319	1,274	1,250
Crude Oil in SPR	691	694	695	695	695	695	695	695	695	695	695	694	695	695	694

^{- =} no data available

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

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

⁽a) Includes lease condensate.

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

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

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

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

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

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

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

U.S. Energy Information Administration	Short-			ook - Fe	bruary 2										
	4-4 [201		441-	4-4	201		441-	4-4	201		441-	0045	Year	2047
HGL Production	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Natural Gas Processing Plants												1			
Ethane	. 1.05	1.10	1.09	1.17	1.21	1.21	1.24	1.31	1.34	1.43	1.48	1.51	1.10	1.24	1.44
Propane		1.12	1.13	1.15	1.11	1.14	1.14	1.16	1.16	1.20	1.20	1.21	1.12	1.14	1.19
Butanes		0.62	0.64	0.64	0.61	0.64	0.63	0.65	0.65	0.67	0.67	0.69	0.62	0.63	0.67
Natural Gasoline (Pentanes Plus)		0.44	0.46	0.44	0.41	0.44	0.46	0.44	0.43	0.46	0.48	0.46	0.43	0.44	0.46
Refinery and Blender Net Production	0.00	0.11	0.40	0.11	0.11	0.11	0.10	0.11	0.10	0.10	0.10	0.10	0.40	0.11	0.10
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		0.58	0.56	0.55	0.54	0.57	0.57	0.56	0.55	0.58	0.58	0.57	0.56	0.56	0.57
Butanes/Butylenes		0.27	0.19	-0.18	-0.06	0.25	0.19	-0.17	-0.06	0.25	0.19	-0.17	0.05	0.05	0.05
Renewable Fuels and Oxygenate Plant Net Pr								****							
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
HGL Net Imports															
Ethane	0.06	-0.07	-0.06	-0.07	-0.11	-0.12	-0.16	-0.19	-0.21	-0.22	-0.24	-0.26	-0.06	-0.14	-0.23
Propane/Propylene		-0.49	-0.56	-0.57	-0.65	-0.60	-0.67	-0.68	-0.71	-0.68	-0.72	-0.72	-0.50	-0.65	-0.71
Butanes/Butylenes		-0.09	-0.11	-0.09	-0.12	-0.17	-0.16	-0.14	-0.12	-0.18	-0.18	-0.16	-0.09	-0.15	-0.16
Natural Gasoline (Pentanes Plus)	-0.17	-0.15	-0.21	-0.18	-0.20	-0.19	-0.22	-0.20	-0.22	-0.20	-0.24	-0.22	-0.18	-0.20	-0.22
HGL Refinery and Blender Net Inputs Butanes/Butylenes	0.40	0.27	0.32	0.49	0.37	0.27	0.30	0.43	0.37	0.27	0.30	0.44	0.37	0.34	0.34
Natural Gasoline (Pentanes Plus)		0.27	0.32	0.49	0.37	0.27	0.30	0.43	0.37	0.27 0.16	0.30	0.44	0.37	0.34	0.34
Natural Gasoline (Fernalies Flus)	0.15	0.14	0.10	0.13	0.15	0.10	0.10	0.10	0.15	0.10	0.10	0.10	0.15	0.10	0.10
HGL Consumption															
Ethane/Ethylene		1.02	1.02	1.11	1.09	1.05	1.09	1.16	1.13	1.17	1.25	1.30	1.05	1.10	1.21
Propane/Propylene		0.92	0.96	1.16	1.36	0.90	0.93	1.20	1.31	0.91	0.97	1.23	1.12	1.10	1.10
Butanes/Butylenes		0.24	0.22	0.21	0.17	0.22	0.21	0.21	0.17	0.23	0.22	0.23	0.20	0.20	0.21
Natural Gasoline (Pentanes Plus)	0.10	0.09	0.09	0.08	0.05	0.06	0.06	0.07	0.05	0.06	0.06	0.07	0.09	0.06	0.06
HGL Inventories (million barrels)	. 31.38	31.65	31.86	33.23	22.65	36.97	37.59	35.44	33.84	37.61	20 12	35.71	32.04	35.67	36.33
Ethane/Ethylene		84.20	100.20	97.84	32.65 64.73	30.97 84.17	95.25	81.23	53.72	70.21	38.13 78.59	62.54	97.84	81.23	62.54
Propane/Propylene Butanes/Butylenes		59.42	76.52	46.19	35.85	56.97	95.25 71.13	42.64	36.46	70.21 58.10	76.59 72.40	43.96	46.19	42.64	43.96
Natural Gasoline (Pentanes Plus)		20.51	19.00	19.76	18.25	20.26	20.72	19.59	18.35	20.75	21.45	20.64	19.76	19.59	20.64
Refinery and Blender Net Inputs	45.50	40.40	40.50	40.47	45.00	40.57	40.70	40.00	45.00	40.07	40.00	10.47	40.40	40.05	40.44
Crude OII		16.48	16.58	16.17	15.69	16.57	16.78	16.36	15.68	16.67	16.90	16.47	16.19	16.35	16.44
Hydrocarbon Gas Liquids		0.40	0.47	0.64	0.52	0.43	0.46	0.60	0.52	0.43	0.46	0.60	0.52	0.50	0.50
Other Hydrocarbons/Oxygenates		1.18	1.19	1.17	1.18	1.24	1.28	1.25	1.20	1.25	1.29	1.27	1.16	1.24	1.25
Unfinished Oils		0.22	0.38	0.35	0.24	0.26	0.36	0.37	0.27	0.30	0.39	0.40	0.30	0.31	0.34
Motor Gasoline Blend Components		0.91	0.75	0.41	0.50	0.93	0.74	0.51	0.67	0.91	0.74	0.51	0.70	0.67	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
Total Refinery and Blender Net Inputs	. 18.14	19.18	19.38	18.74	18.14	19.42	19.62	19.09	18.33	19.56	19.79	19.25	18.86	19.07	19.24
Refinery Processing Gain	0.99	1.02	1.08	1.04	1.03	1.05	1.08	1.09	1.04	1.06	1.09	1.10	1.03	1.06	1.07
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids		0.86	0.76	0.38	0.48	0.83	0.76	0.39	0.49	0.84	0.77	0.40	0.62	0.62	0.62
Finished Motor Gasoline	9.48	9.83	9.97	9.79	9.52	9.97	10.02	10.01	9.63	10.04	10.07	10.06	9.77	9.88	9.95
Jet Fuel	. 1.50	1.61	1.60	1.63	1.52	1.58	1.62	1.60	1.50	1.61	1.66	1.61	1.59	1.58	1.60
Distillate Fuel	. 4.82	4.99	5.08	4.98	4.76	5.15	5.23	5.16	4.86	5.17	5.27	5.23	4.97	5.08	5.13
Residual Fuel	0.43	0.44	0.41	0.41	0.42	0.44	0.41	0.41	0.43	0.44	0.42	0.41	0.42	0.42	0.43
Other Oils (a)	. 2.44	2.48	2.63	2.59	2.46	2.51	2.67	2.62	2.46	2.53	2.69	2.63	2.53	2.56	2.58
Total Refinery and Blender Net Production		20.20	20.45	19.78	19.17	20.48	20.70	20.18	19.37	20.63	20.88	20.35	19.90	20.13	20.31
Refinery Distillation Inputs	15.78	16.69	16.85	16.35	15.94	16.76	17.03	16.62	15.99	16.86	17.14	16.72	16.42	16.59	16.68
Refinery Operable Distillation Capacity	17.88	17.98	18.08	18.14	18.14	18.15	18.31	18.40	18.43	18.43	18.43	18.43	18.02	18.25	18.43
Refinery Distillation Utilization Factor	0.88	0.93	0.93	0.90	0.88	0.92	0.93	0.90	0.87	0.91	0.93	0.91	0.91	0.91	0.91

^{- =} no data available

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

 $\textit{Petroleum Supply Annual}\ , \ \mathsf{DOE/EIA-0340/2}; \ \textit{Weekly Petroleum Status Report}\ , \ \mathsf{DOE/EIA-0208}.$

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

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

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

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

0.5. Energy information Administration	011 011			/ Outlook	(- I CDI						_				
_		20				201				201			-	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	143	112	130	131	120	127	157	162	148	172	124	149
Gasoline Regular Grade Retail Prices Incl	uding Tax	es													
PADD 1	228	259	247	211	186	197	200	195	200	226	232	224	236	195	221
PADD 2	216	256	253	209	173	196	199	187	191	226	231	216	234	189	217
PADD 3	204	240	228	190	165	179	181	169	176	206	211	198	215	174	198
PADD 4	207	261	277	218	181	191	202	188	181	217	233	218	241	191	213
PADD 5	271	328	327	264	239	244	252	233	224	259	266	250	298	242	250
U.S. Average	227	267	260	216	188	202	206	194	197	228	234	222	243	198	221
Gasoline All Grades Including Taxes	236	275	269	226	198	211	215	204	206	237	243	231	252	207	230
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	64.5	61.3	62.6	59.8	62.5	62.4	58.9	61.3	61.9	63.3	61.0	63.5	59.8	61.3	63.5
PADD 2	52.9	50.4	47.0	54.0	54.4	49.7	48.9	51.1	52.1	48.8	49.2	51.0	54.0	51.1	51.0
PADD 3	78.4	74.6	78.1	83.1	79.5	78.0	78.3	82.9	81.6	79.2	80.2	82.8	83.1	82.9	82.8
PADD 4	6.5	6.8	7.1	7.7	7.3	6.9	6.9	7.8	7.2	7.1	7.1	7.8	7.7	7.8	7.8
PADD 5	29.2	28.0	30.3	27.4	29.2	27.9	28.4	32.2	30.6	28.1	28.0	31.7	27.4	32.2	31.7
U.S. Total	231.5	221.0	225.1	232.0	232.8	224.9	221.4	235.3	233.3	226.5	225.6	236.8	232.0	235.3	236.8
Finished Gasoline Inventories															
U.S. Total	26.9	25.7	29.0	28.8	24.5	25.2	25.7	27.4	27.0	25.3	26.3	27.7	28.8	27.4	27.7
Gasoline Blending Components Inventorio	es														
U.S. Total	204.6	195.4	196.1	203.2	208.3	199.7	195.7	207.8	206.4	201.2	199.2	209.1	203.2	207.8	209.1

^{- =} no data available

Prices are not adjusted for inflation.

