# **Short-Term Energy Outlook (STEO)**

## **Highlights**

- North Sea Brent crude oil prices averaged \$58/barrel (bbl) in February, an increase of \$10/bbl from the January average, and the first monthly average price increase since June 2014. The price increase reflects news of falling U.S. crude oil rig counts and announced reductions in capital expenditures by major oil companies, along with lower-than-expected Iraqi crude oil exports.
- EIA forecasts that Brent crude oil prices will average \$59/bbl in 2015, \$2/bbl higher than projected in last month's STEO, and \$75/bbl in 2016. West Texas Intermediate (WTI) prices in 2015 and 2016 are expected to average \$7/bbl and \$5/bbl, respectively, below Brent. The Brent-WTI spread for 2015 is more than twice the projection in last month's STEO, reflecting continuing large builds in U.S. crude oil inventories, including at the Cushing, Oklahoma storage hub.
- The current values of futures and options contracts continue to suggest very high uncertainty in the oil price outlook (*Market Prices and Uncertainty Report*). Although WTI futures contracts for June 2015 delivery traded during the five-day period ending March 5 averaged \$54/bbl, the market's expectations (at the 95% confidence interval) for monthly average WTI prices in June 2015 range from \$33/bbl to \$81/bbl. The band widens over time, with lower and upper limits of \$32/bbl and \$108/bbl for the broadly held December 2015 contract.
- Total U.S. crude oil production was estimated to average 9.4 million barrels per day (bbl/d) in February. Given EIA's price forecast, projected total crude oil production averages 9.3 million bbl/d in 2015 and 9.5 million bbl/d in 2016, close to the 9.6 million bbl/d highest annual average level of U.S. production in 1970.
- U.S. average regular gasoline retail prices increased for the sixth consecutive week from \$2.04/gallon (gal) on January 26 to \$2.49/gal on March 9, reflecting rising crude oil prices and several outages at West Coast refineries. EIA expects U.S. regular gasoline retail prices, which averaged \$3.36/gal in 2014, to average \$2.39/gal in 2015, an increase of \$0.05/gal from last month's STEO, and \$2.73/gal in 2016. The average household is expected to spend \$710 less for gasoline in 2015 compared with last year because of lower prices.

- Natural gas working inventories on February 27 totaled 1,710 billion cubic feet (Bcf), 492 Bcf (40%) above the level at the same time in 2014 but 143 Bcf (8%) below the previous five-year (2010-14) average. EIA expects the Henry Hub natural gas spot price, which averaged \$4.39/million British thermal units (MMBtu) in 2014, to average \$3.07/MMBtu in 2015 and \$3.48/MMBtu in 2016, largely unchanged from last month's STEO.
- Much of the eastern United States experienced a very cold February, which resulted in
  increased electricity demand for space heating. EIA estimates total U.S. generation during
  February 2015 averaged 11,800 gigawatthours (GWh) per day, which would be a monthly
  record for February. However, this estimated level of generation still falls short of the
  winter-month record for total U.S. power generation (12,178 GWh per day) during January
  2014.

### **Global Petroleum and Other Liquids**

Market fundamentals remain largely unchanged since last month's STEO, as global production continues to exceed demand, resulting in inventory builds. Global oil inventory builds are projected to average 1.3 million bbl/d through the first half of 2015, with the builds moderating during the second half of the year, as demand rises and non-OPEC supply growth slows, particularly in the United States, because of lower oil prices. The expected inventory builds in 2015 are on top of an estimated average 0.9 million bbl/d increase in 2014.

**Global Petroleum and Other Liquids Consumption**. EIA estimates that global consumption grew by 0.9 million bbl/d in 2014, averaging 92.2 million bbl/d for the year. EIA expects global consumption to grow by 1.0 million bbl/d in both 2015 and 2016. Projected global oil-consumption-weighted real gross domestic product (GDP), which increased by an estimated 2.7% in 2014, is projected to grow by 2.6% in 2015 and by 3.1% in 2016.

Consumption outside of the Organization for Economic Cooperation and Development (OECD), which grew by 1.2 million bbl/d in 2014, is projected to grow by 0.8 million bbl/d in 2015 and by 1.1 million bbl/d in 2016. The reduction in forecast non-OECD consumption growth in 2015 is mostly attributable to a 0.2 million bbl/d decline in Russia's consumption as a result of its economic downturn. Russia's oil consumption is expected to decline by a similar amount in 2016. China's economic growth slowed in the second half of 2014, as key manufacturing indexes decreased. Nonetheless, China remains the main source of non-OECD oil consumption growth, with a projected annual average increase of 0.3 million bbl/d in both 2015 and 2016, down from growth of 0.4 million bbl/d in 2014.

OECD consumption, which fell by 0.3 million bbl/d in 2014, is expected to grow by 0.2 million bbl/d in 2015 and then stay relatively flat in 2016. Japan and Europe accounted for almost the entire 2014 decline in OECD oil consumption. Consumption in these areas is expected to continue declining over the next two years, albeit at a slower rate than in 2014. The United

States is the leading contributor to projected OECD consumption growth, with U.S. consumption increasing by 0.3 million bbl/d in 2015 and by 0.1 million bbl/d in 2016.

Non-OPEC Petroleum and Other Liquids Supply. EIA estimates that non-OPEC production grew by 2.2 million bbl/d in 2014. EIA expects non-OPEC production to grow by 1.0 million bbl/d in 2015 and by 0.6 million bbl/d in 2016, in part because of lower projected oil prices. The slower growth in total non-OPEC supply is largely attributable to slower production growth in the United States and Canada and declining production in Europe and Eurasia. After a slight decline in 2015, production in Eurasia is projected to decline by 0.1 million bbl/d in 2016. The projected decline reflects reduced investment in Russia's oil sector stemming from low oil prices and international sanctions.

Unplanned supply disruptions among non-OPEC producers averaged slightly less than 0.6 million bbl/d in February 2015, similar to the previous month. South Sudan, Syria, and Yemen accounted for more than 85% of total non-OPEC supply disruptions in February. EIA estimates that unplanned non-OPEC supply disruptions averaged slightly more than 0.6 million bbl/d in 2014.

**OPEC Petroleum and Other Liquids Supply**. EIA estimates that OPEC crude oil production averaged 30.1 million bbl/d in 2014, unchanged from the previous year. Crude oil production declines in Libya, Angola, Algeria, and Kuwait offset production growth in Iraq and Iran. In EIA's forecast, OPEC crude oil production remains flat in 2015 and falls by 0.3 million bbl/d in 2016. Iraq is the largest contributor to OPEC production growth over the forecast period, but its growth is expected to be offset by production declines from other OPEC producers.

OPEC noncrude liquids production, which averaged 6.4 million bbl/d in 2014, is expected to increase by less than 0.1 million bbl/d in both 2015 and 2016, led by increases in Qatar and Kuwait.

In February 2015, unplanned crude oil supply disruptions among OPEC producers averaged 2.7 million bbl/d, an increase of 0.1 million bbl/d compared with the previous month. This increase was mainly attributable to rising outages in Iraq, Nigeria, and Libya. Unplanned OPEC crude supply disruptions averaged 2.4 million bbl/d in 2014, 0.5 million bbl/d higher than in the previous year. The high level of OPEC disruptions contributed to higher crude oil prices during the first half of 2014. Unplanned supply disruptions could still affect crude oil prices, but the threshold that the market can bear has risen in light of robust global production and increases in inventory levels.

EIA expects OPEC surplus crude oil production capacity, which is concentrated in Saudi Arabia, to increase to an annual average of 2.1 million bbl/d in 2015 and 2.6 million bbl/d in 2016, after averaging about 2.0 million bbl/d in 2014. Surplus capacity is typically an indication of market conditions, and surplus capacity below 2.5 million bbl/d is an indicator of a relatively tight

market. However, the current and forecast levels of global inventory builds make the projected low surplus capacity level in 2015 less significant.

**OECD Petroleum Inventories**. EIA estimates that OECD commercial oil inventories totaled 2.75 billion barrels at the end of 2014, the highest end-of-year level on record and equivalent to roughly 60 days of consumption. Projected OECD oil inventories rise to 2.90 billion barrels at the end of 2015 and to 2.92 billion barrels by the end of 2016.

Crude Oil Prices. North Sea Brent crude oil spot prices increased by \$10/bbl from January to reach an average of \$58/bbl in February, the first month in which Brent prices increased since June 2014. Several factors supported Brent prices in February, including news of falling U.S. crude oil rig counts and announced reductions in capital expenditures by major oil companies, both of which contributed to expectations that oil supplies could decline more quickly than previous market expectations. Additionally, lower-than-expected Iraqi crude oil exports and a reduction in Libyan production contributed to an increase in global unplanned supply disruptions. However, the sustainability of the recent price increase is very uncertain, as it occurred amid strong global oil inventory growth, which is expected to continue in the coming months. Inventory builds are projected to moderate later in the year and provide support to crude oil prices.

The monthly average WTI crude oil spot price increased to an average of \$51/bbl in February, up \$3/bbl from January. WTI prices increased less than Brent prices in February as U.S. commercial crude oil inventories increased to 444 million barrels as of February 27, an increase of over 50 million barrels since the end of 2014. The record inventory levels have put downward pressure on the price of crude oil for prompt delivery relative to the price of crude oil for delivery in the future.

EIA projects the Brent crude oil price will average \$59/bbl in 2015, up \$2/bbl from last month's STEO, with prices rising from an average of \$56/bbl in the second quarter to an average of \$67/bbl in the fourth quarter. The Brent crude oil price is projected to average \$75/bbl in 2016. WTI prices in 2015 and 2016 are expected to average \$7/bbl and \$5/bbl, respectively, below Brent. The Brent-WTI spread for 2015 is more than twice the projection in last month's STEO, reflecting continuing large builds in U.S. crude oil inventories, including at the Cushing, Oklahoma storage hub.

The current values of futures and options contracts continue to suggest very high uncertainty in the price outlook (*Market Prices and Uncertainty Report*). WTI futures contracts for June 2015 delivery traded during the five-day period ending March 5 averaged \$54/bbl while implied volatility averaged 46%, establishing the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in June 2015 at \$36/bbl and \$80/bbl, respectively. The 95% confidence interval for market expectations widens over time, with lower and upper limits of \$35/bbl and \$102/bbl for prices in December 2015. Last year at this time, WTI for June 2014 delivery averaged \$101/bbl, and implied volatility averaged 18%.

The corresponding lower and upper limits of the 95% confidence interval were \$87/bbl and \$118/bbl.

Given the high level of uncertainty in oil markets, several factors could cause oil prices to deviate significantly from current projections. Among these factors is the responsiveness of supply to lower prices. Despite OPEC's November 2014 decision to leave its crude oil production target at 30 million bbl/d, key producers could decide to reduce output, tightening market balances. The level of unplanned production outages could also vary from forecast levels for a wide range of producers, including OPEC members Libya, Iraq, Iran, Nigeria, and Venezuela. The degree to which non-OPEC supply growth is affected by lower oil prices will also affect market balances and prices.

Several OPEC and non-OPEC oil producers rely heavily on oil revenue to finance their national budgets. Some producers have already started adjusting their upcoming budgets to reflect the crude oil price decline. If crude oil prices fall further or are sustained at current levels, oil-dependent producing countries will face tough decisions. These decisions could potentially lead to austerity programs and fuel subsidy cuts that could spark social unrest, leaving some countries vulnerable to supply disruptions if protesters target oil infrastructure. Potential new supply disruptions are a real possibility and present a major uncertainty in the world oil supply forecast.

#### **U.S. Petroleum and Other Liquids**

U.S. average regular gasoline retail prices have increased for six consecutive weeks to \$2.49/gal as of March 9, after falling to \$2.04/gal on January 26, the lowest price in EIA's weekly survey of Monday prices since April 6, 2009. Rising crude oil prices, along with several outages at refineries on the West Coast, have contributed to the recent increase in retail gasoline prices.

In February, monthly average regional gasoline retail prices ranged from a low of \$1.96/gal in Petroleum Administration for Defense District (PADD) 4, the Rocky Mountain region, to a high of \$2.55/gal in PADD 5 along the West Coast. EIA expects U.S. retail gasoline prices to average \$2.26/gal during the first quarter of 2015 and \$2.39/gal for the full year, \$0.13/gal and \$0.05/gal higher than in last month's STEO, respectively.

**Liquid Fuels Consumption.** Total U.S. liquid fuels consumption rose by an estimated 70,000 bbl/d (0.4%) in 2014. Motor gasoline consumption increased by 80,000 bbl/d (0.9%) reflecting an increase in highway travel that was partially offset by fleetwide increases in fuel efficiency. Distillate consumption grew by 180,000 bbl/d (4.8%) in 2014, as a result of colder-than-average weather in the first quarter as well as increases in industrial production. Jet fuel consumption increased by 40,000 bbl/d (2.5%). Hydrocarbon gas liquids (HGL) and residual fuel oil consumption in 2014 fell by an estimated 100,000 bbl/d (4.0%) and 60,000 bbl/d (19.2%), respectively.

In 2015, total liquid fuels consumption is forecast to grow by 310,000 bbl/d (1.6%). Lower pump prices contribute to a 70,000 bbl/d increase (0.8%) in motor gasoline consumption. EIA expects petrochemical plants to use more HGL as feedstock, which will reverse 2014's decline in HGL consumption, increasing by 160,000 bbl/d (6.8%). Consumption of distillate fuel is projected to increase by 80,000 bbl/d (2.0%), driven partially by expanding industrial production. Additionally, some of the growth in distillate fuel consumption comes from Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL Annex VI), which is an international agreement that generally requires the use of fuels below 1,000 parts per million sulfur by marine vessels in most U.S. waters, unless alternative devices, procedures, or compliance methods are used to achieve equivalent emissions reductions. The increase in marine distillate use because of MARPOL regulations will displace the use of residual fuel oil.

EIA projects that in 2016 liquid fuels consumption growth will slow to 70,000 bbl/d (0.4%). Motor gasoline consumption is projected to decline by 50,000 bbl/d (0.6%), as the annual average retail regular gasoline price is projected to increase by 14% from the 2015 level. Continuing industrial growth contributes to an 80,000 bbl/d (3.1%) increase in HGL consumption and a 50,000 bbl/d (1.2%) increase in distillate consumption. Jet fuel consumption remains unchanged, as the effects of moderate increases in air transport activity offset the effects of improved fuel efficiency brought about by the introduction of new aircraft.

**Liquid Fuels Supply.** Forecast U.S. crude oil production increases from an average of 8.7 million bbl/d in 2014 to 9.3 million bbl/d in 2015 and to 9.5 million bbl/d in 2016. With WTI crude oil prices expected to average \$47/bbl in the first half of 2015, EIA expects 2015 onshore drilling activity to decline because of unattractive economic returns in some areas of both emerging and mature oil production regions. Many companies have begun redirecting investment away from marginal exploration and research drilling to focus on core areas of major tight oil plays. Projected 2015 oil prices remain high enough to support continued development drilling activity in the Bakken, Eagle Ford, Niobrara, and Permian basins. Companies with lower drilling and debt service costs that operate on acreage in the sweet spots of these regions are expected to continue to drill highly productive wells in 2015. Furthermore, a reduction of the backlog of wells drilled but not completed, which runs three to seven months in major producing regions, will bolster production by offsetting recent drops in drilling activity.

Nevertheless, EIA expects crude oil production to reach 9.4 million bbl/d in the second quarter of 2015, then decline by 170,000 bbl/d in the third quarter. With projected WTI crude oil prices rising in the second half of 2015, drilling activity is expected to increase again as companies take advantage of lower costs for acreage leasing and drilling services, resulting in growing production despite the relatively low WTI price. However, the forecast remains particularly sensitive to actual prices available at the wellhead, drilling economics that vary across regions and operators, and whether additional production from the backlog of well completions materializes. Projected production in the federal offshore region rises during the forecast period, while production in Alaska falls. Production in these areas is less sensitive to short-term price movements than onshore production in the Lower 48 states.

HGL production at natural gas liquids plants, which reached a record high of 3.1 million bbl/d in October, is projected to average 3.2 million bbl/d in 2015 and 3.5 million bbl/d in 2016. Ethane and propane are expected to contribute most to the projected growth, with most of the production supplying domestic petrochemical demand or exports. EIA expects higher rates of ethane recoveries as a result of planned increases in petrochemical plant feedstock demand, while export terminal expansions will allow higher quantities of domestically produced propane and butanes to reach the international market.

The growth in domestic oil production has contributed to a significant decline in imports of crude oil and other liquids. The share of total U.S. liquid fuels consumption met by net imports fell from 60% in 2005 to an estimated 26% in 2014. EIA expects the net import share to decline to 20% in 2016, which would be the lowest level since 1968.

**Petroleum Product Prices.** U.S. regular gasoline retail prices averaged \$2.22/gal in February, \$0.10/gal more than in January, which had the lowest monthly average price since April 2009. The U.S. regular gasoline retail price, which averaged \$3.36/gal in 2014, is projected to average \$2.39/gal in 2015, \$0.05/gal higher than forecast in last month's STEO, and \$2.73/gal in 2016, unchanged from last month's STEO. Diesel fuel retail prices, which averaged \$3.83/gal in 2014, are projected to fall to an average of \$2.89/gal in 2015, \$0.05/gal higher than in last month's STEO, and then rise to \$3.25/gal in 2016.

The June 2015 New York Harbor reformulated blendstock for oxygenate blending (RBOB) futures contract averaged \$1.91/gal for the five trading days ending March 5, 2015, and has a 27% probability of exceeding \$2.10/gal (consistent with a retail price of \$2.75/gal) at expiration. The current values of futures and options contracts suggest there is a 10% probability that the RBOB futures contract price at expiration may exceed \$2.35/gal, consistent with a retail price of \$3.00/gal or higher, and a 3% probability that the RBOB futures price may fall below \$1.35/gal, consistent with a retail price of \$2.00/gal or lower. Daily and weekly national average prices can differ significantly from monthly and seasonal averages, and there are also significant differences across regions, with monthly average prices in some areas falling above or below the national average price by \$0.30/gal or more.

Despite the recent cold weather, home heating costs this winter are still expected to be lower than last winter for households using heating oil or propane. Lower projected crude oil prices this winter compared with last winter contribute to retail heating oil prices that are expected to average \$3.02/gal this winter, \$0.86/gal lower than last winter. The average household that uses heating oil as its primary space-heating fuel is now expected to spend \$1,784 for heating this winter, about \$570 less than last winter. With propane supplies more ample this winter compared with last winter, propane prices are expected to be 16% lower in the Northeast and 27% lower in the Midwest, resulting in households spending 18% and 32% less on propane in those regions, respectively.