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

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

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

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: Petroleum Marketing Monthly, DOE/EIA-0380;

Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; and Weekly Petroleum Status Report, DOE/EIA-0208.

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

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

U.S. Energy Information Admi	nistratio	on Sh	ort- i erm	ı ⊨nergy	Outlook	- Februa	ary 2016)							
			15			20 ⁻	16			201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Supply (billion cubic feet per day)															
Total Marketed Production	78.11	79.20	80.01	79.20	79.34	79.50	79.61	80.30	80.76	81.02	81.24	82.00	79.13	79.69	81.26
Alaska	0.99	0.93	0.86	0.97	1.00	0.85	0.77	0.93	0.98	0.83	0.76	0.93	0.94	0.89	0.87
Federal GOM (a)	3.37	3.68	3.95	3.55	3.43	3.38	3.21	3.17	3.22	3.17	3.00	3.03	3.64	3.30	3.10
Lower 48 States (excl GOM)	73.75	74.58	75.19	74.68	74.91	75.27	75.64	76.19	76.56	77.02	77.49	78.04	74.55	75.51	77.28
Total Dry Gas Production	73.67	74.50	75.25	74.28	74.42	74.57	74.68	75.32	75.75	75.99	76.21	76.92	74.43	74.75	76.22
LNG Gross Imports	0.43	0.08	0.26	0.22	0.14	0.16	0.17	0.15	0.12	0.12	0.12	0.12	0.25	0.15	0.12
LNG Gross Exports	0.06	0.06	0.09	0.06	0.00	0.26	0.70	1.04	1.04	1.13	1.42	1.73	0.07	0.50	1.33
Pipeline Gross Imports	8.36	6.69	6.69	7.09	7.23	6.20	6.53	6.71	7.24	6.20	6.51	6.76	7.20	6.67	6.68
Pipeline Gross Exports	4.86	4.36	4.81	5.01	5.13	4.95	5.33	5.50	5.25	5.14	5.30	5.57	4.76	5.23	5.32
Supplemental Gaseous Fuels	0.17	0.16	0.14	0.17	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.17
Net Inventory Withdrawals	18.48	-12.99	-10.48	-0.41	17.17	-9.18	-8.61	3.39	16.81	-9.31	-8.86	3.35	-1.43	0.67	0.44
Total Supply	96.19	64.00	66.97	76.28	93.99	66.70	66.90	79.20	93.79	66.90	67.43	80.02	75.78	76.68	76.97
Balancing Item (b)	0.48	0.10	-0.93	-1.25	0.15	-0.92	0.04	-0.21	0.76	-0.37	0.35	0.53	-0.41	-0.24	0.32
Total Primary Supply	96.67	64.11	66.04	75.03	94.14	65.78	66.94	78.99	94.56	66.53	67.78	80.55	75.38	76.44	77.29
Consumption (billion cubic feet per	r day)														
Residential	27.52	6.91	3.46	13.00	25.35	7.34	3.58	15.62	26.17	7.64	3.59	15.86	12.66	12.96	13.26
Commercial	16.01	5.87	4.43	9.07	14.56	5.95	4.53	10.57	14.96	6.10	4.58	10.71	8.81	8.90	9.06
Industrial	22.68	19.61	19.18	21.11	22.74	20.31	20.08	22.14	23.17	20.80	20.61	22.65	20.64	21.32	21.80
Electric Power (c)	23.05	25.28	32.41	25.05	24.05	25.67	32.19	23.68	22.73	25.38	32.33	24.19	26.47	26.41	26.18
Lease and Plant Fuel	4.29	4.35	4.39	4.35	4.35	4.36	4.37	4.41	4.43	4.45	4.46	4.50	4.34	4.37	4.46
Pipeline and Distribution Use	3.03	2.01	2.07	2.36	2.98	2.04	2.08	2.48	3.00	2.06	2.10	2.53	2.36	2.39	2.42
Vehicle Use	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.10	0.10
Total Consumption	96.67	64.11	66.04	75.03	94.14	65.78	66.94	78.99	94.56	66.53	67.78	80.55	75.38	76.44	77.29
End-of-period Inventories (billion c	ubic feet)													
Working Gas Inventory	1,483	2,658	3,625	3,659	2,096	2,932	3,725	3,413	1,899	2,746	3,561	3,252	3,659	3,413	3,252
East Region (d)	242	576	859	854	378	654	886	721	294	562	816	671	854	721	671
Midwest Region (d)	252	565	972	982	476	693	1,030	890	401	638	990	835	982	890	835
South Central Region (d)	575	1,002	1,206	1,298	841	1,047	1,174	1,218	808	1,014	1,123	1,192	1,298	1,218	1,192
Mountain Region (d)	113	155	203	185	125	164	219	196	123	158	212	189	185	196	189
Pacific Region (d)	276	336	359	314	251	350	392	362	249	349	395	340	314	362	340
Alaska	24	24	25	25	24	24	25	25	24	24	25	25	25	25	25

^{- =} no data available

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

LNG: liquefied natural gas.

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

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

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

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

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

⁽d) For a list of States in each inventory region refer to Weekly Natural Gas Storage Report, Notes and Definitions (http://ir.eia.gov/ngs/notes.html) .

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

U.S. Energy information	Adminis	20 [.]		I GIIII LII	ergy Ou	1100K - F		2010		20	17			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	2.43	2.52	2.85	3.07	3.37	3.09	3.29	3.51	2.71	2.72	3.32
Residential Retail															
New England	13.09	13.33	16.17	11.99	11.34	13.32	16.39	12.90	12.45	13.89	16.64	13.15	13.07	12.48	13.17
Middle Atlantic	9.53	11.20	16.32	11.17	10.20	12.73	17.21	11.65	10.48	12.86	17.12	11.58	10.55	11.45	11.57
E. N. Central	7.78	10.58	16.71	8.07	6.76	10.48	16.27	8.20	7.66	11.12	16.63	8.47	8.68	8.21	8.85
W. N. Central	8.66	11.84	17.65	9.95	7.27	9.43	16.24	8.70	7.87	10.51	17.28	9.55	9.90	8.49	9.21
S. Atlantic	10.74	16.68	22.48	13.89	11.15	15.97	22.14	12.46	11.03	15.89	21.91	12.32	12.89	12.83	12.66
E. S. Central	9.34	14.36	19.19	12.46	9.27	12.74	17.90	10.70	9.14	13.31	18.47	11.23	11.06	10.57	10.70
W. S. Central	8.45	13.94	19.90	13.72	9.65	12.80	17.95	10.41	8.47	12.96	18.58	11.38	11.08	10.97	10.60
Mountain	9.57	10.87	14.58	8.42	7.49	8.62	12.59	8.10	7.77	9.13	13.28	8.65	9.72	8.24	8.66
Pacific	11.46	11.40	12.05	10.01	9.00	9.70	10.41	9.74	9.63	10.27	10.90	9.98	11.03	9.54	10.01
U.S. Average	9.30	11.96	16.45	10.10	8.59	11.35	15.65	9.77	9.00	11.82	16.09	10.06	10.36	9.83	10.21
Commercial Retail															
New England	10.77	10.13	9.69	8.80	10.09	9.70	9.69	10.09	10.69	10.72	10.73	11.02	10.13	9.99	10.79
Middle Atlantic	7.91	7.48	6.62	6.90	7.15	6.94	7.02	7.82	8.34	7.97	7.89	8.55	7.48	7.29	8.28
E. N. Central	6.95	7.51	8.80	6.44	6.47	7.51	8.55	6.87	7.10	8.34	9.19	7.39	7.04	6.89	7.51
W. N. Central	7.65	7.98	9.01	6.90	6.66	7.16	8.43	7.14	7.46	7.87	8.97	7.58	7.59	7.02	7.66
S. Atlantic	8.48	9.21	9.62	8.89	8.55	9.21	9.98	9.11	9.12	9.20	9.88	9.19	8.83	8.99	9.25
E. S. Central	8.54	9.62	9.94	9.00	7.98	8.62	9.39	8.72	8.34	9.25	9.97	9.23	8.94	8.45	8.91
W. S. Central	7.15	7.21	8.00	7.50	6.50	6.89	7.64	7.13	7.13	7.69	8.22	7.64	7.36	6.90	7.52
Mountain	8.28	8.35	9.04	6.99	6.30	6.53	7.83	6.93	6.64	6.95	8.30	7.37	7.93	6.69	7.09
Pacific	9.20	8.43	8.69	7.98	8.03	8.13	8.74	8.53	8.74	8.82	9.30	8.87	8.56	8.32	8.89
U.S. Average	7.94	8.13	8.42	7.39	7.21	7.61	8.36	7.76	7.94	8.33	8.92	8.25	7.88	7.56	8.20
Industrial Retail															
New England	9.10	7.61	6.10	6.41	7.38	7.37	7.58	8.63	8.80	8.00	7.86	8.76	7.70	7.75	8.47
Middle Atlantic	8.31	7.56	7.10	6.74	6.97	6.44	7.05	7.85	8.15	7.35	7.68	8.33	7.72	7.09	8.00
E. N. Central	6.41	5.65	5.54	5.25	5.58	5.36	5.72	5.95	6.53	6.21	6.38	6.51	5.89	5.66	6.46
W. N. Central	5.81	4.56	4.41	4.40	4.47	3.84	4.17	4.80	5.32	4.62	4.78	5.31	4.87	4.36	5.05
S. Atlantic	5.46	4.51	4.52	4.31	4.45	4.49	4.85	5.21	5.40	5.06	5.25	5.58	4.73	4.76	5.33
E. S. Central	5.15	4.28	4.14	3.84	4.26	4.14	4.47	4.86	5.25	4.73	4.91	5.24	4.39	4.43	5.05
W. S. Central	3.21	2.92	3.07	2.55	2.51	2.63	3.08	3.28	3.47	3.25	3.56	3.74	2.93	2.88	3.50
Mountain	6.61	6.22	6.12	5.57	4.87	4.56	5.23	5.41	5.25	5.10	5.77	5.92	6.14	5.02	5.50
Pacific	7.32	6.57	6.62	6.17	5.39	5.31	5.96	6.21	6.08	6.00	6.51	6.64	6.68	5.72	6.31
U.S. Average	4.57	3.68	3.66	3.38	3.58	3.33	3.70	4.17	4.56	3.98	4.19	4.63	3.84	3.70	4.35

^{- =} 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.

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

		201	15			20	16			20	17			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Supply (million short tons)															
Production	240.2	211.1	232.4	206.8	200.6	199.2	218.5	215.5	217.2	195.9	217.8	210.2	890.5	833.8	841.0
Appalachia	62.3	54.6	60.3	50.6	51.1	53.5	54.4	49.7	54.1	51.0	50.9	48.5	227.8	208.9	204.5
Interior	45.2	38.9	44.8	39.7	39.4	39.7	43.2	42.7	42.0	39.5	44.3	43.3	168.7	165.1	169.0
Western	132.7	117.6	127.2	116.5	110.0	106.0	120.8	123.1	121.1	105.5	122.6	118.4	494.0	459.9	467.5
Primary Inventory Withdrawals	-0.7	0.3	3.1	-1.6	-1.0	0.7	2.9	-1.6	-1.9	0.7	2.9	-1.6	1.1	1.0	0.0
Imports	3.0	2.6	3.0	2.9	2.3	2.4	3.3	2.9	2.2	2.4	3.3	2.9	11.6	10.9	10.8
Exports	22.0	19.8	16.9	16.2	15.5	18.2	15.5	17.3	11.7	17.4	16.4	18.9	74.9	66.4	64.4
Metallurgical Coal	13.5	12.7	10.3	9.5	10.9	10.9	8.8	10.2	9.0	10.9	9.7	11.7	46.1	40.8	41.3
Steam Coal	8.5	7.0	6.6	6.7	4.6	7.3	6.7	7.0	2.7	6.6	6.6	7.2	28.8	25.6	23.1
Total Primary Supply	220.5	194.3	221.5	191.9	186.4	184.2	209.2	199.5	205.7	181.6	207.6	192.5	828.2	779.3	787.4
Secondary Inventory Withdrawals	-2.4	-12.7	3.9	-26.2	5.8	-1.3	16.3	-8.5	-0.4	-0.3	16.0	-3.5	-37.4	12.4	11.8
Waste Coal (a)	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	9.5	10.0	10.0
Total Supply	220.5	184.0	227.7	168.1	194.8	185.4	228.0	193.5	207.8	183.8	226.1	191.5	800.3	801.6	809.2
Consumption (million short tons)															
Coke Plants	4.4	4.4	5.1	5.0	4.2	3.8	4.6	4.5	3.9	3.8	4.4	4.1	18.8	17.1	16.3
Electric Power Sector (b)	196.4	174.7	215.6	160.1	184.2	171.0	212.9	178.1	192.7	169.5	211.3	176.5	746.8	746.2	749.9
Retail and Other Industry	11.4	10.4	10.5	10.7	11.3	10.6	10.4	10.9	11.2	10.6	10.4	10.9	42.9	43.2	43.1
Residential and Commercial	0.8	0.6	0.6	0.7	0.8	0.5	0.4	0.6	0.7	0.4	0.4	0.6	2.7	2.4	2.1
Other Industrial	10.6	9.8	9.9	10.0	10.5	10.0	10.0	10.3	10.5	10.1	10.0	10.4	40.2	40.9	41.0
Total Consumption	212.2	189.4	231.1	175.8	199.7	185.3	228.0	193.5	207.9	183.8	226.1	191.5	808.6	806.5	809.3
Discrepancy (c)	8.3	-5.4	-3.4	-7.7	-5.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-8.2	-4.9	-0.1
End-of-period Inventories (million shor	t tons)														
Primary Inventories (d)	45.5	45.2	42.1	43.7	44.7	44.0	41.1	42.7	44.7	44.0	41.1	42.7	43.7	42.7	42.7
Secondary Inventories	161.0	173.7	169.8	196.0	190.2	191.5	175.2	183.7	184.0	184.3	168.3	171.8	196.0	183.7	171.8
Electric Power Sector	154.8	166.8	162.4	188.2	183.4	184.1	167.2	175.4	176.9	176.6	160.1	163.4	188.2	175.4	163.4
Retail and General Industry	4.1	4.5	5.1	5.5	4.8	5.0	5.6	5.9	5.2	5.4	5.9	6.2	5.5	5.9	6.2
Coke Plants	1.6	1.9	1.9	1.8	1.5	1.9	1.8	1.8	1.5	1.9	1.7	1.7	1.8	1.8	1.7
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.61	5.61	5.61	5.61	5.46	5.46	5.46	5.46	5.32	5.32	5.32	5.32	5.61	5.46	5.32
Total Raw Steel Production															
(Million short tons per day)	0.247	0.242	0.248	0.226	0.221	0.217	0.219	0.194	0.196	0.203	0.182	0.153	0.241	0.213	0.183
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.27	2.25	2.22	2.15	2.14	2.20	2.20	2.16	2.16	2.21	2.23	2.19	2.23	2.18	2.20

^{- =} no data available

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

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

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

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

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

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

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

Table 7a. U.S. Electricity Industry Overview

		201	5			201	16			201	17			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Electricity Supply (billion kilowatthou	rs per day)													
Electricity Generation	11.36	10.77	12.44	10.28	10.95	10.88	12.52	10.64	11.22	11.02	12.66	10.79	11.21	11.25	11.43
Electric Power Sector (a)	10.93	10.36	11.99	9.85	10.53	10.48	12.08	10.21	10.80	10.62	12.21	10.36	10.78	10.83	11.00
Comm. and Indus. Sectors (b)	0.43	0.41	0.45	0.43	0.42	0.40	0.44	0.43	0.42	0.41	0.45	0.43	0.43	0.42	0.43
Net Imports	0.17	0.20	0.20	0.17	0.17	0.16	0.19	0.13	0.15	0.15	0.18	0.13	0.19	0.16	0.15
Total Supply	11.52	10.96	12.65	10.45	11.13	11.04	12.71	10.77	11.37	11.17	12.84	10.92	11.40	11.41	11.58
Losses and Unaccounted for (c)	0.78	0.93	0.86	0.65	0.66	0.93	0.80	0.73	0.62	0.94	0.81	0.74	0.80	0.78	0.78
Electricity Consumption (billion kilow	atthours p	er day un	less note	d)											
Retail Sales	10.36	9.68	11.39	9.42	10.09	9.75	11.51	9.67	10.38	9.88	11.63	9.80	10.21	10.26	10.42
Residential Sector	4.20	3.35	4.51	3.31	3.93	3.39	4.54	3.45	4.14	3.44	4.58	3.53	3.84	3.83	3.92
Commercial Sector	3.60	3.65	4.11	3.54	3.60	3.68	4.18	3.58	3.64	3.72	4.23	3.63	3.72	3.76	3.80
Industrial Sector	2.54	2.66	2.75	2.56	2.54	2.67	2.78	2.61	2.58	2.70	2.80	2.63	2.63	2.65	2.68
Transportation Sector	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Direct Use (d)	0.38	0.36	0.40	0.38	0.37	0.36	0.39	0.38	0.37	0.36	0.40	0.38	0.38	0.37	0.38
Total Consumption	10.74	10.04	11.79	9.80	10.47	10.11	11.90	10.05	10.75	10.24	12.03	10.19	10.59	10.63	10.80
Average residential electricity															
usage per customer (kWh)	2,923	2,350	3,190	2,337	2,743	2,355	3,184	2,419	2,827	2,369	3,183	2,450	10,801	10,701	10,829
Prices															
Power Generation Fuel Costs (dolla	rs per mill	ion Btu)													
Coal	2.27	2.25	2.22	2.15	2.14	2.20	2.20	2.16	2.16	2.21	2.23	2.19	2.23	2.18	2.20
Natural Gas	4.09	3.11	3.09	2.86	3.56	3.24	3.35	4.08	4.43	3.74	3.74	4.45	3.26	3.54	4.05
Residual Fuel Oil	10.82	11.64	10.48	8.29	7.47	7.74	7.70	7.99	8.23	9.31	9.55	10.05	10.42	7.72	9.27
Distillate Fuel Oil	15.61	15.16	13.18	11.88	10.38	11.17	11.79	12.92	13.44	13.81	14.58	15.82	14.48	11.52	14.34
Retail Prices (cents per kilowatthou	r)														
Residential Sector	12.23	12.85	12.99	12.57	12.19	12.72	12.99	12.76	12.48	13.20	13.46	13.24	12.66	12.68	13.10
Commercial Sector	10.47	10.53	10.95	10.39	10.51	10.65	11.11	10.62	10.75	10.85	11.31	10.83	10.60	10.74	10.95
Industrial Sector	6.78	6.81	7.31	6.65	6.78	6.84	7.37	6.78	6.95	6.95	7.48	6.89	6.90	6.95	7.07

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

Prices are not adjusted for inflation.

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.

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

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

⁽c) Includes transmission and distribution losses, data collection time-frame differences, and estimation error.