#### **Natural Gas**

December 2014 marketed natural gas production hit a record high of 78.8 Bcf/d, according to EIA's *Natural Gas Monthly*. The increase in production occurred despite declining prices and falling rig counts, and likely reflects increases in rig efficiency. For 2014 as a whole, natural gas production increased 6.1%, which was the strongest growth since 2011. Preliminary data indicate temporary declines in production in early 2015, largely attributable to freeze-offs during a few cold weeks in January and February. Based on increases in rig efficiency and December 2014 data, this month's STEO raises the outlook for production by 1 Bcf/d from last month's outlook for both 2015 and 2016.

**Natural Gas Consumption.** EIA projects that U.S. total natural gas consumption will average 75.7 Bcf/d in 2015 and 76.2 Bcf/d in 2016, compared with an estimated 73.5 Bcf/d in 2014. Growth is largely driven by demand in the industrial and electric power sectors, while residential and commercial consumption are projected to decline in 2015 and 2016. EIA projects natural gas consumption in the power sector to grow by 8.1% in 2015 and by 1.9% in 2016. Industrial sector consumption increases by 6.6% and 2.1% in 2015 and 2016, respectively, as new industrial projects come online, particularly in the fertilizer and chemicals sectors, and industrial consumers take advantage of low natural gas prices.

**Natural Gas Production and Trade.** EIA expects that marketed natural gas production will increase by 3.7 Bcf/d (5.0%) and 1.6 Bcf/d (2.0%) in 2015 and 2016, respectively, reflecting continuing production growth in the Lower 48 states, which more than offsets the long-term declining production in the Gulf of Mexico. Although natural gas prices have fallen dramatically in recent months, EIA expects that increases in drilling efficiency and growth in oil production (albeit at a slower rate) will continue to support growing natural gas production in the forecast. With most growth expected to come from the Marcellus Shale, a backlog of drilled but uncompleted wells will continue to support production growth, as new pipelines come online in the Northeast.

Increases in domestic natural gas production are expected to reduce demand for natural gas imports from Canada and to support growth in exports to Mexico. EIA expects exports to Mexico, particularly from the Eagle Ford Shale in South Texas, to increase because of growing demand from Mexico's electric power sector, coupled with flat Mexican natural gas production.

Liquefied natural gas (LNG) imports have fallen over the past five years because higher prices in Europe and Asia are more attractive to LNG exporters than the relatively low prices in the United States. Forecast LNG gross imports average 0.2 Bcf/d in both 2015 and 2016. EIA projects that LNG gross exports will increase from an average of 0.04 Bcf/d in 2014 to almost 0.8 Bcf/d in 2016.

**Natural Gas Inventories.** On February 27, natural gas working inventories totaled 1,710 Bcf, 492 Bcf (40%) above the level at the same time in 2014 and 143 Bcf (8%) below the previous five-

year (2010-14) average for the week. Following the extremely cold weather last winter, inventories were 1,000 Bcf below the five-year average in mid-April 2014. After strong builds over the summer and weak draws during the early winter, natural gas working inventories briefly surpassed the five-year average in mid-February. However, recent cold temperatures have contributed to inventory levels falling back below the five-year average. EIA projects that end-of-March 2015 inventories will total 1,587 Bcf, close to the five-year average and 730 Bcf more than at the end of last March.

**Natural Gas Prices.** The Henry Hub natural gas spot price averaged \$2.87/MMBtu in February, a decline of \$0.12/MMBtu from January. EIA expects monthly average spot prices to remain less than \$3/MMBtu through May, and less than \$4/MMBtu through the remainder of the forecast. The projected Henry Hub natural gas price averages \$3.07/MMBtu in 2015 and \$3.48/MMBtu in 2016.

Natural gas futures contracts for June 2015 delivery traded during the five-day period ending March 5 averaged \$2.83/MMBtu. Current options and futures prices imply that market participants place the lower and upper bounds for the 95% confidence interval for June 2015 contracts at \$1.92/MMBtu and \$4.18/MMBtu, respectively. At this time last year, the natural gas futures contract for June 2014 delivery averaged \$4.55/MMBtu and the corresponding lower and upper limits of the 95% confidence interval were \$3.51/MMBtu and \$5.90/MMBtu.

#### Coal

Coal exports totaled 97.3 million short tons (MMst) in 2014, which was the first time since 2010 exports were below 100 MMst. Coal exports fall into two categories: metallurgical (met) coal, which is used in the production of steel, and steam coal, which is commonly used to fuel boilers that generate steam used to produce electricity, heat, or both. Steam coal exports fell by 34% in 2014 to slightly more than 34 MMst. In contrast, steam coal exports to Europe alone were nearly 31 MMst in 2013. Met coal exports declined by 4% in 2014, but met coal exports to Europe increased by nearly 20%.

**Coal Trade.** The 2014 decline in coal exports was primarily a result of slower growth in world coal demand, lower international coal prices, and higher coal output in other coal-exporting countries compared with 2013. EIA projects coal exports will fall from 97 MMst in 2014 to an annual average of 81 MMst in 2015 and 2016. Global market conditions for coal are not expected to change significantly through 2016.

**Coal Supply.** EIA estimates that U.S. coal production for 2014 totaled 997 MMst, 13 MMst (1.3%) higher than in 2013. EIA expects annual production to decline in 2015 to 943 MMst, before growing slightly to 951 MMst in 2016.

**Coal Consumption.** Electric power sector coal consumption decreased by 7 MMst (0.8%) in 2014. EIA projects power sector coal will decrease by 2.2% in 2015, despite an increase in electricity generation, because of lower natural gas prices and retirements of coal power plants in response to the implementation of the Mercury and Air Toxics Standards. The full effect of the coal plant retirements will be felt in 2016, as projected coal consumption in the electric power sector declines by an additional 0.5%.

**Coal Prices.** The annual average coal price to the electric power sector fell from \$2.39/MMBtu in 2011 to an estimated \$2.36/MMBtu in 2014. EIA expects the delivered coal price to average \$2.31/MMBtu in 2015 and \$2.34/MMBtu in 2016.

#### **Electricity**

Much of the eastern United States experienced a very cold February, which resulted in increased electricity demand for space heating. EIA estimates total U.S. generation during February 2015 averaged 11,800 gigawatthours (GWh) per day, which would be a monthly record for February. However, this estimated level of generation still falls short of the winter-month record for total U.S. power generation (12,178 GWh per day) during January 2014.

**Electricity Consumption**. Milder January temperatures offset the cold February weather, leading to a forecast reduction of 6.2% in first-quarter heating degree days compared with the same period last year. The colder-than-expected temperatures in February contribute to an increase in EIA's projection of residential electricity sales for 2015, compared with last month's forecast. EIA expects U.S. retail residential sales of electricity will grow by 0.7% in 2015 and then decline by 0.3% in 2016. Projected U.S. sales of electricity to the commercial sector increase by 1.6% this year and by 1.1% in 2016. Projected industrial electricity sales rise by 1.9% in 2015 and by 1.3% in 2016.

**Electricity Generation.** EIA forecasts that U.S. electricity generation will grow by an average of 1.3% in 2015 and 0.6% in 2016. The cost of natural gas used for power generation fell in recent months, with the Henry Hub spot price declining from an average of \$4.29/MMBtu last summer to an average of \$2.87/MMBtu in February. This decline in fuel costs, combined with upcoming coal plant retirements, is expected to contribute to an increase in natural gas-fired generation. EIA expects the share of total generation fueled by natural gas to average 29.2% during 2015, up from 27.4% last year. In contrast, the share of generation provided by coal falls from 38.7% in 2014 to 37.2% in 2015.

**Electricity Retail Prices.** Average U.S. residential electricity prices increased in 2014 at the highest rate (3.1%) since 2008. EIA expects continued growth in average residential electricity prices over the forecast period, albeit at a slower pace than last year. The U.S. retail residential price is projected to increase by 1.0% in 2015 and by 1.8% in 2016.

#### **Renewables and Carbon Dioxide Emissions**

**Electricity and Heat Generation from Renewables.** EIA projects that total renewables used for electricity and heat generation will grow by 2.9% in 2015. Conventional hydropower generation increases by 6.0%, while nonhydropower renewables generation increases by 1.4%. In 2016, total renewables consumption for electric power and heat generation increases by 1.8% as a result of a 3.6% decline in hydropower and a 4.6% increase in nonhydropower renewables.

Wind is the largest source of nonhydropower renewable generation, and it is projected to contribute 5.0% of total electricity generation in 2016. In 2014, wind generation produced more than 10% of total ERCOT electricity generation (most of Texas), which represented 20% of total U.S. wind generation.

EIA expects continued growth in utility-scale solar power generation, which is projected to average 74 gigawatthours (GWh) per day in 2016. Despite this growth, utility-scale solar power averages only 0.6% of total U.S. electricity generation in 2016. Although solar growth has historically been concentrated in customer-sited distributed generation installations, EIA expects that utility-scale solar capacity will increase by more than 60% between the end of 2014 and the end of 2016, with about half of this new capacity being built in California. Wind capacity, which grew by 7.6% in 2014, is forecast to increase by 11.4% in 2015 and by another 11.0% in 2016. Because wind is starting from a much larger base than solar, even though the growth rate is lower, the absolute amount of the increase in capacity is more than twice that of solar: 15 GW of wind compared with 6 GW of utility-scale solar between 2014 and 2016.

**Liquid Biofuels.** After reaching a record monthly average of 1,002,000 bbl/d in December 2014, ethanol production in February 2015 is estimated to have fallen to an average of 948,000 bbl/d. Ethanol production averaged 935,000 bbl/d in 2014, and EIA expects it to average 947,000 bbl/d in 2015 and 942,000 bbl/d in 2016. Biodiesel production averaged an estimated 83,000 bbl/d in 2014 and is forecast to average 84,000 bbl/d in both 2015 and 2016.

**Energy-Related Carbon Dioxide Emissions.** EIA estimates that emissions grew 1.0% in 2014. Emissions are forecast to increase by 0.2% in 2015 and by 0.3% in 2016. These forecasts are sensitive to both weather and economic assumptions.

# **U.S.** Economic Assumptions

**Recent Economic Indicators.** The Bureau of Economic Analysis (BEA) reported that real gross domestic product (GDP) grew at an annual rate of 2.2% in the fourth quarter of 2014, lower than the initial estimate of 2.6%. Estimated growth for 2014 as a whole is now 2.4%.

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

**Production, Income, and Employment.** Forecast real GDP growth reaches 2.7% in 2015, then declines to 2.4% in 2016. Growth is expected to rise in 2015 because of greater business investment spending and increases in consumer purchases. However, a stronger dollar and lower demand from slower-growing economies are expected to reduce export growth and raise import growth. Real disposable income grows by 3.2% in 2015, below the 3.3% forecast last month, and by 2.4% in 2016. Total industrial production grows by 2.3% in 2015 and by 3.4% in 2016. Projected growth in nonfarm employment averages 2.1% in 2015 and 1.6% in 2016.

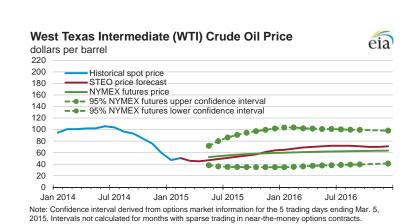
**Expenditures.** Forecast private real fixed investment growth averages 5.3% and 5.8% in 2015 and 2016, respectively, led by growth in equipment in 2015 and 2016 and by growth in equipment and structures in 2016. Real consumption expenditures grow faster than real GDP in 2015 and 2016, at 3.3% and 2.7%, respectively. Durable goods expenditures drive consumption spending in both years. Export growth is 3.2% and 3.6% over the same two years, while import growth is 5.8% in 2015 and 4.5% in 2016. Total government expenditures rise 1.0% in 2015 and 0.5% in 2016.

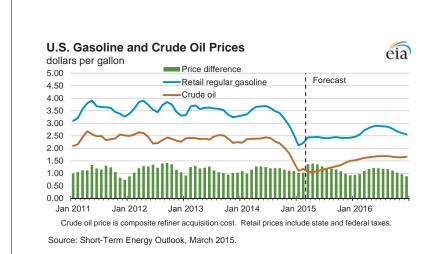
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views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