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

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

O.O. Energy informat	IOII AUIIII	201		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	114	142	114	143	120	146	114	143	121	130	130	131
Middle Atlantic	423	321	423	305	379	320	425	321	396	321	424	325	368	361	366
E. N. Central	587	428	556	441	546	441	584	467	568	443	575	474	503	510	515
W. N. Central	325	232	309	244	311	240	319	259	325	242	313	264	277	282	286
S. Atlantic	1,078	889	1,137	820	981	868	1,148	877	1,068	880	1,158	901	981	969	1,002
E. S. Central	390	275	384	256	350	281	390	283	373	284	391	289	326	326	334
W. S. Central	602	503	782	482	554	531	761	489	570	549	799	504	592	584	606
Mountain	235	240	333	235	244	244	345	237	250	248	348	242	261	268	272
Pacific contiguous	396	337	425	397	413	336	409	389	427	344	413	397	389	387	395
AK and HI	13	12	13	13	14	12	12	13	13	12	12	13	13	13	13
Total	4,202	3,348	4,505	3,308	3,933	3,386	4,537	3,455	4,136	3,436	4,577	3,531	3,840	3,829	3,920
Commercial Sector															
New England	147	139	159	136	143	140	158	138	143	140	158	137	146	145	145
Middle Atlantic	443	417	477	405	436	416	479	408	440	417	481	409	436	435	437
E. N. Central	509	489	543	474	506	498	562	486	513	504	567	493	504	513	519
W. N. Central	281	269	305	266	279	275	314	268	285	279	318	273	280	284	288
S. Atlantic	805	859	939	801	810	853	957	815	818	865	972	826	851	859	870
E. S. Central	235	239	279	226	236	240	285	229	239	243	289	232	245	248	251
W. S. Central	496	530	625	515	500	538	630	521	509	548	643	530	542	548	558
Mountain	240	256	289	246	244	261	297	251	248	266	303	256	258	263	268
Pacific contiguous	424	433	479	450	427	439	476	450	430	442	482	454	447	448	452
AK and HI	16	16	17	17	16	16	17	17	17	16	17	17	16	17	17
Total	3,598	3,646	4,114	3,537	3,596	3,676	4,176	3,583	3,642	3,719	4,229	3,625	3,725	3,758	3,805
Industrial Sector															
New England	49	50	52	49	47	49	52	49	47	49	52	49	50	49	49
Middle Atlantic	198	196	204	190	201	197	204	195	202	199	209	197	197	199	202
E. N. Central	520	525	531	495	514	519	532	505	515	523	534	507	518	518	520
W. N. Central	237	240	252	237	237	244	257	244	241	247	261	247	242	246	249
S. Atlantic	375	406	406	376	370	397	400	379	374	405	408	384	391	387	393
E. S. Central	279	287	290	271	278	290	296	282	285	295	300	283	282	286	291
W. S. Central	427	456	485	458	436	470	493	465	444	463	484	457	457	466	462
Mountain	217	235	251	226	217	240	259	232	224	248	266	239	232	237	244
Pacific contiguous	227	251	266	239	226	251	272	245	230	256	276	248	246	248	253
AK and HI	13	13	15	14	13	13	15	14	13	13	15	14	14	14	14
Total	2,541	2,660	2,751	2,556	2,539	2,670	2,779	2,610	2,576	2,699	2,804	2,626	2,627	2,650	2,677
Total All Sectors (a)															
New England	350	302	357	301	334	305	355	309	337	304	354	309	327	325	326
Middle Atlantic	1,076	944	1,115	911	1,027	943	1,120	935	1,050	948	1,125	943	1,011	1,006	1,016
E. N. Central	1,618	1,444	1,632	1,411	1,568	1,459	1,679	1,461	1,598	1,472	1,678	1,476	1,526	1,542	1,556
W. N. Central	843	742	866	747	828	<i>7</i> 59	890	771	851	768	892	783	799	812	824
S. Atlantic	2,262	2,158	2,486	2,001	2,164	2,121	2,510	2,075	2,264	2,153	2,542	2,114	2,226	2,218	2,269
E. S. Central	904	801	953	754	864	812	971	794	897	822	980	804	853	860	876
W. S. Central	1,525	1,490	1,892	1,456	1,490	1,539	1,885	1,476	1,523	1,561	1,927	1,492	1,591	1,598	1,626
Mountain	692	731	874	708	706	746	902	720	723	762	917	737	752	769	785
Pacific contiguous	1,050	1,023	1,172	1,089	1,068	1,028	1,159	1,086	1,090	1,044	1,174	1,102	1,084	1,085	1,103
AK and HI	43	41	44	44	43	41	44	44	43	41	44	44	43	43	43
Total	10,364	9,675	11,390	9,421	10,092	9,753	11,514	9,669	10,377	9,876	11,632	9,803	10,213	10,259	10,424

^{- =} no data available

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

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

U.S. Energy Informa	TOTT AUT			л (- I С ПП	2016					201	17		Year			
	1st	201 2nd	3rd	4th	1st	2nd	3rd	4th	1st	201 2nd	3rd	4th	2015	2016	2017	
Residential Sector	151	ZIIU	Jiu	4111	131	ZIIU	Jiu	401	131	ZIIU	Jiu	4111	2013	2010	2017	
New England	20.41	20.27	18.34	18.68	18.43	18.18	18.11	18.98	19.27	19.17	19.16	20.02	19.42	18.41	19.39	
Middle Atlantic		16.06	16.47	16.15	16.48	16.35	16.87	16.65	16.65	17.01	17.50	17.12	16.11	16.50	17.08	
E. N. Central		13.20	13.15	13.04	12.34	13.27	13.35	13.55	12.80	13.83	13.92	14.04	12.87	13.11	13.63	
W. N. Central	10.24	12.16	12.47	11.12	10.51	12.31	12.69	11.33	10.74	12.61	13.03	11.55	11.46	11.70	11.95	
S. Atlantic	11.37	11.91	12.14	11.66	11.21	11.58	11.84	11.45	11.21	11.83	12.16	11.72	11.78	11.53	11.74	
E. S. Central		11.16	10.90	10.94	10.62	11.31	11.28	11.49	11.11	11.86	11.78	11.86	10.80	11.16	11.63	
W. S. Central	10.67	11.36	11.04	10.81	10.39	10.95	10.99	11.07	10.89	11.58	11.53	11.44	10.97	10.86	11.37	
Mountain		12.21	12.33	11.37	11.45	12.42	12.60	11.68	11.80	12.81	12.98	12.00	11.86	12.09	12.45	
Pacific		13.47	15.76	13.84	13.77	13.75	15.51	14.01	13.85	14.46	16.09	15.27	14.25	14.29	14.93	
U.S. Average	12.23	12.85	12.99	12.57	12.19	12.72	12.99	12.76	12.48	13.20	13.46	13.24	12.66	12.68	13.10	
Commercial Sector																
New England	16.91	15.19	14.89	15.11	17.73	16.03	15.89	16.38	18.71	17.05	16.86	17.41	15.52	16.49	17.49	
Middle Atlantic		12.99	13.71	13.09	13.45	13.25	13.99	13.64	13.84	13.55	14.30	13.93	13.26	13.60	13.92	
E. N. Central		9.95	10.03	9.82	9.74	9.96	10.07	9.87	9.86	10.04	10.16	9.97	9.89	9.91	10.02	
W. N. Central	8.57	9.52	9.95	8.81	8.67	9.69	10.17	9.07	8.88	9.93	10.45	9.32	9.23	9.43	9.67	
S. Atlantic	9.66	9.45	9.59	9.28	9.56	9.49	9.69	9.42	9.72	9.65	9.88	9.61	9.50	9.55	9.72	
E. S. Central	10.22	10.35	10.27	10.14	10.54	10.63	10.49	10.39	10.92	10.86	10.71	10.63	10.25	10.51	10.78	
W. S. Central	8.04	7.89	7.94	7.58	7.68	7.75	7.92	7.76	7.84	7.84	8.00	7.81	7.87	7.79	7.88	
Mountain		9.96	10.21	9.33	9.45	10.14	10.44	9.57	9.69	10.40	10.71	9.83	9.74	9.93	10.19	
Pacific		13.31	15.61	13.53	12.54	13.57	15.93	13.67	12.81	13.85	16.14	13.98	13.73	13.98	14.25	
U.S. Average	10.47	10.53	10.95	10.39	10.51	10.65	11.11	10.62	10.75	10.85	11.31	10.83	10.60	10.74	10.95	
Industrial Sector																
New England	13.17	11.83	11.85	12.03	14.06	12.47	12.38	12.53	14.67	12.91	12.77	12.91	12.21	12.84	13.29	
Middle Atlantic	7.87	7.20	7.36	7.38	8.08	7.32	7.46	7.68	8.36	7.48	7.55	7.81	7.45	7.64	7.80	
E. N. Central	6.87	6.77	7.06	6.80	6.93	6.87	7.17	6.95	7.11	7.02	7.32	7.10	6.88	6.98	7.14	
W. N. Central	6.49	6.89	7.51	6.50	6.70	7.06	7.67	6.62	6.88	7.23	7.85	6.77	6.86	7.02	7.19	
S. Atlantic	6.55	6.38	6.90	6.19	6.51	6.43	6.97	6.35	6.74	6.53	7.05	6.42	6.51	6.57	6.69	
E. S. Central	5.77	5.95	6.58	5.66	5.92	5.99	6.61	5.76	6.07	6.05	6.68	5.85	6.00	6.08	6.17	
W. S. Central	5.66	5.50	5.70	5.20	5.21	5.27	5.59	5.34	5.27	5.23	5.58	5.35	5.52	5.36	5.36	
Mountain	6.17	6.65	7.17	6.05	6.14	6.70	7.26	6.14	6.30	6.85	7.41	6.25	6.54	6.59	6.73	
Pacific	7.99	8.95	10.46	9.22	8.22	9.16	10.55	9.23	8.36	9.26	10.66	9.33	9.21	9.35	9.46	
U.S. Average	6.78	6.81	7.31	6.65	6.78	6.84	7.37	6.78	6.95	6.95	7.48	6.89	6.90	6.95	7.07	
All Sectors (a)																
New England	17.89	16.49	15.82	15.93	17.47	16.22	16.25	16.74	18.34	17.14	17.16	17.68	16.55	16.67	17.58	
Middle Atlantic	13.21	12.82	13.58	12.91	13.35	13.04	13.87	13.40	13.82	13.42	14.23	13.72	13.15	13.44	13.82	
E. N. Central	9.72	9.75	10.13	9.76	9.72	9.86	10.29	10.04	10.02	10.11	10.54	10.29	9.85	9.98	10.25	
W. N. Central	8.63	9.49	10.14	8.83	8.80	9.67	10.35	9.06	9.02	9.90	10.59	9.27	9.29	9.49	9.71	
S. Atlantic	9.96	9.88	10.32	9.67	9.78	9.77	10.24	9.71	9.93	9.95	10.46	9.93	9.98	9.89	10.09	
E. S. Central	8.90	9.05	9.40	8.80	9.09	9.21	9.63	9.14	9.46	9.48	9.90	9.39	9.06	9.28	9.57	
W. S. Central	8.41	8.33	8.65	7.90	7.97	8.10	8.55	8.10	8.23	8.38	8.85	8.28	8.35	8.20	8.46	
Mountain	9.03	9.63	10.15	8.96	9.12	9.78	10.35	9.16	9.37	10.03	10.61	9.38	9.49	9.65	9.90	
Pacific	11.85	12.28	14.48	12.69	12.09	12.54	14.50	12.78	12.27	12.91	14.82	13.39	12.88	13.02	13.38	
U.S. Average	10.28	10.31	10.88	10.14	10.23	10.32	10.95	10.35	10.50	10.60	11.23	10.64	10.42	10.48	10.76	