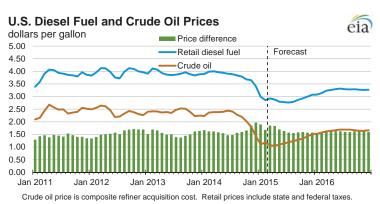


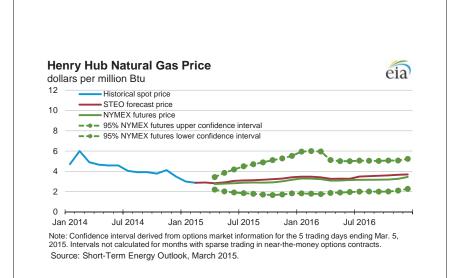
# **Short-Term Energy Outlook**

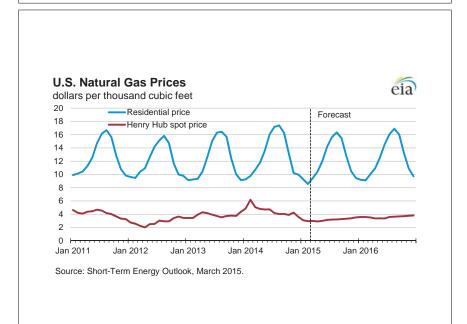
# Chart Gallery for March 2015

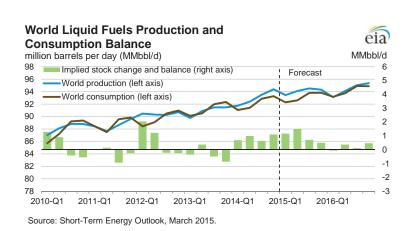


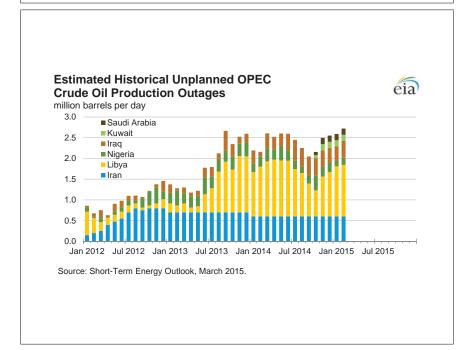


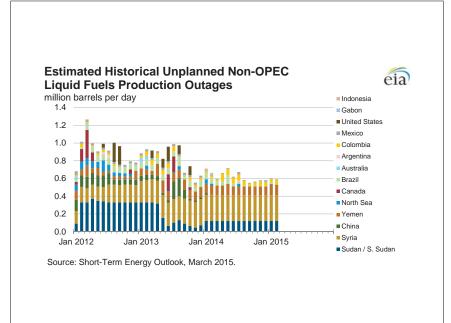


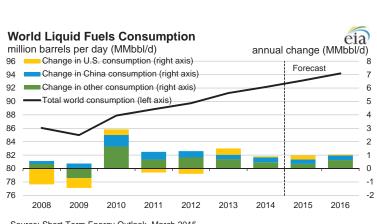


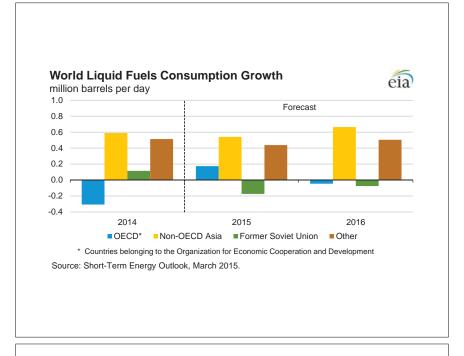


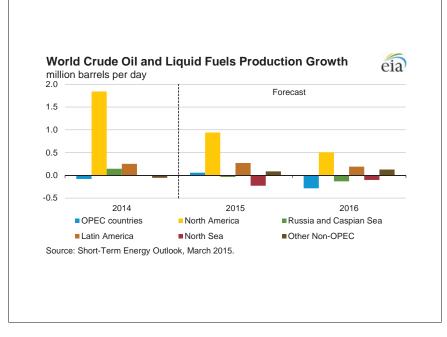


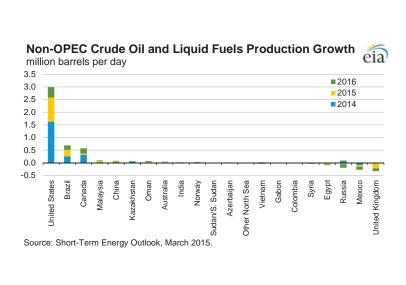


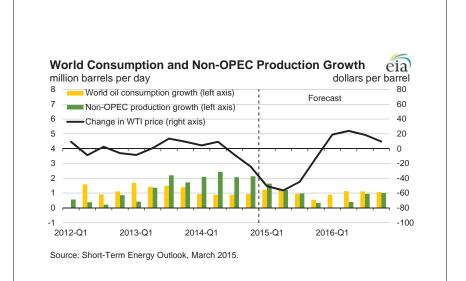


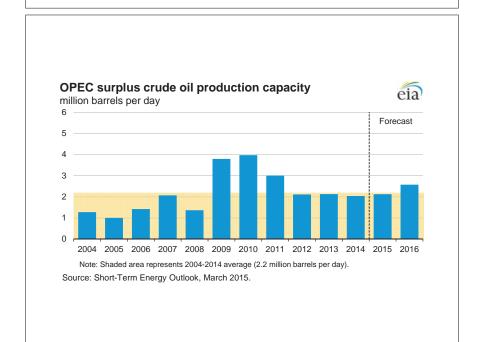


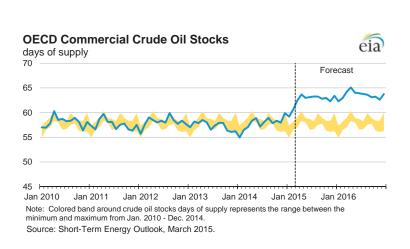


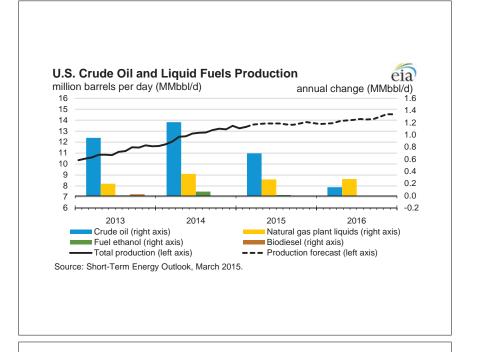


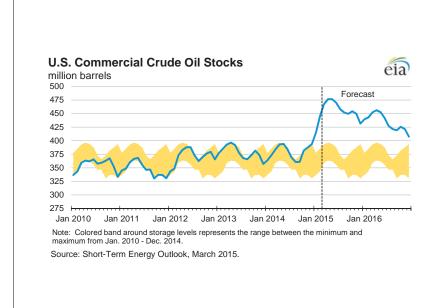


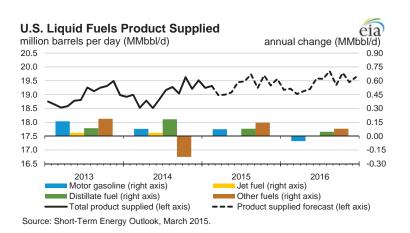


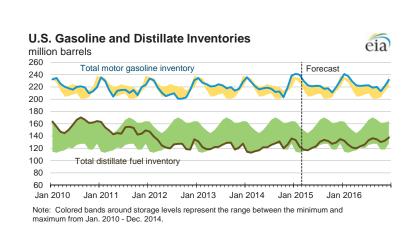


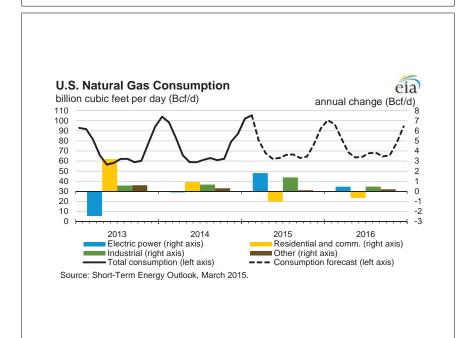


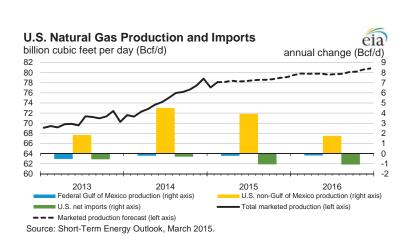


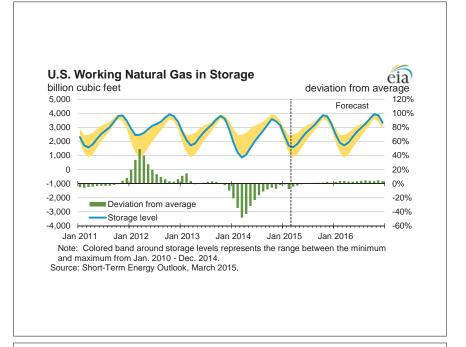


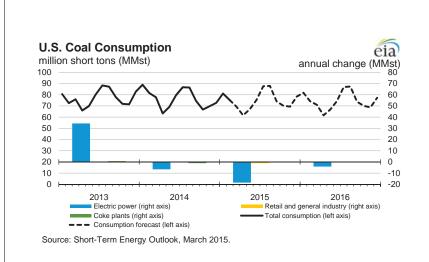


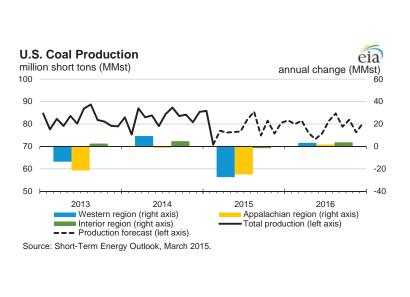


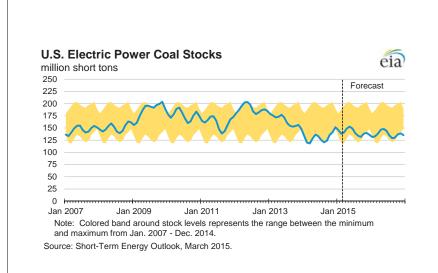


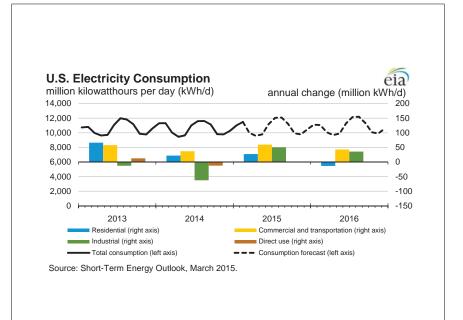


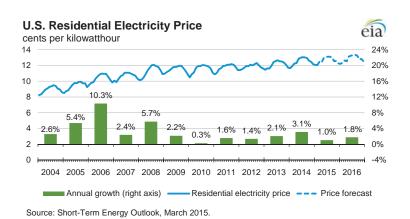






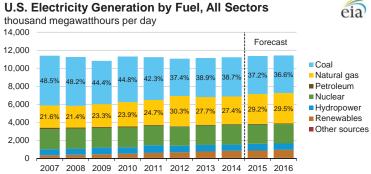










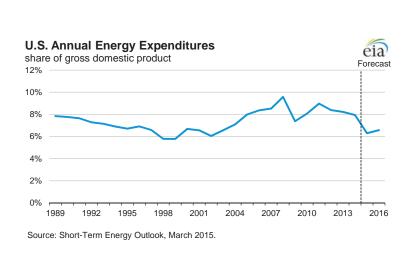


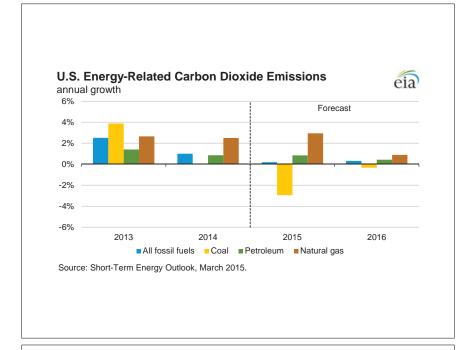
Note: Labels show percentage share of total generation provided by coal and natural gas.

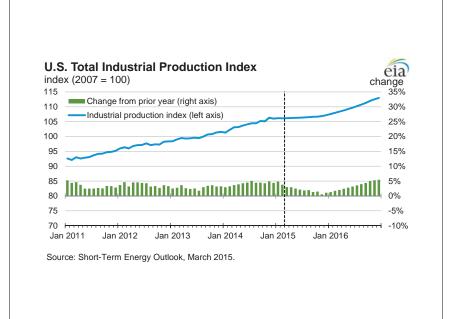
Source: Short-Term Energy Outlook, March 2015.

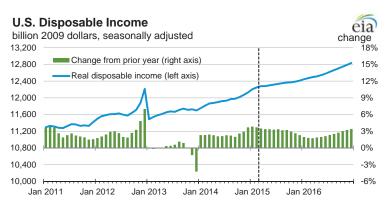
#### U.S. Renewable Energy Supply eia quadrillion British thermal units (Btu) Forecast 10 ■ Solar 8 Geothermal ■ Other biomass 6 ■ Wind power ■ Liquid biofuels ■ Wood biomass Hydropower 2 0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

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



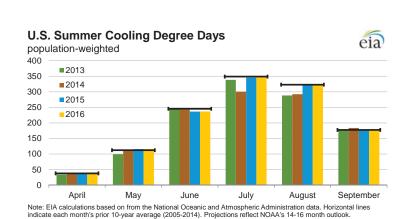






Source: Short-Term Energy Outlook, March 2015.

Source: Short-Term Energy Outlook, March 2015.



**U.S. Winter Heating Degree Days** population-weighted 1000 ■2012/13 900 **2013/14** 800 2014/15 700 2015/16 600 500 400 300 200 100 0 January February March October November December Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Horizontal lines indicate each month's prior 10-year average (Oct 2004 • Mar 2014). Projections reflect NOAA's 14-16 month outlook.

# U.S. Census Regions and Divisions West Midwest Northeast Northeast New England Division Central Division Central Division Divisi

South

Table WF01. Average Consumer Prices and Expenditures for Heating Fuels During the Winter U.S. Energy Information Administration | Short-Term Energy Outlook - March 2015

O.S. Energy Information Admin				Winter of				Fo	recast
Fuel / Region	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	% Change
Network Occ									
Natural Gas									
Northeast	75.2	90.2	75.7	90.7	66.4	76.0	84.1	82.1	-2.4
Consumption (Mcf**) Price (\$/mcf)	15.18	80.3 15.83	75.7 13.31	80.7 12.66	66.4 12.21	11.74	11.55	11.01	-2.4 -4.6
Expenditures (\$)	1,141	1,272	1,007	1,022	812	893	971	904	-4.0 -6.9
Midwest	1,141	1,212	1,007	1,022	012	093	9/1	304	-0.9
Consumption (Mcf)	78.2	80.7	78.6	80.2	65.4	77.6	88.1	82.3	-6.6
Price (\$/mcf)	11.40	11.47	9.44	9.23	8.99	8.36	8.70	8.37	-3.8
Expenditures (\$)	892	926	742	740	587	648	766	689	-10.1
South									
Consumption (Mcf)	44.6	47.3	53.3	49.3	40.9	46.5	52.2	50.4	-3.4
Price (\$/mcf)	14.18	14.07	11.52	11.02	11.45	10.71	10.79	10.69	-0.9
Expenditures (\$)	632	665	613	544	468	498	563	539	-4.2
West									
Consumption (Mcf)	50.4	47.8	49.9	49.4	49.1	48.6	46.4	42.0	-9.6
Price (\$/mcf)	11.31	10.86	9.91	9.67	9.35	9.13	9.96	10.25	2.9
Expenditures (\$)	570	519	494	478	459	444	462	430	-6.9
U.S. Average									
Consumption (Mcf)	62.5	64.2	64.4	65.0	55.7	62.5	68.0	64.2	-5.6
Price (\$/mcf)	12.72	12.87	10.83	10.46	10.25	9.73	9.98	9.78	-2.0
Expenditures (\$)	795	826	698	680	571	608	679	628	-7.5
Heating Oil									
U.S. Average									
Consumption (gallons)	537.9	576.7	544.8	580.7	471.2	545.5	607.6	591.1	-2.7
Price (\$/gallon)	3.33	2.65	2.85	3.38	3.73	3.87	3.88	3.02	-22.1
Expenditures (\$)	1,790	1,530	1,552	1,966	1,757	2,113	2,355	1,784	-24.2
(,,	1,100	-,	-,	-,	-,	_,	_,	1,101	
Electricity									
Northeast									
Consumption (kWh***)	6,835	7,063	6,847	7,076	6,436	6,862	7,223	7,133	-1.3
Price (\$/kwh)	0.145	0.152	0.152	0.154	0.154	0.152	0.163	0.166	1.8
Expenditures (\$)	988	1,071	1,040	1,091	993	1,045	1,178	1,184	0.5
Midwest									
Consumption (kWh)	8,631	8,751	8,660	8,733	7,897	8,588	9,167	8,825	-3.7
Price (\$/kwh)	0.090	0.097	0.099	0.105	0.111	0.112	0.112	0.117	4.7
Expenditures (\$)	774	851	856	914	875	958	1,027	1,036	8.0
South Consumption (kWh)	7,778	8,057	8,486	8,224	7,470	7,978	8,385	8,275	-1.3
Price (\$/kwh)	0.098	0.109	0.103	0.104	0.107	0.107	0.109	0.111	-1.3 2.1
Expenditures (\$)	765	878	874	856	798	851	913	920	0.8
West	703	070	074	030	730	001	313	320	0.0
Consumption (kWh)	7,288	7,084	7,239	7,216	7,190	7,152	6,986	6,645	-4.9
Price (\$/kwh)	0.104	0.107	0.110	0.112	0.115	0.118	0.123	0.126	2.1
Expenditures (\$)	756	755	800	809	825	847	861	835	-2.9
U.S. Average									
Consumption (kWh)	7,585	7,725	7,937	7,844	7,253	7,673	7,986	7,792	-2.4
Price (\$/kwh)	0.104	0.112	0.110	0.113	0.116	0.117	0.120	0.123	2.6
Expenditures (\$)	789	866	873	884	843	895	955	956	0.1

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

U.S. Energy Information Admin				Winter of				Fo	recast
Fuel / Region	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	% Change
Dranana									
Propane Northeast									
	671.8	714.7	672.0	717.5	595.6	675.8	745.7	729.2	-2.2
Consumption (gallons)									
Price* (\$/gallon)	2.93	2.84	2.98	3.24	3.34	3.00	3.56	3.00	-15.7
Expenditures (\$) Midwest	1,967	2,031	2,004	2,321	1,990	2,031	2,655	2,188	-17.6
Consumption (gallons)	774.6	795.0	779.6	791.8	644.3	766.4	868.5	807.6	-7.0
Price* (\$/gallon)	2.25	2.11	1.99	2.11	2.23	1.74	2.61	1.91	-26.8
Expenditures (\$)	1,744	1,678	1,548	1,674	1,437	1,333	2,267	1,543	-31.9
Number of households by pr	imary space	e heating t	fuel (thou	sands)					
Northeast									
Natural gas	10,714	10,889	10,992	11,118	11,236	11,369	11,511	11,632	1.0
Heating oil	6,520	6,280	6,016	5,858	5,701	5,466	5,248	5,055	-3.7
Propane	704	713	733	744	761	816	836	827	-1.1
Electricity	2,550	2,563	2,645	2,776	2,894	3,012	3,070	3,134	2.1
Wood	414	474	501	512	548	579	605	646	6.9
Midwest									
Natural gas	18,366	18,288	18,050	17,977	18,019	18,047	17,960	17,891	-0.4
Heating oil	534	491	451	419	393	360	334	311	-6.8
Propane	2,181	2,131	2,098	2,073	2,037	2,065	2,062	2,003	-2.9
Electricity	4,469	4,570	4,715	4,922	5,119	5,316	5,489	5,626	2.5
Wood	528	584	616	618	631	635	655	696	6.2
South									
Natural gas	14,061	13,958	13,731	13,657	13,636	13,702	13,622	13,450	-1.3
Heating oil	1,051	956	906	853	790	741	693	648	-6.5
Propane	2,356	2,220	2,165	2,098	2,024	1,990	1,893	1,772	-6.4
Electricity	24,662	25,258	25,791	26,555	27,283	27,832	28,406	29,058	2.3
Wood	558	593	586	599	609	611	625	635	1.7
West									
Natural gas	15,084	15,027	14,939	15,020	15,021	14,998	15,018	15,084	0.4
Heating oil	316	294	289	279	261	246	237	229	-3.1
Propane	942	936	940	914	885	911	915	878	-4.1
Electricity	7,651	7,768	7,877	8,126	8,439	8,650	8,831	9,043	2.4
Wood	679	703	721	725	736	730	726	734	1.1
U.S. Totals									
Natural gas	58,226	58,162	57,713	57,771	57,912	58,115	58,111	58,057	-0.1
Heating oil	8,422	8,021	7,662	7,408	7,145	6,812	6,511		-4.1
Propane	6,184	5,999	5,936	5,829	5,707	5,782	5,707		-4.0
Electricity	39,332	40,159	41,029	42,380	43,734	44,810	45,795		2.3
Wood	2,179	2,353	2,424	2,454	2,524	2,554	2,610	2,711	3.9
Heating degree days									
Northeast	4,914	5,313	4,933	5,337	4,217	4,964	5,599	5,443	-2.8
Midwest	5,603	5,810	5,639	5,773	4,484	5,544	6,450		-7.9
South	2,279	2,493	2,870	2,632	2,023	2,430	2,786		-3.7
West	3,339	3,116	3,285	3,258	3,229	3,181	2,990	2,611	-12.7
U.S. Average	3,729	3,869	3,937	3,939	3,224	3,721	4,110	3,840	-6.6
Note: Winter covers the period Oct									

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.

<sup>\*</sup> Prices exclude taxes

<sup>\*\*</sup> thousand cubic feet

<sup>\*\*\*</sup> kilowatthour

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administr	ation   S	3hort-1e 20	rm Ener	gy Outlo	ock - Ma	rch 2015 <b>20</b> °		I		20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Energy Supply	·		•				•			•				•	
Crude Oil Production (a) (million barrels per day)	8.11	8.59	8.79	9.11	9.35	9.44	9.27	9.34	9.35	9.45	9.44	9.70	8.65	9.35	9.49
Dry Natural Gas Production (billion cubic feet per day)	67.84	69.33	71.30	73.18	73.30	73.84	74.04	74.41	75.14	75.16	75.28	75.93	70.43	73.90	75.38
Coal Production (million short tons)	245	246	255	250	234	229	242	238	243	225	245	238	997	943	951
Energy Consumption															
Liquid Fuels (million barrels per day)	18.81	18.71	19.16	19.45	19.17	19.17	19.49	19.53	19.13	19.30	19.59	19.62	19.03	19.34	19.41
Natural Gas (billion cubic feet per day)	95.14	61.17	61.74	76.20	95.71	64.43	65.28	77.85	93.06	65.46	66.90	79.51	73.48	75.74	76.21
Coal (b) (million short tons)	248	212	247	209	226	204	250	218	227	203	248	216	917	897	894
Electricity (billion kilowatt hours per day)	10.87	10.04	11.46	9.95	10.81	10.18	11.79	10.07	10.74	10.29	11.90	10.19	10.58	10.71	10.78
Renewables (c) (quadrillion Btu)	2.35	2.56	2.27	2.40	2.41	2.61	2.39	2.38	2.45	2.65	2.40	2.43	9.59	9.80	9.93
Total Energy Consumption (d) (quadrillion Btu)	26.54	22.97	23.84	24.56	26.02	23.09	24.27	24.64	25.99	23.26	24.47	24.87	97.91	98.01	98.59
Energy Prices															
Crude Oil (e) (dollars per barrel)	97.56	101.02	96.43	73.44	46.84	46.01	51.97	59.72	65.99	70.01	70.68	69.34	92.01	51.20	69.05
Natural Gas Henry Hub Spot (dollars per million Btu)	5.21	4.61	3.96	3.80	2.92	2.93	3.13	3.31	3.45	3.27	3.53	3.65	4.39	3.07	3.48
Coal (dollars per million Btu)	2.33	2.39	2.37	2.37	2.30	2.34	2.32	2.30	2.33	2.36	2.36	2.32	2.36	2.31	2.34
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR) Percent change from prior year	15,832 1.9	16,010 2.6	16,206 2.7	16,312 2.5	16,398 3.6	16,489 3.0	16,570 2.3	16,644 2.0	16,731 2.0	16,847 2.2	16,986 2.5	17,146 3.0	16,090 2.4	16,525 2.7	16,927 2.4
GDP Implicit Price Deflator (Index, 2009=100) Percent change from prior year	107.7 1.4	108.3 1.7	108.6 1.6	108.6 1.2	109.2 1.4	109.8 1.4	110.3 1.6	110.9 2.1	111.5 2.1	112.0 2.0	112.5 2.0	113.0 1.9	108.3 1.5	110.1 1.6	112.3 2.0
Real Disposable Personal Income (billion chained 2009 dollars - SAAR) Percent change from prior year	11,810 2.4	11,900 2.2	11,960 2.2	12,072 3.1	12,245 3.7	12,299 3.4	12,350 3.3	12,390 2.6	12,472 1.8	12,545 2.0	12,664 2.5	12,790 3.2	11,936 2.4	12,321 3.2	12,618 2.4
Manufacturing Production Index (Index, 2007=100) Percent change from prior year	99.4 2.4	101.2 3.8	102.4 4.6	103.5 4.5	104.2 4.9	104.4 3.2	104.6 2.2	105.3 1.7	106.3 2.0	107.4 2.9	108.7 3.9	110.5 5.0	101.6 3.8	104.6 3.0	108.3 3.5
Weather															
U.S. Heating Degree-Days	2,452	480	80	1,539	2,301	469	<i>7</i> 5	1,540	2,122	482	75	1,537	4,552	4,385	4,217
U.S. Cooling Degree-Days	35	394	776	96	35	390	844	92	41	391	845	93	•	1,361	1,370

<sup>- =</sup> 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.