^{- =} 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 following reports: Electric Power Monthly, DOE/EIA-0226; and Electric Power Annual, DOE/EIA-0348.

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

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

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

U.S. Energy Information Admir	Administration Short-Term Energy Outlook - February 2016 2015 2016 2017										Year				
ŀ	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
United States			V				<u> </u>								
Coal	4,091	3,512	4,276	3,125	3,739	3,467	4,249	3,536	3.997	3,457	4,236	3,516	3,750	3,749	3,801
Natural Gas	3,248	3,476	4,378	3,482	3,369	3,487	4,330	3,325	3,183	3,447	4,347	3,394	3,649	3,629	3,595
Petroleum (a)	123	61	72	60	79	71	79	70	85	72	79	69	79	75	76
Other Gases	37	33	40	30	36	32	40	31	36	33	41	32	35	35	35
Nuclear	2,248	2,133	2,286	2,082	2,159	2.002	2,257	2,126	2,197	2.024	2.266	2,135	2,187	2,136	2,156
Renewable Energy Sources:	1,590	1,525	1,371	1,470	1,549	1,793	1,541	1,528	1,703	1,965	1,664	1,621	1,488	1,603	1,738
Conventional Hydropower	802	690	616	604	661	817	717	613	727	875	757	639	677	702	749
Wind	506	532	441	592	611	655	479	609	661	706	51 <i>4</i>	660		588	635
Wood Biomass	119	112	122	113	116	109	121	115	118	112	124	119	116	115	118
Waste Biomass	58	59	61	61	59	59	60	60	59	59	61	60	60	60	59
Geothermal	48	46	45	46	<i>4</i> 8	47	48	48	48	47	48	48	46	48	48
			45 86	46 55	40 54	107		83	90	167		96		90	
Solar	57	87					116	-14			160		71		128 -13
Pumped Storage Hydropower	-15	-10	-18	-12	-12	-11	-15		-13	-12	-16	-14	-14	-13	
Other Nonrenewable Fuels (b)	33	37	39	37	34	37	39	37	34	37	39	38	36	37	37
Total Generation	11,355	10,766	12,444	10,276	10,953	10,878	12,519	10,640	11,221	11,023	12,656	10,791	11,211	11,250	11,425
Northeast Census Region		4=4		400	000	407	470	474	0.57	45.4	400	470		470	400
Coal	292	174	203	132	206	137	176	171	257	154	199	173	200	172	196
Natural Gas	483	534	714	547	538	587	733	562	512	570	715	570	570	605	592
Petroleum (a)	46	2	5	3	9	5	6	6	11	5	6	6	14	7	7
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	545	499	542	499	512	470	526	496	497	458	513	483	521	501	488
Hydropower (c)	93	99	97	97	93	107	100	94	100	116	105	98	97	99	105
Other Renewables (d)	76	65	58	73	73	64	60	70	76	67	62	75	68	67	70
Other Nonrenewable Fuels (b)	11	12	12	12	11	12	12	12	11	12	12	12	12	12	12
Total Generation	1,547	1,387	1,633	1,365	1,444	1,383	1,615	1,413	1,466	1,383	1,614	1,417	1,483	1,464	1,471
South Census Region															
Coal	1,715	1,539	1,908	1,236	1,493	1,529	1,882	1,386	1,625	1,526	1,897	1,394	1,599	1,573	1,611
Natural Gas	1,971	2,074	2,452	1,951	1,958	2,097	2,446	1,855	1,858	2,087	2,462	1,868	2,113	2,089	2,070
Petroleum (a)	42	24	29	22	32	30	32	26	35	30	32	25	29	30	30
Other Gases	14	13	15	14	14	13	15	14	14	13	15	14	14	14	14
Nuclear	974	956	1,001	875	942	883	1,004	946	985	908	1,016	957	952	944	967
Hydropower (c)	122	108	94	120	127	123	104	115	135	132	109	120	111	117	124
Other Renewables (d)	231	265	253	285	303	327	273	321	343	375	307	354	259	306	345
Other Nonrenewable Fuels (b)	14	15	16	16	14	16	16	15	14	16	16	16	15	15	15
Total Generation	5,084	4,995	5,769	4,521	4,884	5,017	5,773	4,678	5,011	5,086	5,855	4,749	5,092	5,089	5,176
Midwest Census Region															
Coal	1,579	1,302	1,578	1,229	1,489	1,323	1,627	1,380	1,515	1,308	1,578	1,337	1,421	1,455	1,435
Natural Gas	299	257	340	271	294	275	354	259	301	290	386	306	292	295	321
Petroleum (a)	12	11	13	10	13	12	13	11	13	11	13	10	12	12	12
Other Gases	15	13	16	9	13	12	16	9	13	12	16	9	13	12	13
Nuclear	553	529	570	555	543	502	562	529	553	509	570	537	552	534	542
Hydropower (c)	44	47	42	34	42	49	42	34	45	53	44	35	42	42	44
Other Renewables (d)	251	218	168	271	264	251	179	264	281	268	193	282	227	239	256
Other Nonrenewable Fuels (b)	4	5	5	4	4	5	5	5	4	5	5	5	5	5	5
Total Generation	2,757	2,381	2,732	2,384	2,661	2,427	2,798	2,490	2,723	2,456	2,805	2,522	2,563	2,594	2,626
West Census Region															
Coal	505	496	587	528	551	478	564	600	600	467	562	612	529	548	560
Natural Gas	494	611	873	713	579	528	798	649	512	500	784	650	674	639	612
Petroleum (a)	23	23	25	23	25	25	27	28	27	26	27	28	23	26	27
Other Gases	7	6	7	6	7	6	7	6	7	6	7	6	7	7	7
Nuclear	176	149	172	152	162	147	165	155	162	149	167	158	162	158	159
Hydropower (c)	527	425	365	340	387	526	455	356	434	562	483	373		431	463
Other Renewables (d)	230	287	276	237	248	335	313	260	275	382	345	271	258	289	318
Other Nonrenewable Fuels (b)	4	4	5	5	4	5	5	5	5	5	6	5		5	5
Total Generation	1,967	2,002	2,310	2,006	1,964	2,051	2,334	2,060	2,022	2,097	2,382	2,103	2,072	2,103	2,152
. otar Gonoration	1,501	2,002	_,010	2,000	1,504	2,001	2,007	2,000	2,022	2,031	2,002	2,103	2,012	۵, ۱۷۵	۷, ۱۵۷

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

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics. **Historical data:** Latest data available from U.S. Energy Information Administration *Electric Power Monthly* and *Electric Power Annual.*

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

⁽c) Conventional hydroelectric and pumped storage generation.

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

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

		20	15			20 ⁻	16			20	17			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Fuel Consumption for Electricity Ge	eneration,	All Secto	rs												
United States															
Coal (thousand st/d)	2,187	1,923	2,349	1,741	2,026	1,883	2,321	1,941	2,146	1,868	2,303	1,924	2,050	2,043	2,060
Natural Gas (million cf/d)	24,028	26,271	33,510	26,118	25,026	26,580	33,183	24,697	23,673	26,304	33,360	25,245	27,504	27,380	27,167
Petroleum (thousand b/d)	215	108	126	104	142	127	139	125	154	128	140	123	138	133	136
Residual Fuel Oil	76	26	33	29	36	31	34	31	39	32	34	31	41	33	34
Distillate Fuel Oil	66	26	24	23	36	29	31	31	39	29	31	30	35	32	32
Petroleum Coke (a)	61	52	65	49	64	62	69	58	68	62	69	58	57	63	64
Other Petroleum Liquids (b)	12	4	4	4	7	4	5	5	8	5	5	5	6	5	6
Northeast Census Region															
Coal (thousand st/d)	134	82	100	65	96	64	84	81	119	72	96	82	95	81	92
Natural Gas (million cf/d)	3,638	4,102	5,595	4,155	4,083	4,501	5,716	4,253	3,886	4,366	5,568	4,307	4,377	4,640	4,536
Petroleum (thousand b/d)	75	5	9	6	16	8	12	10	19	8	12	10	23	12	12
South Census Region															
Coal (thousand st/d)	888	819	1,023	677	782	807	1,000	742	842	801	1,003	743	852	833	847
Natural Gas (million cf/d)	14,410	15,633	18,665	14,629	14,445	15,941	18,648	13,707	13,719	15,876	18,789	13,815	15,843	15,688	15,559
Petroleum (thousand b/d)	79	45	53	42	64	57	61	49	69	57	61	48	54	58	59
Midwest Census Region															
Coal (thousand st/d)	881	742	896	700	836	744	919	780	848	734	889	<i>7</i> 53	805	820	806
Natural Gas (million cf/d)	2,329	2,010	2,725	2,121	2,245	2,164	2,868	1,996	2,309	2,297	3,149	2,370	2,297	2,319	2,533
Petroleum (thousand b/d)	24	23	26	20	23	21	23	21	23	21	23	21	23	22	22
West Census Region															
Coal (thousand st/d)	285	280	331	299	311	268	317	339	337	260	315	345	299	309	315
Natural Gas (million cf/d)	3,650	4,526	6,526	5,214	4,253	3,974	5,950	4,741	3,760	3,765	5,854	4,754	4,987	4,733	4,540
Petroleum (thousand b/d)	37	36	39	37	40	40	42	45	43	42	44	45	37	42	43
End-of-period U.S. Fuel Inventories	Held by E	Electric Po	ower Sect	or											
Coal (million short tons)	154.8	166.8	162.4	188.2	183.4	184.1	167.2	175.4	176.9	176.6	160.1	163.4	188.2	175.4	163.4
Residual Fuel Oil (mmb)	10.2	10.5	10.6	13.2	13.3	13.0	12.6	12.8	12.8	12.5	12.2	12.3	13.2	12.8	12.3
Distillate Fuel Oil (mmb)	16.6	16.7	17.1	17.5	17.6	17.4	17.3	17.6	17.6	17.5	17.4	17.6	17.5	17.6	17.6
Petroleum Coke (mmb)	4.1	5.2	5.5	6.4	6.3	6.1	6.0	5.8	5.7	5.6	5.5	5.3	6.4	5.8	5.3

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

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

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

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

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

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

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

U.S. Energy Information Administ	ration	201		gy Cull	JOK 1 01	oruary 20 20 1				201	17		Year			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017	
Electric Power Sector																
Hydroelectric Power (a)	0.685	0.596	0.539	0.526	0.569	0.704	0.625	0.533	0.619	0.754	0.660	0.556	2.345	2.431	2.589	
Wood Biomass (b)	0.063	0.058	0.067	0.059	0.061	0.056	0.069	0.062	0.063	0.059	0.071	0.065	0.247	0.249	0.258	
Waste Biomass (c)	0.067	0.066	0.070	0.070	0.067	0.067	0.070	0.068	0.066	0.067	0.070	0.068	0.273	0.272	0.271	
Wind	0.433	0.460	0.385	0.518	0.529	0.566	0.419	0.533	0.565	0.611	0.450	0.577	1.796	2.047	2.204	
Geothermal	0.041	0.040	0.040	0.040	0.042	0.041	0.042	0.042	0.042	0.041	0.042	0.042	0.161	0.166	0.166	
Solar	0.047	0.073	0.074	0.047	0.045	0.091	0.100	0.072	0.076	0.143	0.139	0.083	0.242	0.308	0.440	
Subtotal	1.337	1.293	1.174	1.260	1.313	1.526	1.325	1.310	1.431	1.675	1.432	1.391	5.064	5.473	5.929	
Industrial Sector																
Hydroelectric Power (a)	0.004	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.013	0.012	0.012	
Wood Biomass (b)	0.324	0.320	0.324	0.318	0.306	0.301	0.312	0.314	0.306	0.302	0.313	0.315	1.287	1.233	1.235	
Waste Biomass (c)	0.046	0.049	0.050	0.050	0.048	0.048	0.050	0.049	0.049	0.048	0.050	0.050	0.195	0.195	0.198	
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004	
Biofuel Losses and Co-products (f)	0.189	0.192	0.195	0.195	0.194	0.194	0.198	0.196	0.193	0.193	0.197	0.195	0.771	0.783	0.779	
Subtotal	0.569	0.571	0.577	0.572	0.557	0.552	0.569	0.568	0.556	0.552	0.569	0.569	2.289	2.245	2.246	
Commercial Sector												•				
Wood Biomass (b)	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.020	0.019	0.076	0.076	0.078	
Waste Biomass (c)	0.013	0.010	0.010	0.011	0.011	0.010	0.011	0.011	0.011	0.010	0.012	0.011	0.044	0.044	0.044	
Geothermal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.020	0.020	0.020	
Subtotal	0.038	0.036	0.037	0.037	0.036	0.035	0.037	0.036	0.036	0.036	0.037	0.037	0.149	0.143	0.145	
Residential Sector																
Wood Biomass (b)	0.110	0.111	0.113	0.113	0.103	0.104	0.105	0.105	0.106	0.106	0.106	0.106	0.447	0.418	0.426	
Geothermal	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.040	0.044	0.045	
Solar (d)	0.069	0.070	0.071	0.071	0.077	0.077	0.078	0.078	0.088	0.089	0.090	0.090	0.281	0.311	0.356	
Subtotal	0.189	0.191	0.194	0.194	0.191	0.193	0.195	0.195	0.206	0.207	0.208	0.208	0.768	0.773	0.827	
Transportation Sector																
Ethanol (e)	0.266	0.284	0.292	0.283	0.273	0.290	0.298	0.291	0.271	0.288	0.296	0.290	1.124	1.151	1.146	
Biomass-based Diesel (e)	0.034	0.058	0.064	0.059	0.068	0.072	0.081	0.081	0.070	0.074	0.084	0.083	0.215	0.302	0.310	
Subtotal	0.300	0.341	0.356	0.345	0.341	0.362	0.379	0.371	0.341	0.362	0.380	0.373	1.342	1. 4 53	1.456	
All Sectors Total																
Hydroelectric Power (a)	0.689	0.599	0.541	0.529	0.572	0.707	0.628	0.536	0.622	0.757	0.663	0.559	2.358	2.443	2.601	
Wood Biomass (b)	0.517	0.508	0.523	0.509	0.490	0.481	0.505	0.501	0.495	0.486	0.510	0.506	2.056	1.976	1.997	
Waste Biomass (c)	0.126	0.125	0.129	0.130	0.126	0.125	0.131	0.128	0.125	0.126	0.132	0.129	0.512	0.511	0.512	
Wind	0.433	0.460	0.385	0.518	0.529	0.566	0.419	0.533	0.565	0.611	0.450	0.577	1.796	2.047	2.204	
Geothermal	0.057	0.056	0.056	0.056	0.058	0.058	0.059	0.059	0.059	0.058	0.059	0.059	0.225	0.234	0.235	
Solar	0.118	0.145	0.146	0.115	0.123	0.170	0.180	0.152	0.165	0.233	0.230	0.174	0.524	0.624	0.802	
Ethanol (e)	0.271	0.289	0.298	0.291	0.279	0.295	0.304	0.296	0.277	0.294	0.302	0.295	1.148	1.174	1.167	
Biomass-based Diesel (e)	0.034	0.058	0.064	0.059	0.068	0.072	0.081	0.081	0.070	0.074	0.084	0.083	0.215	0.302	0.310	
Biofuel Losses and Co-products (f)	0.189	0.192	0.195	0.195	0.194	0.194	0.198	0.196	0.193	0.193	0.197	0.195	0.771	0.783	0.779	
Total Consumption	2.434	2.433	2.338	2.379	2.437	2.666	2.504	2.480	2.569	2.831	2.626	2.576	9.583	10.087	10.603	