<sup>(</sup>a) Includes lease condensate.

<sup>(</sup>b) Total consumption includes Independent Power Producer (IPP) consumption.

<sup>(</sup>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.

<sup>(</sup>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).

<sup>(</sup>e) Refers to the refiner average acquisition cost (RAC) of crude oil.

Table 2. U.S. Energy Prices

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

		201	4			201	15			20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Crude Oil (dollars per barrel)										-				-	
West Texas Intermediate Spot Average	98.75	103.35	97.78	73.16	47.93	47.00	53.00	60.67	67.00	71.00	71.67	70.33	93.26	52.15	70.00
Brent Spot Average	108.15	109.67	101.90	76.43	54.62	56.34	59.94	67.00	72.09	76.02	76.67	75.34	99.00	59.50	75.03
Imported Average	94.10	98.59	93.82	71.59	44.36	43.47	49.50	57.15	63.47	67.48	68.17	66.83	89.65	48.56	66.53
Refiner Average Acquisition Cost	97.56	101.02	96.43	73.44	46.84	46.01	51.97	59.72	65.99	70.01	70.68	69.34	92.01	51.20	69.05
Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	272	298	276	203	156	173	173	170	190	216	213	189	262	168	202
Diesel Fuel	303	300	288	240	182	185	190	209	222	233	234	231	282	192	230
Heating Oil	303	289	276	228	182	173	178	205	215	218	219	226	274	188	219
Refiner Prices to End Users															
Jet Fuel	297	295	289	234	179	180	183	203	217	228	227	225	278	186	224
No. 6 Residual Fuel Oil (a)	249	244	243	194	131	118	131	148	161	169	173	171	230	132	168
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	340	368	350	288	226	244	243	242	258	287	284	261	336	239	273
Gasoline All Grades (b)	348	375	358	296	234	252	251	250	266	295	293	270	344	247	281
On-highway Diesel Fuel	396	394	384	358	293	282	281	300	315	329	329	327	383	289	325
Heating Oil	397	382	369	330	285	265	262	289	302	304	301	310	372	282	305
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	5.36	4.75	4.08	3.91	3.01	3.02	3.23	3.41	3.56	3.37	3.63	3.76	4.52	3.17	3.58
Henry Hub Spot (dollars per Million Btu)	5.21	4.61	3.96	3.80	2.92	2.93	3.13	3.31	3.45	3.27	3.53	3.65	4.39	3.07	3.48
End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	6.17	5.62	5.06	5.15	4.58	3.84	4.04	4.44	4.77	4.23	4.48	4.87	5.53	4.24	4.60
Commercial Sector	8.66	9.64	9.69	8.51	8.33	8.25	8.81	8.30	8.51	8.72	9.37	8.85	8.87	8.36	8.74
Residential Sector	9.82	13.11	16.92	10.52	9.06	11.64	15.80	10.28	9.38	12.12	16.32	10.61	10.94	10.24	10.64
Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.33	2.39	2.37	2.37	2.30	2.34	2.32	2.30	2.33	2.36	2.36	2.32	2.36	2.31	2.34
Natural Gas	6.82	4.93	4.25	4.30	4.15	3.69	3.86	4.27	4.38	3.98	4.22	4.57	4.98	3.98	4.28
Residual Fuel Oil (c)	19.95	20.44	19.75	15.28	12.10	11.60	11.35	11.58	11.80	12.63	13.13	13.19	19.26	11.67	12.68
Distillate Fuel Oil	23.40	22.74	21.86	18.77	15.34	15.07	15.39	17.28	18.04	18.52	18.63	19.26	22.33	15.74	18.57
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.99	6.92	7.36	6.76	6.53	6.73	7.30	6.69	6.59	6.82	7.40	6.81	7.01	6.82	6.91
Commercial Sector	10.55	10.68	11.11	10.59	10.26	10.59	11.05	10.50	10.34	10.71	11.21	10.69	10.75	10.62	10.76
Residential Sector	11.91	12.73	13.01	12.38	12.18	12.80	13.08	12.44	12.38	12.99	13.31	12.69	12.50	12.63	12.86

<sup>- =</sup> no data available

Prices are not adjusted for inflation.

- (a) Average for all sulfur contents.
- (b) Average self-service cash price.
- (c) Includes fuel oils No. 4, No. 5, No. 6, and topped crude.

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

Prices exclude taxes unless otherwise noted.

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

 $Weekly\ Petroleum\ Status\ Report\ ,\ DOE/EIA-0208;\ Natural\ Gas\ Monthly\ ,\ DOE/EIA-0130;\ Electric\ Power\ Monthly\ ,\ DOE/EIA-0226;\ and\ Monthly\ Energy\ Review\ ,\ DOE/EIA-0035.$ 

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

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

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

U.S. Energy Information Adminis	stration			ergy Out	look - Ma	arch 201:									
		201				201		4.4		201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million barrels per day) (a)															
OECD	25.00	25.38	25.64	26.22	26.15	26.18	26.22	26.60	26.22	26.49	26.83	27.24	25.57	26.29	26.70
U.S. (50 States)		13.90	14.25	14.63	14.78	14.95	14.92	15.03	14.94	15.24	15.40	15.75	13.98	14.92	15.34
Canada		4.28	4.33	4.52	4.31	4.30	4.45	4.69	4.49	4.54	4.75	4.82	4.39	4.44	4.65
Mexico	2.88	2.86	2.78	2.74	2.80	2.77	2.74	2.72	2.67	2.65	2.62	2.60	2.81	2.76	2.63
North Sea (b)		2.80	2.71	2.76	2.69	2.59	2.51	2.60	2.55	2.49	2.46	2.48	2.83	2.60	2.49
Other OECD		1.55	1.57	1.58	1.57	1.57	1.59	1.56	1.57	1.57	1.61	1.59	1.56	1.57	1.58
Non-OECD	66.74	67.01	67.85	68.15	67.29	67.92	68.29	67.72	66.88	67.61	68.19	68.11	67.44	67.81	67.70
OPEC	36.37	36.08	36.66	36.73	36.44	36.58	36.70	36.34	36.09	36.19	36.28	36.37	36.46	36.52	36.23
Crude Oil Portion	30.01	29.70	30.28	30.32	30.04	30.16	30.25	29.87	29.66	29.72	29.78	29.85	30.08	30.08	29.75
Other Liquids	6.36	6.37	6.38	6.41	6.39	6.42	6.45	6.48	6.44	6.46	6.49	6.52	6.38	6.44	6.48
Eurasia	13.90	13.84	13.85	14.02	14.05	13.87	13.81	13.77	13.73	13.71	13.74	13.74	13.90	13.87	13.73
China	4.50	4.53	4.46	4.61	4.52	4.55	4.56	4.56	4.55	4.58	4.58	4.59	4.53	4.55	4.58
Other Non-OECD	11.97	12.57	12.88	12.79	12.29	12.91	13.22	13.05	12.51	13.14	13.59	13.41	12.56	12.87	13.16
Total World Supply	91.74	92.39	93.49	94.37	93.44	94.11	94.51	94.32	93.11	94.10	95.02	95.35	93.01	94.10	94.40
Non-OPEC Supply	55.37	56.32	56.84	57.65	57.01	57.52	57.81	57.97	57.01	57.92	58.75	58.98	56.55	57.58	58.17
Consumption (million barrels per day)	) (c)														
OECD	45.73	44.75	45.81	46.77	46.31	45.06	45.90	46.49	46.14	45.08	45.89	46.46	45.77	45.94	45.90
U.S. (50 States)	18.81	18.71	19.16	19.45	19.17	19.17	19.49	19.53	19.13	19.30	19.59	19.62	19.03	19.34	19.41
U.S. Territories	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.39	0.39	0.39	0.39	0.34	0.36	0.39
Canada	2.43	2.35	2.45	2.37	2.38	2.32	2.43	2.41	2.38	2.32	2.43	2.41	2.40	2.38	2.38
Europe	12.99	13.37	13.87	13.56	13.33	13.06	13.50	13.46	13.22	12.96	13.40	13.35	13.45	13.34	13.24
Japan		3.87	3.88	4.54	4.63	3.90	3.93	4.30	4.57	3.84	3.87	4.24	4.32	4.19	4.13
Other OECD	6.14	6.11	6.11	6.51	6.43	6.25	6.19	6.43	6.45	6.26	6.21	6.45	6.22	6.32	6.34
Non-OECD	45.32	46.65	47.04	46.50	45.96	47.54	47.90	47.32	47.02	48.65	49.01	48.41	46.38	47.19	48.28
Eurasia	4.82	4.76	4.98	4.96	4.61	4.55	4.82	4.80	4.53	4.47	4.73	4.71	4.88	4.70	4.61
Europe	0.71	0.71	0.74	0.73	0.72	0.72	0.74	0.74	0.73	0.73	0.75	0.75	0.72	0.73	0.74
China	10.28	10.85	10.80	10.76	10.60	11.18	11.13	11.09	10.93	11.53	11.48	11.43	10.67	11.00	11.34
Other Asia	11.65	11.87	11.43	11.74	11.86	12.08	11.63	11.95	12.19	12.41	11.95	12.27	11.67	11.88	12.20
Other Non-OECD	17.86	18.46	19.11	18.31	18.17	19.01	19.57	18.75	18.65	19.52	20.11	19.25	18.44	18.88	19.38
Total World Consumption	91.05	91.40	92.85	93.27	92.28	92.60	93.80	93.81	93.17	93.73	94.91	94.88	92.15	93.13	94.17
Inventory Net Withdrawals (million ba	rrels per d	ay)													
U.S. (50 States)	0.09	-0.67	-0.23	-0.23	-0.34	-0.49	-0.08	0.54	0.14	-0.32	-0.05	0.51	-0.26	-0.09	0.07
Other OECD	-0.30	-0.03	-0.49	-0.32	-0.30	-0.36	-0.23	-0.38	-0.03	-0.02	-0.03	-0.35	-0.29	-0.32	-0.11
Other Stock Draws and Balance	-0.49	-0.30	0.08	-0.55	-0.52	-0.66	-0.41	-0.66	-0.05	-0.03	-0.05	-0.63	-0.31	-0.56	-0.19
Total Stock Draw	-0.69	-0.99	-0.64	-1.10	-1.16	-1.51	-0.71	-0.50	0.06	-0.37	-0.12	-0.47	-0.86	-0.97	-0.23
End-of-period Inventories (million bar	rels)														
U.S. Commercial Inventory	1,057	1,123	1,144	1,165	1,196	1,240	1,247	1,198	1,186	1,215	1,219	1,172	1,165	1,198	1,172
OECD Commercial Inventory	2,569	2,637	2,703	2,754	2,812	2,889	2,917	2,902	2,892	2,923	2,929	2,915	2,754	2,902	2,915

<sup>- =</sup> no data available

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

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.

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

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

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,

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

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

 $<sup>\</sup>begin{tabular}{ll} \textbf{(b) Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.} \end{tabular}$ 

<sup>(</sup>c) Consumption of petroleum by the OECD countries is synonymous with "petroleum product supplied," defined in the glossary of the EIAPetroleum 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		tlook - N	larch 201										
	4-4	201		441-	4-4	20		441-	4-4	20		441-	2044	Year	2046
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
North America	20.41	21.03	21.36	21.89	21.89	22.02	22.12	22.43	22.10	22.43	22.77	23.18	21.18	22.12	22.62
Canada	4.43	4.28	4.33	4.52	4.31	4.30	4.45	4.69	4.49	4.54	4.75	4.82	4.39	4.44	4.65
Mexico	2.88	2.86	2.78	2.74	2.80	2.77	2.74	2.72	2.67	2.65	2.62	2.60	2.81	2.76	2.63
United States	13.10	13.90	14.25	14.63	14.78	14.95	14.92	15.03	14.94	15.24	15.40	15.75	13.98	14.92	15.34
Central and South America	4.54	5.17	5.56	5.38	4.89	5.49	5.78	5.57	5.04	5.65	6.00	5.81	5.16	5.44	5.63
Argentina	0.70	0.71	0.73	0.71	0.71	0.72	0.74	0.72	0.71	0.73	0.75	0.73	0.71	0.72	0.73
Brazil	2.34	2.98	3.32	3.15	2.67	3.29	3.53	3.33	2.80	3.43	3.73	3.55	2.95	3.20	3.38
Colombia	1.03	0.99	1.02	1.03	1.02	0.99	1.01	1.03	1.02	0.98	1.01	1.02	1.02	1.01	1.01
Other Central and S. America	0.48	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.51	0.51	0.50	0.49	0.50	0.50
Europe	4.03	3.79	3.69	3.74	3.67	3.56	3.48	3.57	3.51	3.44	3.42	3.45	3.81	3.57	3.46
Norway	1.94	1.78	1.86	1.77	1.82	1.79	1.77	1.85	1.82	1.80	1.82	1.83	1.84	1.81	1.82
United Kingdom (offshore)	0.93	0.85	0.66	0.77	0.67	0.62	0.57	0.58	0.56	0.51	0.46	0.47	0.80	0.61	0.50
Other North Sea	0.18	0.17	0.19	0.21	0.20	0.18	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.18	0.18
Eurasia	13.91	13.85	13.87	14.03	14.06	13.89	13.83	13.78	13.74	13.72	13.76	13.75	13.91	13.89	13.74
Azerbaijan	0.85	0.86	0.88	0.84	0.86	0.87	0.88	0.88	0.88	0.88	0.87	0.87	0.86	0.87	0.87
Kazakhstan	1.73	1.66	1.71	1.78	1.76	1.73	1.70	1.70	1.71	1.72	1.72	1.75	1.72	1.72	1.72
Russia	10.86	10.83	10.79	10.93	10.92	10.80	10.76	10.71	10.67	10.64	10.68	10.64	10.85	10.80	10.66
Turkmenistan	0.27	0.28	0.28	0.26	0.27	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Other Eurasia	0.20	0.21	0.21	0.21	0.24	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.21
Middle East	1.20	1.20	1.20	1.18	1.18	1.18	1.18	1.18	1.20	1.19	1.25	1.24	1.19	1.18	1.22
Oman	0.96	0.96	0.96	0.95	0.96	0.96	0.97	0.97	0.97	0.98	1.03	1.03	0.96	0.97	1.00
Syria	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Yemen	0.14	0.13	0.14	0.13	0.12	0.11	0.11	0.11	0.12	0.11	0.11	0.11	0.13	0.11	0.11
Asia and Oceania	8.97	8.99	8.88	9.14	9.10	9.18	9.22	9.22	9.23	9.28	9.33	9.33	8.99	9.18	9.29
Australia	0.45	0.46	0.48	0.47	0.47	0.49	0.50	0.47	0.49	0.49	0.51	0.50	0.47	0.48	0.50
China	4.50	4.53	4.46	4.61	4.52	4.55	4.56	4.56	4.55	4.58	4.58	4.59	4.53	4.55	4.58
India	0.98	0.98	0.96	0.99	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.99	1.00
Indonesia	0.91	0.91	0.90	0.89	0.92	0.92	0.93	0.94	0.94	0.95	0.95	0.96	0.90	0.93	0.95
Malaysia	0.69	0.69	0.66	0.75	0.71	0.73	0.75	0.76	0.75	0.76	0.77	0.78	0.70	0.74	0.76
Vietnam	0.33	0.32	0.31	0.30	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.32	0.34	0.34
Africa	2.31	2.30	2.29	2.29	2.22	2.21	2.20	2.21	2.19	2.19	2.22	2.23	2.29	2.21	2.21
Egypt	0.67	0.67	0.66	0.65	0.64	0.63	0.62	0.61	0.61	0.60	0.59	0.58	0.66	0.63	0.60
Equatorial Guinea	0.27	0.27	0.27	0.27	0.24	0.24	0.24	0.24	0.21	0.21	0.21	0.21	0.27	0.24	0.21
Gabon	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.22	0.22	0.22	0.22	0.24	0.24	0.22
Sudan	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.25	0.25
Total non-OPEC liquids	55.37	56.32	56.84	57.65	57.01	57.52	57.81	57.97	57.01	57.92	58.75	58.98	56.55	57.58	58.17
OPEC non orudo liquido	6.36	6.37	6.38	6.41	6 20	6. <i>4</i> 2	6.45	6.40	6.44	6.46	6.49	6.52	6.38	6.11	6.48
OPEC non-crude liquids					6.39			6.48						6.44	
Non-OPEC + OPEC non-crude	61.73	62.69	63.22	64.05	63.40	63.94	64.26	64.45	63.45	64.38	65.24	65.50	62.93	64.02	64.65
Unplanned non-OPEC Production Outages	0.66	0.67	0.60	0.57	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.62	n/a	n/a

<sup>- =</sup> 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.

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.

Sudan production represents total production from both north and south.

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

		20	14				)15			20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Crude Oil															
Algeria	1.15	1.15	1.15	1.13	-	-	-	-	-	-	-	-	1.15	-	-
Angola	1.63	1.63	1.72	1.73	-	-	-	-	-	-	-	-	1.68	-	-
Ecudaor	0.55	0.56	0.56	0.56	-	-	-	-	-	-	-	-	0.56	-	-
Iran	2.80	2.80	2.80	2.80	-	-	-	-	-	-	-	-	2.80	-	-
Iraq	3.26	3.29	3.28	3.53	-	-	-	-	-	-	-	-	3.34	-	-
Kuwait	2.60	2.60	2.60	2.48	-	-	-	-	-	-	-	-	2.57	-	-
Libya	0.38	0.23	0.58	0.69	-	-	-	-	-	-	-	-	0.47	-	-
Nigeria	2.00	1.97	2.07	1.98	-	-	-	-	-	-	-	-	2.00	-	-
Qatar	0.74	0.73	0.72	0.68	-	-	-	-	-	-	-	-	0.72	-	-
Saudi Arabia	9.80	9.65	9.70	9.63	-	-	-	-	-	-	-	-	9.70	-	-
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	30.01	29.70	30.28	30.32	30.04	30.16	30.25	29.87	29.66	29.72	29.78	29.85	30.08	30.08	29.75
Other Liquids	6.36	6.37	6.38	6.41	6.39	6.42	6.45	6.48	6.44	6.46	6.49	6.52	6.38	6.44	6.48
Total OPEC Supply	36.37	36.08	36.66	36.73	36.44	36.58	36.70	36.34	36.09	36.19	36.28	36.37	36.46	36.52	36.23
Crude Oil Production Capacity															
Africa	5.15	4.97	5.51	5.54	5.22	5.20	5.28	5.38	5.42	5.43	5.45	5.46	5.29	5.27	5.44
South America	2.95	2.95	2.95	2.95	2.96	2.96	2.96	2.96	2.87	2.88	2.87	2.88	2.95	2.96	2.87
Middle East	23.93	23.88	23.86	23.82	23.82	23.98	24.06	24.03	23.94	23.99	24.04	24.08	23.87	23.97	24.01
OPEC Total	32.02	31.80	32.32	32.32	32.00	32.14	32.30	32.37	32.23	32.30	32.36	32.42	32.11	32.20	32.33
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	2.01	2.09	2.04	1.98	1.95	1.98	2.05	2.50	2.57	2.57	2.58	2.58	2.03	2.12	2.57
OPEC Total	2.01	2.09	2.04	2.00	1.95	1.98	2.05	2.50	2.57	2.57	2.58	2.58	2.04	2.12	2.57
Unplanned OPEC Production Outages	2.32	2.57	2.25	2.40	n/a	2.39	n/a	n/a							

<sup>- =</sup> 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 Fast)

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.

 $\textbf{Projections:} \ \mathsf{EIA} \ \mathsf{Regional} \ \mathsf{Short}\text{-}\mathsf{Term} \ \mathsf{Energy} \ \mathsf{Model}.$ 

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

U.S. Energy Information Administration   S	short-Ter		,	ok - Marc	cn 2015								1		
	Q1	20 Q2		Q4	Q1	Q2	15 Q3	Q4	Q1	20 Q2	16 Q3	Q4	2014	2015	2016
_	ŲΙ	Ų2	Q3	Q4	ŲΙ	Q2	ųз	Q4	ŲΙ	Ų2	ųз	Q4	2014	2015	2016
North America	. 23.20	23.04	23.57	23.91	23.54	23.49	23.89	23.92	23.48	23.60	23.97	24.00	23.43	23.71	23.76
Canada		2.35	2.45	2.37	2.38	2.32	2.43	2.41	2.38	2.32	2.43	2.41	2.40	2.38	2.38
Mexico		1.97	1.96	2.08	1.97	1.99	1.96	1.97	1.95	1.97	1.94	1.95	1.99	1.97	1.95
United States		18.71	19.16	19.45	19.17	19.17	19.49	19.53	19.13	19.30	19.59	19.62	19.03	19.34	19.41
Central and South America	. 7.05	7.30	7.33	7.36	7.16	7.43	7.47	7.45	7.26	7.53	7.57	7.55	7.26	7.38	7.48
Brazil	3.03	3.14	3.21	3.20	3.09	3.21	3.28	3.26	3.15	3.27	3.34	3.33	3.15	3.21	3.27
Europe	13.70	14.08	14.60	14.29	14.05	13.78	14.24	14.20	13.95	13.70	14.15	14.10	14.17	14.07	13.98
Eurasia		4.79	5.01	4.99	4.65	4.58	4.85	4.83	4.56	4.50	4.76	4.75	4.91	4.73	4.64
Russia	3.49	3.45	3.65	3.63	3.29	3.25	3.44	3.42	3.14	3.10	3.28	3.26	3.56	3.35	3.20
Middle East	7.98	8.33	8.98	8.23	8.16	8.75	9.32	8.47	8.44	9.05	9.66	8.77	8.38	8.68	8.98
Asia and Oceania	30.54	30.14	29.66	30.79	30.87	30.72	30.22	31.12	31.49	31.38	30.85	31.76	30.28	30.73	31.37
China	10.28	10.85	10.80	10.76	10.60	11.18	11.13	11.09	10.93	11.53	11. <del>4</del> 8	11.43	10.67	11.00	11.34
Japan		3.87	3.88	4.54	4.63	3.90	3.93	4.30	4.57	3.84	3.87	4.24	4.32	4.19	4.13
India	3.73	3.72	3.41	3.68	3.88	3.86	3.54	3.83	4.03	4.01	3.68	3.98	3.63	3.77	3.92
Africa	3.73	3.73	3.68	3.70	3.86	3.85	3.81	3.83	3.99	3.98	3.94	3.96	3.71	3.83	3.96
Total OECD Liquid Fuels Consumption	45.73	44.75	45.81	46.77	46.31	45.06	45.90	46.49	46.14	45.08	45.89	46.46	45.77	45.94	45.90
Total non-OECD Liquid Fuels Consumption	45.32	46.65	47.04	46.50	45.96	47.54	47.90	47.32	47.02	48.65	49.01	48.41	46.38	47.19	48.28
Total World Liquid Fuels Consumption	91.05	91.40	92.85	93.27	92.28	92.60	93.80	93.81	93.17	93.73	94.91	94.88	92.15	93.13	94.17
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100		114.0	114.8	115.6	116.1	117.0	117.8	118.6	119.4	120.5	121.5	122.6	114.4	117.4	121.0
Percent change from prior year		2.8	2.7	2.6	2.5	2.6	2.6	2.6	2.9	3.0	3.1	3.3	2.7	2.6	3.1
OECD Index, 2010 Q1 = 100		107.8	108.5	109.2	109.7	110.3	110.9	111.5	112.1	112.8	113.5	114.3	108.2	110.6	113.2
Percent change from prior year		1.9	1.8	1.9	2.3	2.3	2.2	2.1	2.1	2.2	2.4	2.6	1.9	2.2	2.3
Non-OECD Index, 2010 Q1 = 100		121.9	122.9	123.8	124.1	125.5	126.7	127.7	128.9	130.4	131.9	133.2	122.3	126.0	131.1
Percent change from prior year	. 4.0	3.8	3.8	3.4	2.9	3.0	3.1	3.2	3.8	4.0	4.1	4.3	3.7	3.0	4.0
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100		108.08	109.21	113.85	119.67	122.05	122.85	123.26	123.07	122.89	122.56	122.12	109.86	121.96	122.66
Percent change from prior year	. 3.8	2.1	1.9	6.8	10.5	12.9	12.5	8.3	2.8	0.7	-0.2	-0.9	3.7	11.0	0.6

<sup>- =</sup> no data available

OECD = Organisation for Economic Co-operation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Finland,

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

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

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.

 $\label{thm:projections:equal} \textbf{Projections:} \ \mathsf{EIA} \ \mathsf{Regional} \ \mathsf{Short-Term} \ \mathsf{Energy} \ \mathsf{Model}.$ 

<sup>(</sup>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.

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

U.S. Energy Information Administration   Si	nort-Term	201		- Marci	12013	201	15			20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	8.11	8.59	8.79	9.11	9.35	9.44	9.27	9.34	9.35	9.45	9.44	9.70	8.65	9.35	9.49
Alaska		0.52	0.43	0.51	0.50	0.49	0.42	0.49	0.47	0.46	0.42	0.47	0.50	0.48	0.45
Federal Gulf of Mexico (b)		1.41	1.43	1.41	1.50	1.57	1.54	1.66	1.71	1.70	1.58	1.66	1.39	1.57	1.66
Lower 48 States (excl GOM)		6.66	6.93	7.18	7.35	7.37	7.31	7.19	7.17	7.29	7.45	7.58	6.76	7.30	7.37
Crude Oil Net Imports (c)		6.94	7.15	6.76	6.68	6.52	6.65	6.28	6.18	6.30	6.59	6.04	6.99	6.53	6.27
SPR Net Withdrawals		0.05	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
Commercial Inventory Net Withdrawals	-0.30	0.00	0.25	-0.36	-0.82	-0.03	0.22	0.20	-0.23	0.12	0.25	0.13	-0.10	-0.10	0.07
Crude Oil Adjustment (d)	0.26	0.30	0.16	0.43	0.16	0.19	0.27	0.11	0.18	0.15	0.22	0.08	0.29	0.18	0.16
Total Crude Oil Input to Refineries		15.88	16.35	15.95	15.38	16.12	16.41	15.92	15.47	16.02	16.50	15.95	15.84	15.96	15.98
Other Supply	10.10	10.00	10.00	10.00	70.00	10.12	10.11	10.02	10.11	10.02	70.00	10.00	10.04	70.00	70.00
Refinery Processing Gain	1.07	1.08	1.09	1.10	1.07	1.07	1.09	1.07	1.05	1.06	1.10	1.07	1.09	1.07	1.07
Natural Gas Plant Liquids Production	2.71	2.95	3.09	3.11	3.11	3.19	3.29	3.34	3.30	3.46	3.57	3.69	2.96	3.23	3.51
Renewables and Oxygenate Production (e)		1.06	1.06	1.07	1.06	1.05	1.07	1.07	1.03	1.05	1.07	1.07	1.05	1.06	1.06
Fuel Ethanol Production		0.94	0.93	0.96	0.94	0.94	0.95	0.95	0.92	0.94	0.96	0.96	0.94	0.95	0.94
Petroleum Products Adjustment (f)	0.20	0.94	0.93	0.96	0.94	0.94	0.93	0.93	0.92	0.94	0.90	0.90	0.94	0.93	0.94
Product Net Imports (c)		-1.76	-2.17	-2.14	-2.12	-2.01	-2.28	-2.42	-2.30	-2.07	-2.58	-2.75	-1.95	-2.21	-2.42
Hydrocarbon Gas Liquids		-0.58	-0.66	-0.64	-0.75	-0.76	-0.82	-0.85	-0.91	-0.94	-1.03	-1.14	-0.56	-0.79	-1.01
Unfinished Oils		0.49	0.32	0.35	0.40	0.50	0.45	0.38	0.38	0.51	0.47	0.40	0.40	0.43	0.44
Other HC/Oxygenates		-0.09	-0.08	-0.09	-0.11	-0.10	-0.10	-0.10	-0.10	-0.10	-0.11	-0.10	-0.09	-0.10	-0.10
Motor Gasoline Blend Comp.		0.58	0.45	0.42	0.39	0.60	0.45	0.41	0.39	0.61	0.45	0.37	0.44	0.46	0.45
Finished Motor Gasoline		-0.36	-0.34	-0.47	-0.47	-0.40	-0.28	-0.39	-0.40	-0.38	-0.40	-0.45	-0.39	-0.39	-0.41
Jet Fuel		-0.02	-0.09	-0.09	-0.05	-0.05	-0.08	-0.08	-0.06	-0.03	-0.08	-0.08	-0.07	-0.07	-0.06
Distillate Fuel Oil	-0.67	-1.01	-1.08	-0.92	-0.80	-0.95	-1.04	-0.99	-0.79	-0.88	-1.02	-0.96	-0.92	-0.95	-0.91
Residual Fuel Oil		-0.18	-0.18	-0.16	-0.19	-0.25	-0.26	-0.20	-0.24	-0.26	-0.26	-0.21	-0.19	-0.23	-0.24
Other Oils (g)		-0.58	-0.51	-0.53	-0.54	-0.61	-0.61	-0.61	-0.57	-0.58	-0.61	-0.59	-0.57	-0.59	-0.58
Product Inventory Net Withdrawals		-0.72	-0.48	0.12	0.48	<i>-0.4</i> 5	-0.30	0.34	0.36	-0.44	-0.29	0.38	-0.17	0.01	0.00
Total Supply	18.84	18.71	19.16	19.45	19.12	19.17	19.49	19.53	19.13	19.30	19.59	19.62	19.04	19.33	19.41
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids		2.06	2.26	2.60	2.80	2.28	2.40	2.76	2.81	2.39	2.50	2.84	2.40	2.56	2.64
Unfinished Oils	0.08	0.02	-0.06	-0.04	0.00	0.01	0.02	0.04	0.00	0.01	0.02	0.04	0.00	0.02	0.02
Motor Gasoline	8.52	9.01	9.10	9.05	8.72	9.11	9.18	8.98	8.66	9.07	9.12	8.92	8.92	9.00	8.94
Fuel Ethanol blended into Motor Gasoline	0.84	0.89	0.89	0.90	0.85	0.88	0.89	0.88	0.82	0.88	0.89	0.88	0.88	0.88	0.87
Jet Fuel	1.40	1.47	1.51	1.50	1.46	1.50	1.50	1.44	1.41	1.51	1.52	1.46	1.47	1.48	1.47
Distillate Fuel Oil	4.17	3.93	3.86	4.09	4.16	4.05	4.00	4.15	4.19	4.11	4.05	4.21	4.01	4.09	4.14
Residual Fuel Oil	0.23	0.26	0.24	0.30	0.18	0.21	0.20	0.21	0.21	0.19	0.19	0.20	0.26	0.20	0.20
Other Oils (g)	1.75	1.96	2.25	1.96	1.85	2.03	2.18	1.94	1.85	2.02	2.19	1.96	1.98	2.00	2.01
Total Consumption	18.81	18.71	19.16	19.45	19.17	19.17	19.49	19.53	19.13	19.30	19.59	19.62	19.03	19.34	19.41
Total Petroleum and Other Liquids Net Imports	. 5.38	5.18	4.98	4.62	4.56	4.51	4.37	3.86	3.88	4.23	4.01	3.29	5.04	4.32	3.85
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	383.7	383.9	360.9	393.7	467.3	470.2	449.5	431.5	452.3	441.8	419.2	407.5	393.7	431.5	407.5
Hydrocarbon Gas Liquids	98.1	164.1	209.8	175.4	133.7	182.2	214.5	172.9	136.0	181.9	211.7	168.4	175.4	172.9	168.4
Unfinished Oils	91.3	87.3	84.5	78.5	89.9	87.5	85.5	80.3	90.2	87.7	85.2	79.9	78.5	80.3	79.9
Other HC/Oxygenates	22.6	23.0	22.4	23.2	26.4	25.0	24.1	24.5	26.4	25.0	24.3	24.7	23.2	24.5	24.7
Total Motor Gasoline		218.8	212.5	238.5	229.4	221.6	217.6	230.4	228.3	222.3	220.0	231.5	238.5	230.4	231.5
Finished Motor Gasoline		28.9	28.8	30.6	30.0	27.8	27.0	28.8	27.4	27.2	26.3	27.8	30.6	28.8	27.8
Motor Gasoline Blend Comp		190.0	183.7	207.9	199.4	193.8	190.6	201.5	200.9	195.1	193.7	203.7	207.9	201.5	203.7
Jet Fuel		36.3	39.6	37.5	38.6	39.5	41.4	39.0	38.8	39.7	41.6	38.6	37.5	39.0	38.6
Distillate Fuel Oil	115.3	121.7	131.3	136.1	117.9	123.4	132.0	135.0	121.1	125.9	134.7	137.6	136.1	135.0	137.6
Residual Fuel Oil	36.4	36.7	36.6	33.7	37.0	36.6	35.2	35.6	36.3	36.0	34.5	35.1	33.7	35.6	35.1
Other Oils (q)		50.9	46.4	49.0	55.9	54.3	47.6	48.8	56.2	54.6	47.6	48.9	49.0	48.8	48.9
Total Commercial Inventory		1,123	1,144	1,165	1,196	1,240	1,247	1,198	1,186	1,215	1,219	1,172	1,165	1,198	1,172
Crude Oil in SPR	696	691	691	691	691	691	691	691	691	691	691	691	691	691	691
5.445 OII III OI IX	030	331	031	031	031	331	001	031	001	031	031	031	031	001	031

<sup>- =</sup> 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.

<sup>(</sup>a) Includes lease condensate.

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

<sup>(</sup>c) Net imports equals gross imports minus gross exports.