^{- =} no data available

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

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

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

⁽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

Table 9a. U.S. Macroeconomic Indicators and CC₂ Emissions

U.S. Energy information Administration	ni Onon			JULIOUK	2016					20.	47		Year			
	1st	201 2nd	5 3rd	4th	1st	200 2nd	3rd	4th	1st	20 ⁻ 2nd	3rd	4th	2015	2016	2017	
Macroeconomic	131	ZIIU	Jiu	401	131	ZIIU	Jiu	401	131	ZIIU	Jiu	4111	2013	2010	2017	
Real Gross Domestic Product																
(billion chained 2009 dollars - SAAR)	16,177	16,334	16,414	16,458	16,569	16,679	16,818	16,972	17,095	17,228	17,353	17,455	16,346	16,759	17,283	
Real Personal Consumption Expend.	10,177	10,004	10,414	10,430	10,000	10,013	10,010	10,372	17,000	17,220	17,000	17,400	10,540	10,700	17,200	
(billion chained 2009 dollars - SAAR)	11,081	11,179	11,262	11,321	11,402	11,478	11,577	11,689	11,791	11,887	11,981	12,069	11,211	11,536	11,932	
Real Fixed Investment	11,001	11,173	11,202	11,521	11,402	11,470	11,077	11,009	11,791	11,007	11,901	12,009	11,211	11,000	11,332	
(billion chained 2009 dollars - SAAR)	2,701	2,736	2,761	2,803	2,842	2,887	2,926	2,975	3.026	3,075	3,123	3,165	2,750	2,907	3.097	
Business Inventory Change	2,701	2,730	2,701	2,000	2,072	2,007	2,320	2,370	3,020	3,070	0,120	3, 700	2,730	2,307	3,037	
(billion chained 2009 dollars - SAAR)	127	128	95	45	28	26	34	45	56	67	68	63	99	33	63	
Real Government Expenditures	121	120	33	45	20	20	34	40	00	07	00	05	33	55	00	
(billion chained 2009 dollars - SAAR)	2,839	2,857	2,870	2,873	2,915	2,923	2,930	2,934	2,929	2,937	2,946	2,937	2,860	2,925	2,937	
Real Exports of Goods & Services	2,000	2,001	2,010	2,010	2,010	2,020	2,000	2,007	2,020	2,007	2,010	2,007	2,000	2,020	2,007	
(billion chained 2009 dollars - SAAR)	2,091	2,118	2,121	2,103	2,117	2,140	2,169	2,199	2,230	2,259	2,286	2,314	2,108	2,156	2,272	
Real Imports of Goods & Services	2,001	2,110	_,	2,100	2, , , , ,	2,110	2,100	2,100	2,200	2,200	2,200	2,011	2,100	2,700	2,212	
(billion chained 2009 dollars - SAAR)	2,633	2,652	2,667	2,670	2,715	2,757	2,799	2,851	2,921	2,981	3,038	3,082	2,656	2,780	3,005	
Real Disposable Personal Income	2,033	2,032	2,007	2,070	2,710	2,707	2,199	2,001	2,321	2,901	3,030	3,002	2,030	2,700	3,000	
(billion chained 2009 dollars - SAAR)	12,115	12,194	12,308	12,415	12,498	12,579	12,686	12,785	12,888	13,007	13,123	13,222	12,258	12,637	13.060	
Non-Farm Employment	12,113	12,134	12,500	12,713	12,430	12,013	12,000	12,700	12,000	13,001	10,120	10,222	12,230	12,001	13,000	
(millions)	141.0	141.6	142.2	143.0	143.6	144.0	144.5	145.0	145.6	146.0	146.4	146.9	142.0	144.3	146.2	
Civilian Unemployment Rate	141.0	141.0	172.2	145.0	140.0	144.0	144.0	140.0	140.0	140.0	140.4	140.5	142.0	144.5	140.2	
(percent)	5.6	5.4	5.2	5.0	5.0	5.0	4.9	4.9	4.9	4.8	4.8	4.8	5.3	5.0	4.8	
Housing Starts	3.0	3.4	J.2	3.0	5.0	5.0	4.5	4.5	4.5	4.0	4.0	4.0	3.3	5.0	4.0	
(millions - SAAR)	0.98	1.16	1.16	1.13	1.21	1.25	1.25	1.32	1.37	1.43	1.46	1.48	1.11	1.26	1.44	
(IIIIIIIOIIS - SAAIV)	0.30	1.10	1.10	1.13	1.21	1.20	1.20	1.52	1.57	1.40	1.40	1.40	1.11	1.20	1.44	
Industrial Production Indices (Index, 2012=	100)															
Total Industrial Production	107.4	106.8	107.5	106.6	106.8	106.7	107.6	109.0	110.0	110.7	111.7	112.5	107.1	107.5	111.3	
Manufacturing	105.5	105.8	106.7	106.8	106.8	106.4	107.3	108.9	109.9	110.5	111.4	112.3	106.2	107.3	111.0	
Food	104.7	104.7	105.9	105.9	106.4	106.8	107.2	107.9	108.5	109.0	109.6	110.3	105.3	107.1	109.4	
Paper	97.2	97.1	95.9	95.6	95.1	94.7	94.6	94.9	95.0	94.8	94.9	95.1	96.5	94.8	95.0	
Petroleum and Coal Products	107.9	108.9	109.3	110.4	110.3	110.4	110.9	111.8	112.3	112.6	113.0	113.3	109.1	110.9	112.8	
Chemicals	102.8	103.1	103.3	104.1	104.2	104.3	104.8	105.8	106.8	107.6	109.0	110.6	103.3	104.8	108.5	
Nonmetallic Mineral Products	111.3	111.1	112.2	116.3	116.4	116.8	117.6	118.9	120.4	121.6	123.2	124.6	112.7	117.5	122.4	
Primary Metals	100.7	100.1	99.9	97.5	95.4	94.0	93.9	95.3	95.7	95.1	95.7	96.2	99.6	94.6	95.7	
Coal-weighted Manufacturing (a)	103.6	103.8	104.0	104.3	103.6	103.3	103.6	104.7	105.4	105.6	106.5	107.5	103.9	103.8	106.2	
Distillate-weighted Manufacturing (a)	106.6	106.5	107.5	108.6	108.6	108.7	109.4	110.6	111.7	112.4	113.4	114.3	107.3	109.3	113.0	
Electricity-weighted Manufacturing (a)	104.7	105.0	105.6	105.4	105.0	104.7	105.4	106.6	107.6	108.0	109.1	110.3	105.2	105.4	108.7	
Natural Gas-weighted Manufacturing (a)	104.5	105.4	105.6	105.4	105.5	105.3	105.2	107.3	107.0	100.0	110.4	111.9	105.2	106.0	109.9	
radial cao weighted mandiastaning (a)	104.0	100.4	100.0	100.0	700.0	700.0	100.0	101.0	700.0	100.0	110.1	777.0	100.0	100.0	700.0	
Price Indexes																
Consumer Price Index (all urban consumers)																
(index, 1982-1984=1.00)	2.35	2.37	2.38	2.38	2.39	2.39	2.40	2.42	2.43	2.45	2.46	2.48	2.37	2.40	2.46	
Producer Price Index: All Commodities	2.00	2.01	2.00	2.00	2.00	2.00	2.70	2.72	2.70	2.10	2.70	2.70	2.01	2.70	2.70	
(index, 1982=1.00)	1.92	1.92	1.91	1.87	1.87	1.88	1.89	1.90	1.93	1.93	1.95	1.97	1.90	1.89	1.94	
Producer Price Index: Petroleum	1.02			1.01	1.01	7.00	7.00	7.00	7.00	7.00	7.00	1.01	1.00	7.00	1.01	
(index, 1982=1.00)	1.71	1.96	1.85	1.53	1.24	1.33	1.40	1.39	1.44	1.61	1.71	1.70	1.76	1.34	1.62	
GDP Implicit Price Deflator		1.00	1.00	1.00	1.21	7.00	1.10	7.00		1.01		1.70	0	1.01	7.02	
(index, 2009=100)	109.1	109.7	110.0	110.5	111.1	111.6	112.0	112.5	113.2	113.7	114.2	114.7	109.8	111.8	114.0	
(IIIdox, 2000–100)	100.1	100.1	110.0	110.0	,,,,,	777.0	7 72.0	772.0	110.2	7 70.7		,,,,,	100.0	777.0	7 7 7.0	
Miscellaneous																
Vehicle Miles Traveled (b)																
(million miles/day)	7,990	8,982	8,920	8,537	8,116	9,154	9,072	8,683	8.337	9,225	9,149	8,772	8,610	8,757	8.873	
Air Travel Capacity	7,550	0,302	0,320	0,557	0,110	3, 104	3,072	0,000	0,007	3,220	3,143	0,772	0,010	0,707	0,075	
(Available ton-miles/day, thousands)	517	574	585	547	536	571	562	541	539	574	565	544	556	553	556	
Aircraft Utilization	317	314	303	341	000	071	302	041	000	0/4	000	544	330	000	000	
(Revenue ton-miles/day, thousands)	322	356	365	341	337	356	353	342	341	359	357	345	346	347	351	
Airline Ticket Price Index	322	330	303	341	337	300	303	342	341	309	307	340	340	347	301	
	206.4	212.0	202.2	206.2	270.0	202.0	206.1	205.0	205.0	210 0	202.0	212.0	202.2	201.0	207.4	
(index, 1982-1984=100) Raw Steel Production	286.4	313.0	283.3	286.2	279.9	302.0	286.1	295.9	295.8	318.8	302.0	312.9	292.2	291.0	307.4	
	0.247	0.242	0.240	0.220	0.224	0.247	0.240	0.404	0.406	0.202	0.400	0.450	0.244	0.242	0.400	
(million short tons per day)	0.247	0.242	0.248	0.226	0.221	0.217	0.219	0.194	0.196	0.203	0.182	0.153	0.241	0.213	0.183	
Carbon Diovido (CO.) Emissiona (million m	notrio tan-\															
Carbon Dioxide (CO ₂) Emissions (million n	-		E0.4	E67	EEO	571	E00	E70	EGO	E7E	587	582	2 204	2 202	2 205	
Petroleum	562 469	568 313	584 326	567 367	558 462		583	579 300	560 450	575 325			2,281 1,476	2,292 1,504	2,305	
Natural Gas	469	313	326	367	462 274	321	331	390 364	459	325	335	398	1,476	1,504 1,512	1,517	
Coal	397	354	432	341	374	347	426	364	389	344	422	360	1,524	1,512 5.214	1,515	
Total Energy (c)	1,429	1,236	1,344	1,278	1,396	1,241	1,342	1,336	1,409	1,245	1,346	1,342	5,286	5,314	5,343	

^{- =} no data available

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.