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

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

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

<sup>(</sup>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-I	erm Ene <b>20</b> 1		look - Ma	arch 201	5 <b>201</b>	E			201	6			Year	
	1st	201 2nd	4 3rd	4th	1st	201 2nd	3rd	4th	1st	201 2nd	3rd	4th	2014	2015	2016
HGL Production	101	Ziid	o.u	7411	100	Liiu	ora	74.11	101	2110	o.u	7611	2014	20.0	
Natural Gas Processing Plants															
Ethane	1.03	1.09	1.09	1.08	1.14	1.17	1.20	1.25	1.22	1.27	1.33	1.42	1.07	1.19	1.31
Propane	0.87	0.95	1.02	1.04	1.04	1.05	1.08	1.10	1.09	1.16	1.17	1.20	0.97	1.06	1.16
Butanes	0.48	0.52	0.56	0.58	0.56	0.57	0.59	0.60	0.60	0.62	0.64	0.65	0.54	0.58	0.63
Natural Gasoline (Pentanes Plus)	0.33	0.39	0.42	0.41	0.38	0.40	0.42	0.40	0.39	0.42	0.43	0.41	0.39	0.40	0.41
Refinery and Blender Net Production															
Ethane/Ethylene	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Propane/Propylene	0.57	0.60	0.59	0.59	0.57	0.59	0.59	0.58	0.58	0.59	0.59	0.59	0.59	0.58	0.59
Butanes/Butylenes	-0.04	0.27	0.21	-0.18	-0.05	0.25	0.18	-0.15	-0.03	0.25	0.18	-0.15	0.07	0.06	0.06
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	-0.02
HGL Net Imports															
Ethane	-0.01	-0.02	-0.05	-0.06	-0.08	-0.09	-0.11	-0.11	-0.11	-0.12	-0.18	-0.22	-0.04	-0.10	-0.16
Propane/Propylene	-0.17	-0.34	-0.36	-0.39	-0.39	-0.41	-0.45	-0.49	-0.50	-0.48	-0.51	-0.57	-0.32	-0.43	-0.52
Butanes/Butylenes	-0.03	-0.06	-0.09	-0.03	-0.10	-0.09	-0.09	-0.08	-0.12	-0.17	-0.16	-0.15	-0.05	-0.09	-0.15
Natural Gasoline (Pentanes Plus)	-0.15	-0.16	-0.16	-0.15	-0.17	-0.16	-0.17	-0.17	-0.18	-0.17	-0.18	-0.19	-0.16	-0.17	-0.18
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.37	0.28	0.30	0.48	0.37	0.29	0.29	0.42	0.35	0.29	0.30	0.42	0.36	0.34	0.34
Natural Gasoline (Pentanes Plus)	0.14	0.15	0.16	0.16	0.17	0.18	0.18	0.19	0.17	0.17	0.18	0.18	0.15	0.18	0.18
HGL Consumption															
Ethane/Ethylene	1.01	0.97	1.08	1.05	1.06	1.03	1.12	1.16	1.13	1.10	1.18	1.21	1.03	1.09	1.16
Propane/Propylene	1.46	0.89	0.97	1.29	1.50	1.01	1.04	1.34	1.47	1.06	1.10	1.39	1.15	1.22	1.25
Butanes/Butylenes	0.16	0.17	0.16	0.22	0.20	0.20	0.19	0.22	0.19	0.19	0.17	0.21	0.18	0.20	0.19
Natural Gasoline (Pentanes Plus)	0.03	0.03	0.05	0.05	0.04	0.03	0.05	0.05	0.03	0.04	0.05	0.04	0.04	0.04	0.04
HGL Inventories (million barrels)															
Ethane/Ethylene	29.90	37.06	38.70	36.37	34.41	38.16	37.97	37.35	36.10	39.80	39.59	39.19	35.53	36.98	38.68
Propane/Propylene	28.32	57.12	82.37	77.95	52.83	73.18	89.08	75.09	47.96	66.90	81.03	65.34	77.95	75.09	65.34
Butanes/Butylenes	25.95	52.24	72.22	41.96	26.80	49.73	67.00	41.75	33.28	54.54	70.91	45.38	41.96	41.75	45.38
Natural Gasoline (Pentanes Plus)	13.04	14.82	17.92	20.59	19.15	20.14	20.93	19.14	18.39	19.84	20.63	18.96	20.59	19.14	18.96
Definery and Blander Net Innuts															
Refinery and Blender Net Inputs	45.40	45.00	40.05	45.05	45.00	40.40	40.44	45.00	45 47	40.00	40.50	45.05	45.04	45.00	45.00
Crude OII		15.88	16.35	15.95	15.38	16.12	16.41	15.92	15.47	16.02	16.50	15.95	15.84	15.96	15.98
Hydrocarbon Gas Liquids		0.43	0.46	0.64	0.53	0.46	0.47	0.61	0.52	0.46	0.48	0.60	0.51	0.52	0.51
Other Hydrocarbons/Oxygenates		1.16	1.16	1.14	1.09	1.13	1.14	1.12	1.08	1.13	1.15	1.13	1.14	1.12	1.12
Unfinished Oils		0.51	0.41	0.45	0.27	0.52	0.46	0.40	0.27	0.53	0.47	0.42	0.40	0.41	0.42
Motor Gasoline Blend Components	0.71	1.06	0.83	0.32	0.66	0.84	0.65	0.47	0.58	0.85	0.63	0.44	0.73	0.65	0.62
Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs	17.73	19.04	19.21	18.51	17.94	19.07	19.13	18.52	17.93	18.98	19.23	18.54	18.62	18.67	18.67
Refinery Processing Gain	1.07	1.08	1.09	1.10	1.07	1.07	1.09	1.07	1.05	1.06	1.10	1.07	1.09	1.07	1.07
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.54	0.87	0.81	0.41	0.53	0.86	0.77	0.44	0.55	0.86	0.78	0.44	0.66	0.65	0.66
Finished Motor Gasoline		9.82	9.74	9.68	9.36	9.65	9.61	9.55	9.24	9.61	9.67	9.54	9.63	9.54	9.52
Jet Fuel		1.49	1.64	1.57	1.53	1.55	1.60	1.50	1.47	1.55	1.61	1.51	1.54	1.55	1.54
												-	-		
Distillate Fuel		4.96	4.99	5.00	4.71	5.01	5.08	5.13	4.77	4.99	5.11	5.15	4.90	4.98	5.00
Residual Fuel		0.44	0.42	0.43	0.41	0.45	0.44	0.42	0.46	0.45	0.43	0.41	0.44	0.43	0.44
Other Oils (a)		2.52	2.71	2.52	2.46	2.62	2.72	2.56	2.50	2.58	2.72	2.56	2.55	2.59	2.59
Total Refinery and Blender Net Production	18.80	20.11	20.30	19.61	19.00	20.14	20.22	19.59	18.98	20.04	20.33	19.61	19.71	19.74	19.74
Refinery Distillation Inputs	15.51	16.17	16.64	16.25	15.72	16.44	16.75	16.29	15.80	16.33	16.83	16.32	16.15	16.30	16.32
Refinery Operable Distillation Capacity	17.93	17.89	17.81	17.80	17.80	17.79	17.79	17.79	17.79	17.79	17.79	17.79	17.86	17.80	17.79
Refinery Distillation Utilization Factor	0.87	0.90	0.93	0.91	0.88	0.92	0.94	0.92	0.89	0.92	0.95	0.92	0.90	0.92	0.92
	0.07			V.V.	0.00	0.02	0.07	0.02	0.00	0.02	0.00	0.02	5.50	0.02	

<sup>- =</sup> no data available

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

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

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

<sup>(</sup>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

C.C. Energy Information / turning at at		20		, Galleel		20	15			20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Prices (cents per gallon)				•									•		
Refiner Wholesale Price	272	298	276	203	156	173	173	170	190	216	213	189	262	168	202
Gasoline Regular Grade Retail Prices In	cluding Ta	axes													
PADD 1	344	365	348	292	227	239	239	244	261	285	282	265	337	237	273
PADD 2	337	365	343	278	215	240	240	235	252	285	282	254	331	233	269
PADD 3	318	345	329	265	203	223	222	220	237	266	262	238	314	217	251
PADD 4	326	350	363	297	203	234	241	238	241	277	284	259	335	229	265
PADD 5	362	401	386	315	269	283	274	270	283	316	314	290	366	274	301
U.S. Average	340	368	350	288	226	244	243	242	258	287	284	261	336	239	273
Gasoline All Grades Including Taxes	348	375	358	296	234	252	251	250	266	295	293	270	344	247	281
End-of-period Inventories (million barrels	)														
Total Gasoline Inventories	,														
PADD 1	57.7	63.1	55.6	61.1	63.0	62.9	56.2	59.3	60.6	62.1	57.9	60.1	61.1	59.3	60.1
PADD 2	49.0	49.7	47.2	52.4	51.3	48.7	49.2	50.5	50.8	48.3	49.1	49.9	52.4	50.5	49.9
PADD 3	77.7	72.8	74.9	83.5	78.6	75.6	77.2	81.1	79.4	77.2	78.1	82.1	83.5	81.1	82.1
PADD 4	6.5	6.1	7.4	7.9	7.2	6.6	6.9	7.7	7.2	6.8	6.9	7.7	7.9	7.7	7.7
PADD 5	30.0	27.1	27.3	33.6	29.3	27.9	28.2	31.8	30.3	27.9	28.0	31.7	33.6	31.8	31.7
U.S. Total	220.9	218.8	212.5	238.5	229.4	221.6	217.6	230.4	228.3	222.3	220.0	231.5	238.5	230.4	231.5
Finished Gasoline Inventories															
U.S. Total	34.3	28.9	28.8	30.6	30.0	27.8	27.0	28.8	27.4	27.2	26.3	27.8	30.6	28.8	27.8
Gasoline Blending Components Invento	ories														
U.S. Total	186.6	190.0	183.7	207.9	199.4	193.8	190.6	201.5	200.9	195.1	193.7	203.7	207.9	201.5	203.7

<sup>- =</sup> 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 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.

Prices are not adjusted for inflation.

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

		201	14			201	15			201	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (billion cubic feet per day)															
Total Marketed Production	71.74	73.55	75.72	77.65	77.76	78.32	78.53	78.93	79.70	79.73	79.86	80.54	74.68	78.39	79.96
Alaska	0.99	0.93	0.85	0.98	1.00	0.85	0.77	0.93	0.97	0.82	0.75	0.91	0.94	0.89	0.86
Federal GOM (a)	3.29	3.42	3.41	3.38	3.22	3.16	3.18	3.05	3.10	3.05	2.87	2.84	3.37	3.15	2.97
Lower 48 States (excl GOM)	67.47	69.21	71.46	73.28	73.54	74.31	74.58	74.95	75.63	75.85	76.24	76.79	70.37	74.35	76.13
Total Dry Gas Production	67.84	69.33	71.30	73.18	73.30	73.84	74.04	74.41	75.14	75.16	75.28	75.93	70.43	73.90	75.38
LNG Gross Imports	0.17	0.17	0.15	0.16	0.29	0.17	0.18	0.17	0.14	0.16	0.17	0.15	0.16	0.20	0.15
LNG Gross Exports	0.03	0.02	0.09	0.03	0.00	0.00	0.43	0.59	0.68	0.69	0.72	1.07	0.04	0.26	0.79
Pipeline Gross Imports	8.44	6.52	6.47	7.47	7.90	6.22	6.56	6.86	7.29	6.23	6.54	6.73	7.22	6.88	6.69
Pipeline Gross Exports	4.67	3.89	3.85	3.82	4.54	4.53	4.50	4.81	4.88	4.73	4.92	5.09	4.05	4.60	4.90
Supplemental Gaseous Fuels	0.17	0.16	0.13	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.15	0.16	0.17
Net Inventory Withdrawals	22.75	-12.71	-12.96	0.55	17.26	-11.19	-9.90	2.92	16.80	-10.74	-9.99	3.11	-0.69	-0.29	-0.22
Total Supply	94.67	59.56	61.15	77.67	94.37	64.67	66.10	79.13	93.96	65.56	66.52	79.92	73.18	76.00	76.47
Balancing Item (b)	0.47	1.61	0.58	-1.47	1.34	-0.24	-0.82	-1.28	-0.90	-0.10	0.37	-0.42	0.29	-0.26	-0.26
Total Primary Supply	95.14	61.17	61.74	76.20	95.71	64.43	65.28	77.85	93.06	65.46	66.90	79.51	73.48	75.74	76.21
Consumption (billion cubic feet per	day)											I			
Residential	28.70	7.46	3.69	15.98	26.84	7.03	3.70	16.12	24.68	6.99	3.68	15.96	13.89	13.36	12.81
Commercial	16.46	6.23	4.58	10.75	15.07	6.04	4.54	10.36	14.49	6.08	4.57	10.41	9.48	8.98	8.88
Industrial	22.96	20.03	19.66	21.32	24.03	21.37	21.01	23.05	24.33	21.69	21.55	23.75	20.98	22.36	22.83
Electric Power (c)	19.68	21.12	27.34	21.09	22.19	23.35	29.41	21.53	21.74	23.93	30.35	22.32	22.33	24.13	24.59
Lease and Plant Fuel	4.12	4.22	4.35	4.46	4.46	4.50	4.51	4.53	4.58	4.58	4.59	4.62	4.29	4.50	4.59
Pipeline and Distribution Use	3.14	2.01	2.03	2.51	3.02	2.05	2.03	2.16	3.16	2.09	2.07	2.35	2.42	2.31	2.42
Vehicle Use	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.09	0.09	0.10
Total Consumption	95.14	61.17	61.74	76.20	95.71	64.43	65.28	77.85	93.06	65.46	66.90	79.51	73.48	75.74	76.21
End-of-period Inventories (billion c	ubic feet)	)													
Working Gas Inventory	857	2,005	3,187	3,141	1,587	2,605	3,517	3,248	1,719	2,696	3,615	3,329	3,141	3,248	3,329
Producing Region (d)	358	691	953	1,070	644	927	1,100	1,097	701	989	1,172	1,156	1,070	1,097	1,156
East Consuming Region (d)	315	952	1,752	1,607	598	1,189	1,850	1,635	663	1,225	1,874	1,639	1,607	1,635	1,639
West Consuming Region (d)	184	362	483	464	345	489	566	515	354	482	569	534	464	515	534

<sup>- =</sup> no data available

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.

 $\textbf{Projections:} \ \mathsf{EIA} \ \mathsf{Regional} \ \mathsf{Short}\text{-}\mathsf{Term} \ \mathsf{Energy} \ \mathsf{Model}.$ 

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

<sup>(</sup>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.

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

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

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

LNG: liquefied natural gas.

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

O.S. Energy information	2014			lorgy or	201	15	1		201	16			Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Wholesale/Spot									1						
Henry Hub Spot Price	5.36	4.75	4.08	3.91	3.01	3.02	3.23	3.41	3.56	3.37	3.63	3.76	4.52	3.17	3.58
Residential															
New England	13.65	15.98	17.90	14.41	13.20	14.09	16.84	13.54	13.08	14.43	17.43	14.07	14.52	13.68	13.90
Middle Atlantic	10.71	13.04	17.25	11.15	9.77	12.52	17.25	11.90	10.87	13.49	17.96	12.41	11.58	11.10	12.13
E. N. Central	8.67	12.96	16.85	8.96	7.63	10.75	16.39	8.65	7.95	11.30	17.05	9.03	9.70	8.75	9.22
W. N. Central	9.10	11.73	18.17	9.83	7.90	10.45	16.86	9.23	8.22	11.06	17.47	9.59	10.09	9.10	9.50
S. Atlantic	11.34	16.37	22.98	12.85	10.75	15.67	21.95	12.83	11.43	16.37	22.64	13.17	13.03	12.55	13.23
E. S. Central	9.63	14.08	19.70	11.14	8.95	12.68	17.90	10.84	9.36	13.62	18.72	11.40	11.02	10.28	10.85
W. S. Central	8.53	14.22	20.25	11.62	7.90	12.64	18.17	10.62	8.09	13.26	18.85	11.00	10.83	9.95	10.40
Mountain	9.07	11.22	15.15	9.86	9.31	10.28	13.88	9.28	8.77	9.95	13.66	9.07	10.13	9.81	9.41
Pacific	10.97	11.66	12.41	11.25	10.16	9.88	10.75	9.75	9.49	10.03	11.18	9.98	11.37	10.05	9.94
U.S. Average	9.82	13.11	16.92	10.52	9.06	11.64	15.80	10.28	9.38	12.12	16.32	10.61	10.94	10.24	10.64
Commercial															
New England	11.35	12.82	11.74	11.36	11.04	10.16	10.27	10.48	11.09	10.75	10.72	10.89	11.64	10.69	10.95
Middle Atlantic	9.30	9.06	8.04	8.05	8.73	8.22	8.10	8.90	9.29	8.77	8.59	9.45	8.78	8.61	9.17
E. N. Central	8.02	9.96	10.18	7.71	7.45	8.39	8.99	7.51	7.74	8.91	9.64	8.07	8.33	7.70	8.15
W. N. Central	8.35	9.10	10.19	8.23	7.72	7.40	8.43	7.47	7.68	7.84	8.96	8.00	8.54	7.66	7.90
S. Atlantic	9.23	10.56	10.91	9.47	9.37	9.65	10.29	9.42	9.72	10.27	10.92	10.09	9.69	9.54	10.07
E. S. Central	8.90	10.71	11.17	9.58	8.77	9.10	9.67	9.07	9.11	9.79	10.54	9.82	9.57	9.00	9.57
W. S. Central	7.49	9.24	9.26	8.25	7.33	7.30	8.00	7.56	7.50	7.95	8.63	8.19	8.23	7.48	7.93
Mountain	7.81	8.74	9.90	8.47	8.30	7.69	8.71	7.89	7.66	7.40	8.77	8.04	8.40	8.11	7.84
Pacific	9.29	9.26	9.56	9.28	8.82	7.88	8.65	8.62	8.74	8.46	9.28	9.25	9.32	8.55	8.93
U.S. Average	8.66	9.64	9.69	8.51	8.33	8.25	8.81	8.30	8.51	8.72	9.37	8.85	8.87	8.36	8.74
Industrial															
New England	10.03	9.97	8.04	9.09	9.38	8.14	7.95	8.91	9.22	8.53	8.43	9.46	9.44	8.75	9.01
Middle Atlantic	9.28	8.87	8.15	7.97	8.36	7.21	7.63	8.28	8.41	7.65	8.04	8.69	8.78	8.06	8.30
E. N. Central	8.03	8.87	7.89	6.94	6.60	5.77	6.02	6.29	6.75	6.39	6.52	6.73	7.84	6.31	6.66
W. N. Central	7.34	6.28	5.91	6.38	5.65	4.81	4.95	5.42	5.60	4.84	5.02	5.53	6.57	5.25	5.29
S. Atlantic	6.91	6.42	5.90	5.99	5.42	4.86	5.17	5.50	5.72	5.39	5.61	5.97	6.33	5.25	5.68
E. S. Central	6.37	6.14	5.31	5.50	5.21	4.50	4.73	5.11	5.41	5.04	5.26	5.60	5.86	4.92	5.34
W. S. Central	5.15	4.91	4.52	4.26	3.42	3.14	3.43	3.55	3.71	3.53	3.89	3.97	4.71	3.39	3.78
Mountain	6.55	6.68	6.95	6.65	5.99	5.46	5.97	6.06	5.71	5.44	6.12	6.23	6.69	5.90	5.88
Pacific	7.84	7.63	7.70	7.54	6.71	5.79	6.25	6.53	6.46	6.21	6.69	7.09	7.68	6.36	6.62
U.S. Average	6.17	5.62	5.06	5.15	4.58	3.84	4.04	4.44	4.77	4.23	4.48	4.87	5.53	4.24	4.60

<sup>- =</sup> 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

U.S. Energy Information Administ	ialion			igy Out	IOOK - IVI	arch 201				20	10			Year	
	1st	201 2nd	3rd	4th	1st	201 2nd	3rd	4th	1st	20°	3rd	4th	2014	2015	2016
Supply (million short tons)	151	ZIIU	Siu	401	131	ZIIU	Jiu	4111	151	ZIIU	Jiu	401	2014	2013	2010
Production	245.2	245.8	255.3	250.3	233.6	229.2	242.3	237.7	243.1	225.1	244.9	238.4	996.7	942.9	951.5
	67.5	69.7	67.5	65.6	63.7	63.4	58.9	59.4	65.6	62.3	59.7	59.5	270.3	245.4	247.1
AppalachiaInterior	46.3	44.8	49.3	47.0	44.7	47.0	56.9 47.6	46.6	47.6	62.3 45.8	48.6	47.6	187.4	245.4 185.9	189.6
	131.4	131.4	49.5 138.5	137.7	44.7 125.2	47.0 118.8	135.7	131.7	129.8	45.6 117.1	136.6	131.3	538.9	511.5	514.7
Western															
Primary Inventory Withdrawals	-0.5	0.6	2.4	-1.5	-0.7	0.3	3.1	-1.6	-1.0	0.7	2.9	-1.6	0.9	1.1	1.0
Imports	2.4	3.5	3.2	2.7	2.4	2.5	3.3	2.9	2.2	2.4	3.3	2.9	11.9	11.0	10.8
Exports	27.7	24.6	22.7	22.3	20.9	21.9	18.5	19.1	18.7	21.7	19.4	21.1	97.3	80.4	80.9
Metallurgical Coal	16.9	15.8	15.2	15.2	14.6	12.5	9.8	10.4	11.9	12.1	10.4	11.8	63.0	47.3	46.1
Steam Coal	10.9	8.8	7.5	7.1	6.3	9.4	8.7	8.7	6.8	9.6	9.0	9.3	34.3	33.1	34.8
Total Primary Supply	219.4	225.4	238.2	229.2	214.4	210.1	230.1	219.9	225.6	206.5	231.6	218.5	912.1	874.6	882.3
Secondary Inventory Withdrawals	30.7	-14.9	8.4	-28.1	11.6	-8.9	16.7	-4.7	-1.5	-6.5	13.5	-5.2	-3.8	14.7	0.3
Waste Coal (a)	3.2	2.8	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	11.2	10.8	11.1
Total Supply	253.3	213.3	249.2	203.7	228.7	204.0	249.5	218.0	226.9	202.8	247.9	216.1	919.5	900.1	893.7
Consumption (million short tons)															
Coke Plants	4.8	5.1	5.2	5.2	4.6	4.6	5.5	5.5	4.7	4.7	5.6	5.5	20.4	20.2	20.6
Electric Power Sector (b)	231.3	196.0	231.2	193.0	209.5	188.7	233.4	201.4	210.5	187.4	231.7	199.3	851.4	833.0	828.9
Retail and Other Industry	12.0	10.9	11.0	11.1	11.6	10.7	10.6	11.1	11.7	10.7	10.7	11.2	45.0	43.9	44.2
Residential and Commercial	0.7	0.4	0.4	0.7	0.8	0.5	0.4	0.6	0.8	0.5	0.4	0.6	2.2	2.3	2.3
Other Industrial	11.3	10.5	10.6	10.4	10.8	10.2	10.2	10.5	10.9	10.2	10.3	10.6	42.8	41.7	42.0
Total Consumption	248.2	212.0	247.4	209.3	225.7	204.0	249.5	218.0	226.9	202.8	247.9	216.1	916.9	897.1	893.7
Discrepancy (c)	5.1	1.3	1.9	-5.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.0	0.0
End-of-period Inventories (million short	tone)														
Primary Inventories (d)	46.2	45.6	43.2	44.7	45.5	45.2	42.1	43.7	44.7	44.0	41.1	42.7	44.7	43.7	42.7
Secondary Inventories	124.0	138.9	130.5	158.5	147.0	155.8	139.2	143.8	145.3	151.8	138.2	143.5	158.5	143.8	143.5
Electric Power Sector	118.3	132.9	123.8	151.5	140.8	148.9	131.7	136.0	138.5	144.3	130.2	135.2	151.5	136.0	135.2
Retail and General Industry	3.5	3.6	4.4	4.8	4.1	4.5	5.1	5.5	4.7	5.0	5.6	5.9	4.8	5.5	5.9
•	1.8	1.9	1.8	1.9	1.6	2.0	1.9	1.9	1.6	2.0	1.9	1.9	1.9	1.9	1.9
Coke Plants	1.0	1.9	1.0	1.9	1.0	2.0	1.9	1.9	1.0	2.0	1.9	1.9	1.9	1.9	1.9
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.47	5.47	5.47	5.47	5.61	5.61	5.61	5.61	5.46	5.46	5.46	5.46	5.47	5.61	5.46
Total Raw Steel Production															
(Million short tons per day)	0.262	0.263	0.271	0.262	0.256	0.266	0.255	0.248	0.262	0.275	0.261	0.254	0.264	0.256	0.263
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.33	2.39	2.37	2.37	2.30	2.34	2.32	2.30	2.33	2.36	2.36	2.32	2.36	2.31	2.34

<sup>- =</sup> no data available

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

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

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

 $\textbf{Projections:} \ \mathsf{EIA} \ \mathsf{Regional} \ \mathsf{Short}\text{-}\mathsf{Term} \ \mathsf{Energy} \ \mathsf{Model}.$ 

<sup>(</sup>a) Waste coal includes waste coal and cloal slurry reprocessed into briquettes.

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

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

<sup>(</sup>d) Primary stocks are held at the mines and distribution points.

Table 7a. U.S. Electricity Industry Overview

		201	4			201	15			201	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Electricity Supply (billion kilowatthou	rs per day	<b>(</b> )													
Electricity Generation	11.49	10.77	12.06	10.54	11.33	10.98	12.43	10.69	11.23	11.09	12.55	10.82	11.21	11.36	11.42
Electric Power Sector (a)	11.04	10.36	11.62	10.11	10.88	10.57	11.99	10.27	10.79	10.68	12.10	10.39	10.78	10.93	10.99
Comm. and Indus. Sectors (b)	0.44	0.41	0.44	0.42	0.44	0.41	0.44	0.42	0.44	0.41	0.44	0.43	0.43	0.43	0.43
Net Imports	0.14	0.13	0.14	0.13	0.12	0.11	0.14	0.09	0.11	0.11	0.14	0.10	0.13	0.12	0.12
Total Supply	11.63	10.90	12.20	10.66	11.45	11.09	12.57	10.79	11.34	11.20	12.69	10.91	11.35	11.48	11.54
Losses and Unaccounted for (c)	0.76	0.87	0.74	0.71	0.64	0.91	0.78	0.72	0.60	0.92	0.79	0.73	0.77	0.76	0.76
Electricity Consumption (billion kilow	atthours	oer day un	less note	ed)											
Retail Sales	10.48	9.67	11.07	9.58	10.42	9.82	11.40	9.70	10.36	9.92	11.51	9.82	10.20	10.34	10.40
Residential Sector	4.31	3.36	4.26	3.45	4.17	3.40	4.43	3.48	4.04	3.42	4.44	3.52	3.84	3.87	3.86
Commercial Sector	3.62	3.65	4.06	3.54	3.64	3.71	4.17	3.59	3.67	3.75	4.23	3.63	3.72	3.78	3.82
Industrial Sector	2.52	2.65	2.73	2.57	2.59	2.69	2.78	2.61	2.62	2.73	2.82	2.64	2.62	2.67	2.70
Transportation Sector	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Direct Use (d)	0.39	0.36	0.39	0.37	0.39	0.36	0.38	0.37	0.38	0.36	0.39	0.37	0.38	0.37	0.38
Total Consumption	10.87	10.04	11.46	9.95	10.81	10.18	11.79	10.07	10.74	10.29	11.90	10.19	10.58	10.71	10.78
Average residential electricity															
usage per customer (kWh)	3,025	2,374	3,042	2,457	2,897	2,387	3,136	2,457	2,814	2,373	3,109	2,454	10,899	10,877	10,750
Prices															
Power Generation Fuel Costs (dollar	rs per mil	lion Btu)													
Coal	2.33	2.39	2.37	2.37	2.30	2.34	2.32	2.30	2.33	2.36	2.36	2.32	2.36	2.31	2.34
Natural Gas	6.82	4.93	4.25	4.30	4.15	3.69	3.86	4.27	4.38	3.98	4.22	4.57	4.98	3.98	4.28
Residual Fuel Oil	19.95	20.44	19.75	15.28	12.10	11.60	11.35	11.58	11.80	12.63	13.13	13.19	19.26	11.67	12.68
Distillate Fuel Oil	23.40	22.74	21.86	18.77	15.34	15.07	15.39	17.28	18.04	18.52	18.63	19.26	22.33	15.74	18.57
End-Use Prices (cents per kilowatth	our)														
Residential Sector	11.91	12.73	13.01	12.38	12.18	12.80	13.08	12.44	12.38	12.99	13.31	12.69	12.50	12.63	12.86
Commercial Sector	10.55	10.68	11.11	10.59	10.26	10.59	11.05	10.50	10.34	10.71	11.21	10.69	10.75	10.62	10.76
Industrial Sector	6.99	6.92	7.36	6.76	6.53	6.73	7.30	6.69	6.59	6.82	7.40	6.81	7.01	6.82	6.91

<sup>- =</sup> 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.

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

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

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

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

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

U.S. Energy Informat	ion Aumi			t-Tellii	Energy C			1015		204	10				
	1st	201 2nd	3rd	4th	1st	201 2nd	3rd	4th	1st	201 2nd	3rd	4th	2014	Year 2015	2016
Residential Sector	130	Ziiu	oru	701	130	Ziid	oru	7611	130	ZIIG	oru	7611	2014	2010	
New England	153	111	136	118	150	115	141	120	143	116	141	123	129	132	131
Middle Atlantic	423	315	383	323	416	323	416	327	394	324	416	330	361	371	366
E. N. Central	616	446	513	479	584	446	560	484	560	446	556	487	513	518	513
W. N. Central	352	246	293	265	326	247	316	267	324	249	316	271	289	289	290
S. Atlantic	1,080	858	1,088	861	1,060	868	1,123	875	1,017	872	1,129	885	971	981	976
E. S. Central	404	278	363	288	380	286	379	286	359	284	379	286	333	333	327
W. S. Central	617	501	731	498	590	526	737	501	568	527	741	507	587	589	586
Mountain	238	242	321	226	236	242	342	231	245	246	346	235	257	263	268
Pacific contiguous	419	347	422	378	411	338	407	378	419	343	409	382	391	383	388
AK and HI	14	11	12	13	13	12	12	13	13	12	12	13	13	13	12
Total	4,315	3,355	4,260	3,449	4,166	3,403	4,433	3,483	4.043	3,420	4,445	3,520	3,844	3,871	3.857
Commercial Sector	•	,	•	,								,	,		
New England	148	138	154	139	147	138	156	139	145	137	156	138	145	145	144
Middle Atlantic	442	413	461	409	443	415	472	410	441	417	474	412	431	435	436
E. N. Central	511	490	526	480	507	498	550	488	511	507	559	498	502	511	519
W. N. Central	287	273	298	272	285	278	309	274	288	282	313	278	282	287	290
S. Atlantic	803	842	920	793	813	859	948	811	820	871	958	819	840	858	867
E. S. Central	239	237	271	226	240	243	284	230	243	247	289	234	243	249	253
W. S. Central	494	521	610	504	503	535	625	510	509	544	635	515	532	543	551
Mountain	239	259	287	243	241	263	298	249	248	269	304	254	257	263	269
Pacific contiguous	442	463	514	461	447	461	516	460	449	464	519	465	470	471	474
AK and HI	17	16	17	17	16	16	17	17	16	16	17	17	16	16	17
Total	3,621	3,652	4,056	3,544	3,644	3,706	4,174	3,587	3,671	3,754	4,225	3,630	3,719	3,779	3,821
Industrial Sector															
New England	49	50	52	50	48	49	54	49	49	49	53	48	50	50	50
Middle Atlantic	201	198	205	194	201	200	207	197	204	203	210	199	199	201	204
E. N. Central	525	532	544	519	533	536	545	518	531	540	550	521	530	533	536
W. N. Central	231	240	253	238	246	257	272	253	249	260	275	256	241	257	260
S. Atlantic	372	397	404	383	375	395	402	380	377	404	409	385	389	388	394
E. S. Central	279	287	296	283	295	293	288	285	302	298	296	291	286	290	297
W. S. Central	431	465	471	444	444	474	487	456	447	477	496	460	453	465	470
Mountain	210	235	250	220	217	241	257	227	224	247	264	235	229	235	242
Pacific contiguous	213	228	244	223	219	234	249	230	222	236	253	234	227	233	236
AK and HI	13	14	14	14	14	14	15	14	14	14	15	14	14	14	14
Total	2,522	2,646	2,734	2,567	2,592	2,693	2,775	2,610	2,619	2,730	2,821	2,644	2,618	2,668	2,704
Total All Sectors (a)															
New England	352	300	344	308	347	304	353	310	338	304	351	311	326	328	326
Middle Atlantic	1,078	936	1,059	936	1,072	949	1,107	946	1,052	957	1,112	953	1,002	1,019	1,019
E. N. Central	1,654	1,469	1,584	1,480	1,626	1,482	1,656	1,492	1,605	1,495	1,668	1,508	1,547	1,564	1,569
W. N. Central	870	760	843	776	856	783	898	794	861	791	903	805	812	833	840
S. Atlantic	2,259	2,100	2,415	2,041	2,253	2,126	2,476	2,069	2,218	2,151	2,500	2,092	2,204	2,231	2,240
E. S. Central	922	803	931	797	916	822	952	801	905	829	965	811	863	872	878
W. S. Central	1,542	1,487	1,812	1,446	1,537	1,535	1,849	1,467	1,524	1,549	1,872	1,483	1,572	1,598	1,608
Mountain	687	737	858	689	694	746	897	707	718	762	915	724	743	762	780
Pacific contiguous	1,076	1,040	1,182	1,064	1,078	1,035	1,174	1,071	1,092	1,046	1,183	1,084	1,091	1,090	1,101
AK and HI		41	43	43	43	41	43	44	44	42	43	44	43	43	43
Total	10,481	9,674	11,072	9,581	10,424	9,822	11,405	9,701	10,357	9,925	11,513	9,815	10,202	10,339	10,404

<sup>- =</sup> 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.

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

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

U.S. Lifetgy informa	tion / tain	201	-	101111	Litergy	20	15	2010		201	6			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Residential Sector		•								1					
New England	17.53	18.03	17.60	18.24	18.40	18.22	17.73	18.58	18.31	18.36	17.94	18.81	17.82	18.22	18.34
Middle Atlantic	16.26	16.58	16.67	16.02	15.94	16.39	16.68	16.31	16.45	16.88	17.21	16.82	16.38	16.33	16.85
E. N. Central	11.56	12.95	12.98	12.73	12.15	13.11	13.28	12.75	12.50	13.49	13.70	13.12	12.49	12.80	13.19
W. N. Central	10.05	11.79	12.31	10.65	10.36	12.00	12.44	10.88	10.73	12.20	12.66	11.09	11.14	11.40	11.66
S. Atlantic	11.31	11.98	12.13	11.61	11.33	11.93	12.07	11.58	11.42	11.93	12.13	11.69	11.76	11.73	11.80
E. S. Central	10.30	11.21	10.97	10.66	10.47	11.17	10.98	10.54	10.68	11.42	11.26	10.77	10.75	10.78	11.03
W. S. Central	10.41	11.43	11.40	11.06	10.78	11.37	11.35	10.93	10.71	11.42	11.48	11.09	11.08	11.12	11.20
Mountain	10.93	12.02	12.33	11.31	11.14	12.26	12.61	11.59	11.46	12.64	13.00	11.94	11.71	11.98	12.34
Pacific	12.93	12.77	15.53	13.15	13.50	13.32	15.73	13.27	13.74	13.49	15.97	13.54	13.65	14.00	14.23
U.S. Average	11.91	12.73	13.01	12.38	12.18	12.80	13.08	12.44	12.38	12.99	13.31	12.69	12.50	12.63	12.86
Commercial Sector															
New England	15.62	14.32	14.43	14.33	14.96	14.30	14.29	14.05	14.83	14.29	14.31	14.05	14.68	14.41	14.37
Middle Atlantic	14.29	13.32	13.94	12.94	12.88	12.78	13.80	13.00	12.98	12.95	14.02	13.22	13.64	13.14	13.32
E. N. Central	9.68	9.96	10.00	9.88	9.84	10.03	10.03	9.92	9.91	10.10	10.13	10.06	9.88	9.95	10.05
W. N. Central	8.60	9.39	9.86	8.69	8.57	9.48	10.04	8.83	8.75	9.69	10.28	9.05	9.15	9.25	9.47
S. Atlantic	9.83	9.68	9.70	9.65	9.47	9.46	9.64	9.60	9.49	9.51	9.73	9.72	9.72	9.55	9.62
E. S. Central	10.26	10.51	10.40	10.22	10.06	10.25	10.36	10.39	10.27	10.49	10.69	10.82	10.35	10.27	10.57
W. S. Central	8.13	8.34	8.30	8.15	7.71	7.74	7.76	7.60	7.64	7.73	7.78	7.62	8.24	7.71	7.70
Mountain	9.12	9.89	10.19	9.42	9.14	10.07	10.32	9.55	9.32	10.28	10.55	9.76	9.69	9.80	10.01
Pacific	11.73	13.21	15.67	13.78	12.24	14.15	16.11	13.64	12.52	14.51	16.53	14.10	13.69	14.12	14.49
U.S. Average	10.55	10.68	11.11	10.59	10.26	10.59	11.05	10.50	10.34	10.71	11.21	10.69	10.75	10.62	10.76
Industrial Sector															
New England	12.97	11.47	11.42	11.18	11.34	11.24	11.41	10.73	11.21	11.16	11.37	10.73	11.75	11.19	11.12
Middle Atlantic	8.74	7.36	7.28	7.07	7.31	7.10	7.47	7.12	7.34	7.12	7.52	7.18	7.61	7.25	7.29
E. N. Central	7.01	6.84	7.01	6.85	6.75	6.87	7.08	6.89	6.73	6.83	7.06	6.90	6.93	6.90	6.88
W. N. Central	6.52	6.69	7.32	6.32	6.28	6.65	7.35	6.39	6.34	6.73	7.46	6.50	6.73	6.69	6.77
S. Atlantic	6.80	6.67	6.96	6.49	6.27	6.50	6.93	6.41	6.27	6.51	6.98	6.49	6.73	6.53	6.57
E. S. Central	6.16	6.22	6.76	5.68	5.49	5.87	6.59	5.71	5.56	5.95	6.74	5.93	6.22	5.92	6.04
W. S. Central	5.87	6.04	6.34	5.93	5.77	5.75	6.05	5.64	6.03	6.05	6.41	5.99	6.05	5.81	6.12
Mountain	6.15	6.73	7.38	6.25	6.01	6.60	7.43	6.27	6.12	6.75	7.60	6.39	6.66	6.61	6.75
Pacific	7.71	8.10	9.59	8.63	7.30	7.77	9.27	8.27	7.23	7.78	9.27	8.30	8.54	8.19	8.18
U.S. Average	6.99	6.92	7.36	6.76	6.53	6.73	7.30	6.69	6.59	6.82	7.40	6.81	7.01	6.82	6.91
All Sectors (a)															
New England	16.05	15.19	15.20	15.28	15.92	15.27	15.21	15.26	15.75	15.30	15.30	15.38	15.45	15.42	15.44
Middle Atlantic	14.01	13.15	13.63	12.78	13.01	12.80	13.68	12.90	13.17	13.02	13.96	13.18	13.42	13.12	13.35
E. N. Central	9.53	9.73	9.93	9.74	9.65	9.81	10.16	9.78	9.76	9.93	10.30	9.95	9.73	9.85	9.99
W. N. Central	8.63	9.31	9.95	8.64	8.59	9.35	10.07	8.74	8.80	9.51	10.25	8.93	9.14	9.21	9.39
S. Atlantic	10.04	10.05	10.34	9.88	9.81	9.92	10.30	9.85	9.83	9.93	10.36	9.95	10.09	9.98	10.03
E. S. Central	9.04	9.22	9.47	8.77	8.76	9.01	9.46	8.78	8.86	9.18	9.70	9.04	9.13	9.02	9.21
W. S. Central	8.41	8.66	9.04	8.47	8.33	8.37	8.74	8.13	8.31	8.47	8.88	8.30	8.66	8.41	8.51
Mountain	8.85	9.59	10.17	9.03	8.84	9.66	10.37	9.16	9.05	9.90	10.62	9.38	9.46	9.57	9.80
Pacific	11.39	11.93	14.35	12.47	11.71	12.42	14.52	12.34	11.90	12.64	14.77	12.64	12.59	12.80	13.03
U.S. Average	10.25	10.36	10.92	10.21	10.10	10.30	10.92	10.17	10.19	10.42	11.09	10.36	10.45	10.39	10.53

<sup>- =</sup> 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.