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.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Informat	ion Admir			t-Term i	nergy C			y 2016			_					
		201			1	201				201				Year		
Deel Orese Otata Bresiera	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017	
Real Gross State Produc	•		000	000	074	070	005	000	000	004	000	042	000	000	006	
New England	854	863	866	868	874	879	885	893	898	904	909	913	863	883	906	
Middle Atlantic	2,409	2,437	2,448	2,457	2,470	2,485	2,502	2,520	2,534	2,551	2,564	2,574	2,438	2,494	2,556	
E. N. Central	2,198	2,220	2,227	2,232	2,242	2,253	2,269	2,287	2,301	2,316	2,329	2,339	2,219	2,263	2,321	
W. N. Central	1,028	1,038	1,042	1,044	1,051	1,057	1,066	1,075	1,082	1,090	1,097	1,103	1,038	1,062	1,093	
S. Atlantic	2,868	2,899	2,915	2,928	2,952	2,975	3,001	3,031	3,053	3,078	3,100	3,119	2,902	2,990	3,088	
E. S. Central	736	742	746	748	754	758	764	770	775	781	786	790	743	761	783	
W. S. Central	2,021	2,025	2,036	2,037	2,049	2,061	2,081	2,102	2,121	2,142	2,164	2,183	2,030	2,073	2,152	
Mountain	1,043	1,053	1,059	1,062	1,071	1,081	1,092	1,104	1,114	1,125	1,135	1,145	1,054	1,087	1,130	
Pacific	2,919	2,954	2,971	2,979	3,002	3,026	3,053	3,083	3,109	3,135	3,159	3,179	2,956	3,041	3,146	
Industrial Output, Manufa				-	400.0	100.0	1011	405.5	100 5	407.0	107.7	100.4	400.0	1011	407.4	
New England	101.7	102.4	103.7	103.7	103.6	103.3	104.1	105.5	106.5	107.0	107.7	108.4	102.9	104.1	107.4	
Middle Atlantic	102.1	102.7	103.3	103.2	103.0	102.5	103.2	104.6	105.5	105.9	106.7	107.5	102.8	103.3	106.4	
E. N. Central	107.7	108.5	109.4	109.8	109.5	108.9	109.7	111.4	112.5	112.9	113.8	114.7	108.9	109.9	113.5	
W. N. Central	105.6	105.7	106.5	106.6	106.5	106.2	107.2	108.8	109.9	110.5	111.4	112.2	106.1	107.2	111.0	
S. Atlantic	106.3	106.8	108.0	108.7	108.7	108.3	109.2	110.8	111.8	112.3	113.1	113.9	107.4	109.3	112.8	
E. S. Central	108.0	108.2	109.5	110.0	110.0	109.6	110.4	111.9	113.0	113.5	114.3	115.1	108.9	110.5	114.0	
W. S. Central	104.7	103.6	103.1	102.5	102.2	101.7	102.4	103.9	104.9	105.6	106.6	107.6	103.5	102.5	106.2	
Mountain	107.2	107.9	109.2	110.0	110.4	110.3	111.6	113.4	114.9	115.7	116.9	117.8	108.6	111.4	116.3	
Pacific	105.3	106.0	106.6	106.3	106.2	105.9	107.0	108.7	109.8	110.4	111.4	112.3	106.1	107.0	111.0	
Real Personal Income (B		•														
New England	741	748	755	761	766	770	776	781	787	793	800	805	751	773	796	
Middle Atlantic	1,896	1,914	1,932	1,949	1,958	1,968	1,981	1,995	2,007	2,022	2,036	2,048	1,923	1,976	2,028	
E. N. Central	2,011	2,023	2,043	2,063	2,074	2,086	2,099	2,112	2,128	2,145	2,160	2,172	2,035	2,093	2,151	
W. N. Central	969	972	984	993	999	1,006	1,012	1,019	1,026	1,034	1,042	1,049	980	1,009	1,038	
S. Atlantic	2,621	2,645	2,668	2,696	2,717	2,738	2,762	2,786	2,812	2,839	2,865	2,887	2,658	2,751	2,850	
E. S. Central	759	764	770	777	781	786	792	797	804	811	817	822	768	789	813	
W. S. Central	1,710	1,705	1,718	1,731	1,741	1,751	1,766	1,782	1,800	1,820	1,838	1,854	1,716	1,760	1,828	
Mountain	922	929	938	948	956	963	972	981	991	1,002	1,012	1,021	934	968	1,007	
Pacific	2,219	2,253	2,275	2,291	2,310	2,326	2,345	2,365	2,386	2,409	2,431	2,450	2,260	2,337	2,419	
Households (Thousands)															
New England	5,831	5,838	5,843	5,849	5,858	5,865	5,869	5,875	5,882	5,890	5,898	5,909	5,849	5,875	5,909	
Middle Atlantic	15,986	16,005	16,015	16,027	16,047	16,062	16,073	16,080	16,092	16,106	16,124	16,141	16,027	16,080	16,141	
E. N. Central	18,606	18,613	18,623	18,639	18,663	18,681	18,697	18,714	18,733	18,753	18,776	18,801	18,639	18,714	18,801	
W. N. Central	8,448	8,464	8,478	8,493	8,513	8,531	8,548	8,566	8,586	8,606	8,626	8,648	8,493	8,566	8,648	
S. Atlantic	24,611	24,700	24,786	24,878	24,986	25,082	25,173	25,262	25,353	25,447	25,541	25,638	24,878	25,262	25,638	
E. S. Central	7,517	7,524	7,532	7,543	7,558	7,572	7,586	7,599	7,613	7,629	7,645	7,661	7,543	7,599	7,661	
W. S. Central	14,319	14,373	14,421	14,470	14,529	14,584	14,638	14,688	14,739	14,792	14,846	14,902	14,470	14,688	14,902	
Mountain	8,783	8,817	8,850	8,885	8,927	8,964	9,003	9,041	9,079	9,120	9,161	9,204	8,885	9,041	9,204	
Pacific	18,402	18,459	18,508	18,559	18,622	18,680	18,733	18,787	18,842	18,899	18,956	19,014	18,559	18,787	19,014	
Total Non-farm Employm	ent (Millio	ns)														
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	19.3	19.4	19.4	19.4	19.5	19.1	19.3	19.4	
E. N. Central	21.4	21.5	21.5	21.6	21.6	21.7	21.7	21.8	21.8	21.9	21.9	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	27.5	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	7.9	8.0	8.0	8.0	8.0	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	17.0	17.1	17.2	17.3	16.6	16.9	17.2	
Mountain		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.

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Informati	on Admir			t-Term I	nergy O		2016								
		201	15			201	16			201	17			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2015	2016	2017
Heating Degree Days															
New England		821	58	1,791	3,015	811	127	2,204	3,065	810	131	2,150	6,524	6,157	6,156
Middle Atlantic	3,581	612	41	1,547	2,807	627	81	1,998	2,850	648	90	1,989	5,782	5,512	5,578
E. N. Central	3,694	660	76	1,744	3,029	675	115	2,243	3,104	721	129	2,268	6,174	6,063	6,222
W. N. Central	3,376	653	95	1,964	3,144	651	140	2,418	3,223	688	155	2,462	6,088	6,353	6,528
South Atlantic	1,672	156	8	666	1,456	199	14	977	1,443	208	16	981	2,503	2,646	2,648
E. S. Central	2,149	185	14	885	1,876	257	19	1,297	1,847	263	22	1,313	3,234	3,449	3,445
W. S. Central	1,401	70	2	613	1,224	95	4	777	1,199	101	5	748	2,085	2,100	2,053
Mountain	1,901	705	123	1,872	2,219	657	131	1,804	2,248	677	134	1,850	4,601	4,811	4,909
Pacific	1,083	525	78	1,184	1,299	460	82	1,113	1,498	534	87	1,265	2,870	2,954	3,385
U.S. Average	2,342	443	50	1,252	2,066	448	69	1,518	2,120	476	76	1,549	4,087	4,101	4,221
Heating Degree Days, Pri	or 10-year	Average													
New England	-	838	134	2,147	3,212	824	133	2,105	3,218	822	127	2,133	6,285	6,273	6,300
Middle Atlantic		666	90	1,976	2,983	651	90	1,927	2,997	648	85	1,950	5,667	5,650	5,680
E. N. Central		694	123	2,262	3,247	689	125	2,205	3,271	693	121	2,218	6,272	6,267	6,303
W. N. Central	3,273	691	150	2,433	3,298	693	150	2,392	3,327	706	145	2,408	6,546	6,534	6,587
South Atlantic	1,481	196	14	1,013	1,502	185	14	975	1,512	188	13	980	2,704	2,676	2,693
E. S. Central	,	236	19	1,358	1,899	225	19	1,308	1,918	233	17	1,307	3,466	3,452	3,475
W. S. Central		86	5	834	1,221	83	5	814	1,244	90	4	814	2,113	2,123	2,153
Mountain		730	150	1,873	2,231	724	147	1,880	2,229	731	139	1,872	5,012	4,982	4,972
Pacific	1,534	621	92	1,205	1,495	609	88	1,210	1,461	596	87	1,199	3,453	3,403	3,342
U.S. Average	2,183	493	77	1,567	2,199	483	76	1,535	2,204	484	73	1,539	4,319	4,293	4,299
Cooling Degree Days															
New England		71	485	0	0	99	437	0	0	99	444	0	556	537	543
Middle Atlantic		185	612	3	0	182	580	5	0	177	577	5	800	767	759
E. N. Central		220	498	9	0	234	570	9	0	221	553	8	727	813	782
W. N. Central	3	267	659	13	3	285	710	12	3	275	688	11	942	1,011	977
South Atlantic	137	762	1,158	334	106	633	1,158	233	114	632	1,167	234	2,390	2,129	2,147
E. S. Central		577	1,015	95	22	509	1,066	72	27	507	1,069	69	1,710	1,670	1,672
W. S. Central		855	1,571	267	61	825	1,500	212	72	863	1,609	227	2,743	2,599	2,770
Mountain		430	921	86	18	442	972	87	19	439	973	88	1,483	1,520	1,520
Pacific		231	689	124	29	203	586	76	32	211	613	77	1,096	894	933
U.S. Average		434	876	133	36	402	866	98	40	405	882	100	1,489	1,402	1,427
Cooling Degree Days, Pri	-	_													
New England		85	420	1	0	81	419	1	0	83	423	1	506	501	506
Middle Atlantic		168	557	5	0	168	548	5	0	172	551	6	731	722	729
E. N. Central		234	545	6	3	229	528	6	3	235	529	7	787	766	773
W. N. Central	7	282	683	9	7	279	674	9	7	278	672	10	981	969	967
South Atlantic	110	635	1,154	210	113	659	1,144	221	113	662	1,145	225	2,108	2,138	2,145
E. S. Central		526	1,053	52	32	541	1,037	56	31	542	1,037	59	1,663	1,667	1,669
W. S. Central		883	1,519	184	90	890	1,518	191	84	875	1,518	193	2,679	2,689	2,670
Mountain		423	930	75	21	429	931	76	22	422	940	78	1,445	1,456	1,462
Pacific		170	601	65	29	180	613	72	30	178	609	75	863	895	892
U.S. Average	40	396	849	83	42	404	845	88	41	404	847	91	1,369	1,379	1,383

^{- =} no data available

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

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

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

Regions refer to U.S. Census divisions. See "Census division" in EIA's Energy Glossary (http://www.eia.gov/tools/glossary/) for a list of states in each region.

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

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