<sup>(</sup>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)

0.5. Energy information Admir	notration	201		rieigy C	Janoon	20				201	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
United States	-	-	-	-	•	-	-	-	-	-	-			•	
Coal	4,864	4,029	4,624	3,869	4,320	3,840	4,689	4,035	4,299	3,807	4,642	3,972	4,344	4,221	4,181
Natural Gas	2,715	2,898	3,725	2,948	3,114	3,166	3,939	3,020	3,049	3,242	4,061	3,128	3,074	3,311	3,371
Petroleum (a)	148	64	66	58	89	70	77	71	84	72	77	68	84	77	75
Other Gases	28	29	35	34	29	30	36	35	29	31	37	36	32	33	33
Nuclear	2,201	2,060	2,289	2,184	2,206	2,074	2,206	2,055	2,148	2,101	2,235	2,089	2,184	2,135	2,143
Renewable Energy Sources:															
Conventional Hydropower	703	849	652	633	753	891	723	643	734	860	674	624	709	752	723
Wind	553	549	367	525	534	585	432	549	600	642	467	597	498	525	576
Wood Biomass	119	114	121	118	119	115	124	116	119	116	126	119	118	118	120
Waste Biomass	56	59	60	59	57	59	61	59	58	59	61	59	58	59	59
Geothermal	45	45	45	46	46	44	45	45	45	44	45	45	46	45	45
Solar	35	61	61	44	41	81	79	45	45	92	99	61	50	61	74
Pumped Storage Hydropower	-13	-18	-21	-16	-13	-12	-16	-14	-13	-12	-15	-13	-17	-13	-13
Other Nonrenewable Fuels (b)	32	34	36	35	34	35	37	35	34	36	37	35	34	35	35
Total Generation	11,486	10,773	12,060	10,536	11,328	10,979	12,431	10,692	11,231	11,089	12,545	10,819	11,214	11,359	11,422
Northeast Census Region	,	-,	,	,	,	-,-	, -	-,	, -	,	,	-,-	,	,	,
Coal	353	244	210	207	296	198	246	238	296	178	223	215	253	244	228
Natural Gas	413	485	632	493	496	537	671	519	496	560	693	542	506	556	573
Petroleum (a)	55	2	3	3	10	4	6	6	10	5	6	5	16	7	6
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	542	471	539	531	521	474	504	468	488	477	508	471	521	492	486
Hydropower (c)	94	100	84	91	106	113	100	97	102	107	93	94	92	104	99
Other Renewables (d)	73	64	60	72	71	63	60	69	73	65	62	73	67	66	68
Other Nonrenewable Fuels (b)	11	12	13	12	12	12	12	12	11	12	12	12	12	12	12
Total Generation	1,542	1,381	1,543	1,411	1,514	1,403	1,601	1,411	1,479	1,406	1,599	1,414	1,469	1,482	1,474
South Census Region	1,542	1,501	1,040	1,411	1,014	1,400	1,001	1,411	1,415	1,400	1,000	1,717	1,403	1,402	1,717
Coal	2,122	1,849	2,100	1,614	1,754	1.674	2.006	1,624	1,712	1,651	1,992	1,570	1,920	1,765	1,732
Natural Gas	1,544	1,729	2,088	1,637	1,754	1,953	2,278	1,702	1,778	1,968	2,304	1,748	1,751	1,705	1,752
Petroleum (a)	53	28	2,000	24	40	29	30	26	34	29	31	25	33	31	30
Other Gases	11	11	14	14	11	12	30 15	20 15	34 11	12	15	15	13	13	14
Nuclear	966	882	994	977	965	923	982	920	975	954	1.014	957	955	948	975
	150	107	80	107	157	113	89	108	152	107	83	105	111	116	112
Hydropower (c) Other Renewables (d)	241	257	204	240	252	279	233	271	290	313	255	300	235	259	289
Other Nonrenewable Fuels (b)	13	13	14	14	14	14	233 14	14	13	14	14	14	13	23 <del>9</del> 14	14
Total Generation	5,100	4,875	5,520	4,627	5,042	4,997	5,647	4,679	4,965	5,048	5,710	4,733	5,031	5,092	5,114
Midwest Census Region	5,100	4,073	5,520	4,027	3,042	4,997	3,047	4,079	4,900	5,040	5,710	4,733	3,031	5,092	5,114
<del>-</del>	4 004	4 420	4.000	4 400	1 600	1 100	4 700	4 577	1 600	1 167	4 706	4 500	4 602	4.605	1 604
Coal	1,801	1,439	1,682	1,492	1,699	1,466	1,798	1,577	1,699	1,467	1,786	1,582	1,603	1,635	1,634
Natural Gas	194	184	203	189	239	212	251	174	230	230	286	193	193	219	235
Petroleum (a)	14	13	12	9	13	12	13	11	13	11	12	11	12	12	12
Other Gases	11	12	14	12	11	12	14	12	11	12	14	12	12	12	13
Nuclear	533	543	586	525	551	520	553	513	524	513	545	506	547	534	522
Hydropower (c)	33	45	44	41	34	47	47	40	32	44	44	39	41	42	40
Other Renewables (d)	253	214	148	244	238	230	165	246	261	249	178	263	214	219	238
Other Nonrenewable Fuels (b)	4	5	5	4	4	5	5	5	4	5	5	5	4	5	5
Total Generation	2,843	2,454	2,693	2,516	2,790	2,502	2,847	2,577	2,775	2,531	2,872	2,611	2,626	2,679	2,697
West Census Region															
Coal	588	497	632	556	570	502	638	596	591	511	641	605	568	577	587
Natural Gas	564	500	802	628	528	464	740	626	545	484	777	645	624	590	614
Petroleum (a)	25	21	24	23	26	26	28	28	28	26	28	28	23	27	27
Other Gases	5	5	6	6	5	5	5	6	5	5	6	6	5	5	5
Nuclear	160	164	170	150	169	156	166	154	161	157	167	155	161	161	160
Hydropower (c)	414	579	423	378	444	607	472	383	436	590	438	372	448	476	459
Other Renewables (d)	240	293	243	236	236	312	282	228	243	327	302	245	253	264	279
Other Nonrenewable Fuels (b)	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5
Total Generation	2,001	2,063	2,304	1,982	1,981	2,076	2,336	2,025	2,013	2,105	2,365	2,061	2,088	2,105	2,136

<sup>(</sup>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.

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

<sup>(</sup>c) Conventional hydroelectric and pumped storage generation.

<sup>(</sup>d) Wind, biomass, geothermal, and solar generation.

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

		201	14			20 <sup>-</sup>	15			20 <sup>-</sup>	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Fuel Consumption for Electricity Ge	eneration,	All Secto	rs	·	·			·	·		·		·		
United States															
Coal (thousand st/d)	2,579	2,161	2,522	2,105	2,335	2,080	2,544	2,195	2,319	2,066	2,526	2,173	2,341	2,289	2,271
Natural Gas (million cf/d)	20,666	22,042	28,356	22,049	23,287	24,277	30,341	22,479	22,798	24,854	31,290	23,286	23,296	25,108	25,567
Petroleum (thousand b/d)	262	111	115	103	160	125	134	126	151	127	136	122	147	136	134
Residual Fuel Oil	86	24	29	24	37	27	31	32	36	30	33	29	41	32	32
Distillate Fuel Oil	87	24	24	25	41	28	30	29	37	28	30	29	40	32	31
Petroleum Coke (a)	69	60	59	50	75	65	69	59	70	64	67	58	59	67	65
Other Petroleum Liquids (b)	20	3	3	4	7	4	6	5	8	5	6	5	7	6	6
Northeast Census Region															
Coal (thousand st/d)	161	113	102	96	138	93	116	112	136	83	104	100	118	115	106
Natural Gas (million cf/d)	3,191	3,701	4,921	3,729	3,774	4,123	5,236	3,907	3,745	4,271	5,366	4,047	3,890	4,263	4,359
Petroleum (thousand b/d)	92	4	6	5	20	8	11	10	18	9	11	9	26	12	12
South Census Region															
Coal (thousand st/d)	1,084	963	1,116	855	921	886	1,059	860	900	880	1,063	845	1,004	932	922
Natural Gas (million cf/d)	11,736	13,138	15,819	12,131	13,741	14,924	17,447	12,585	13,206	15,036	17,653	12,926	13,214	14,678	14,708
Petroleum (thousand b/d)	101	51	49	45	76	55	56	49	65	56	58	47	61	59	56
Midwest Census Region															
Coal (thousand st/d)	1,005	811	952	842	956	823	1,013	888	952	820	1,002	888	902	920	916
Natural Gas (million cf/d)	1,574	1,436	1,638	1,513	1,891	1,711	2,095	1,366	1,808	1,852	2,383	1,515	1,540	1,765	1,890
Petroleum (thousand b/d)	28	23	22	17	24	21	22	22	23	21	22	22	23	22	22
West Census Region															
Coal (thousand st/d)	329	274	351	313	320	278	355	335	332	282	356	340	317	322	328
Natural Gas (million cf/d)	4,165	3,767	5,979	4,675	3,881	3,519	5,563	4,621	4,039	3,695	5,888	4,798	4,651	4,401	4,609
Petroleum (thousand b/d)	41	33	38	36	41	41	45	45	44	43	45	45	37	43	44
End-of-period U.S. Fuel Inventories	Held by E	lectric Po	ower Sect	or											
Coal (million short tons)	118.3	132.9	123.8	151.5	140.8	148.9	131.7	136.0	138.5	144.3	130.2	135.2	151.5	136.0	135.2
Residual Fuel Oil (mmb)	10.5	10.6	10.4	12.7	11.8	12.1	12.0	12.2	12.0	11.8	11.5	11.6	12.7	12.2	11.6
Distillate Fuel Oil (mmb)	15.5	15.5	15.5	16.9	16.8	16.6	16.5	16.7	16.7	16.5	16.3	16.5	16.9	16.7	16.5
Petroleum Coke (mmb)	1.7	2.0	1.9	4.2	4.3	4.3	4.2	4.1	4.1	4.1	4.1	4.1	4.2	4.1	4.1

<sup>(</sup>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.

<sup>(</sup>b) Other petroleum liquids include jet fuel, kerosene, and waste oil.

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

O.O. Energy information Administ		201		3,		201				201	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Electric Power Sector	•		•	•	•	•	•				•		•	•	
Hydroelectric Power (a)	0.595	0.731	0.565	0.546	0.637	0.766	0.627	0.556	0.628	0.739	0.585	0.539	2.437	2.586	2.491
Wood Biomass (b)	0.063	0.056	0.064	0.063	0.062	0.056	0.069	0.062	0.064	0.058	0.071	0.064	0.247	0.249	0.257
Waste Biomass (c)	0.063	0.065	0.066	0.066	0.062	0.065	0.068	0.066	0.064	0.065	0.068	0.066	0.260	0.262	0.264
Wind	0.473	0.475	0.321	0.459	0.457	0.506	0.378	0.480	0.519	0.556	0.409	0.522	1.729	1.821	2.006
Geothermal	0.039	0.039	0.039	0.041	0.039	0.038	0.039	0.039	0.039	0.038	0.039	0.039	0.158	0.156	0.156
Solar	0.029	0.051	0.052	0.037	0.034	0.068	0.068	0.038	0.038	0.078	0.085	0.052	0.170	0.209	0.254
Subtotal	1.262	1.417	1.108	1.238	1.291	1.500	1.249	1.242	1.352	1.534	1.257	1.284	5.025	5.282	5.427
Industrial Sector															
Hydroelectric Power (a)	0.008	0.005	0.005	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.025	0.025	0.025
Wood Biomass (b)	0.305	0.317	0.326	0.321	0.298	0.281	0.291	0.294	0.285	0.280	0.293	0.298	1.270	1.164	1.156
Waste Biomass (c)	0.042	0.042	0.042	0.043	0.043	0.041	0.043	0.042	0.043	0.041	0.044	0.042	0.169	0.168	0.170
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)	0.188	0.197	0.197	0.202	0.196	0.197	0.202	0.202	0.192	0.197	0.203	0.203	0.785	0.797	0.795
Subtotal	0.548	0.567	0.577	0.579	0.548	0.530	0.549	0.550	0.531	0.529	0.552	0.555	2.271	2.176	2.168
Commercial Sector															
Wood Biomass (b)	0.018	0.018	0.018	0.019	0.019	0.018	0.018	0.018	0.018	0.017	0.019	0.018	0.072	0.073	0.072
Waste Biomass (c)	0.011	0.011	0.011	0.012	0.012	0.011	0.012	0.011	0.012	0.011	0.012	0.011	0.045	0.046	0.046
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	0.034	0.036	0.037	0.037	0.036	0.034	0.036	0.035	0.036	0.034	0.036	0.035	0.144	0.141	0.141
Residential Sector															
Wood Biomass (b)	0.143	0.145	0.146	0.146	0.141	0.142	0.144	0.144	0.141	0.142	0.144	0.144	0.580	0.571	0.571
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.040	0.040	0.040
Solar (d)	0.062	0.063	0.063	0.063	0.075	0.076	0.076	0.076	0.075	0.076	0.076	0.076	0.252	0.303	0.303
Subtotal	0.215	0.217	0.220	0.220	0.226	0.228	0.230	0.230	0.226	0.228	0.230	0.230	0.871	0.914	0.914
Transportation Sector															
Ethanol (e)	0.256	0.276	0.277	0.280	0.263	0.274	0.279	0.275	0.254	0.273	0.280	0.276	1.088	1.091	1.083
Biodiesel (e)	0.040	0.048	0.055	0.053	0.049	0.049	0.050	0.051	0.047	0.049	0.049	0.051	0.196	0.198	0.196
Subtotal	0.296	0.324	0.332	0.330	0.312	0.322	0.329	0.326	0.301	0.321	0.328	0.327	1.282	1.289	1.278
All Sectors Total															
Hydroelectric Power (a)	0.602	0.736	0.571	0.553	0.643	0.772	0.634	0.562	0.634	0.745	0.591	0.545	2.462	2.611	2.516
Wood Biomass (b)	0.530	0.539	0.554	0.550	0.519	0.497	0.522	0.517	0.508	0.498	0.527	0.524	2.173	2.056	2.057
Waste Biomass (c)	0.114	0.115	0.119	0.122	0.117	0.117	0.123	0.119	0.119	0.117	0.124	0.120	0.470	0.476	0.480
Wind	0.473	0.475	0.321	0.459	0.457	0.506	0.378	0.480	0.519	0.556	0.409	0.522	1.729	1.821	2.006
Geothermal	0.054	0.055	0.055	0.056	0.055	0.054	0.055	0.055	0.055	0.054	0.055	0.055	0.219	0.219	0.219
Solar	0.091	0.116	0.118	0.103	0.110	0.145	0.145	0.116	0.114	0.155	0.163	0.130	0.427	0.516	0.562
Ethanol (e)	0.260	0.281	0.282	0.286	0.264	0.279	0.285	0.280	0.259	0.278	0.285	0.282	1.109	1.107	1.103
Biodiesel (e)		0.048	0.055	0.053	0.049	0.049	0.050	0.051	0.047	0.049	0.049	0.051	0.196	0.198	0.196
Biofuel Losses and Co-products (f)	0.188	0.197	0.197	0.202	0.196	0.197	0.202	0.202	0.192	0.197	0.203	0.203	0.785	0.797	0.795
Total Consumption	2.354	2.562	2.273	2.404	2.412	2.614	2.392	2.383	2.446	2.646	2.404	2.431	9.593	9.802	9.928
no doto ovolleble															

<sup>- =</sup> 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.

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

<sup>(</sup>b) Wood and wood-derived fuels.

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

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

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

<sup>(</sup>f) Losses and co-products from the production of fuel ethanol and biodiesel

Table 9a. U.S. Macroeconomic Indicators and CC<sub>2</sub> Emissions

U.S. Energy Information Administration	)   SHON	201		Juliook -	March 2		15			20	16			Voor	
	1st	201 2nd	4 3rd	4th	1st	20 <sup>2</sup> 2nd	3rd	4th	1st	2nd	3rd	4th	2014	Year 2015	2016
Macroeconomic	1														
Real Gross Domestic Product															
(billion chained 2009 dollars - SAAR) Real Personal Consumption Expend.	15,832	16,010	16,206	16,312	16,398	16,489	16,570	16,644	16,731	16,847	16,986	17,146	16,090	16,525	16,927
(billion chained 2009 dollars - SAAR) Real Fixed Investment	10,844	10,913	11,000	11,115	11,201	11,288	11,372	11,442	11,515	11,582	11,665	11,757	10,968	11,326	11,630
(billion chained 2009 dollars - SAAR)	2,536	2,595	2,643	2,659	2,701	2,729	2,761	2,799	2,833	2,882	2,923	2,985	2,608	2,748	2,906
Business Inventory Change (billion chained 2009 dollars - SAAR)	40	100	95	127	108	83	65	49	34	36	45	66	90	76	45
Real Government Expenditures (billion chained 2009 dollars - SAAR)	2,869	2,881	2,912	2,896	2,904	2,914	2,922	2,928	2,930	2,931	2,932	2,933	2,889	2,917	2,931
Real Exports of Goods & Services (billion chained 2009 dollars - SAAR)	2,027	2,081	2,104	2,118	2,132	2,142	2,154	2,171	2,188	2,211	2,240	2,268	2,083	2,150	2,227
Real Imports of Goods & Services (billion chained 2009 dollars - SAAR)	2,474	2,541	2,535	2,590	2,637	2,659	2,697	2,740	2,763	2,788	2,810	2,851	2,535	2,683	2,803
Real Disposable Personal Income (billion chained 2009 dollars - SAAR)	11,810	11,900	11,960	12,072	12,245	12,299	12,350	12,390	12,472	12,545	12,664	12,790	11,936	12,321	12,618
Non-Farm Employment	137.8	138.6	139.4	140.2	141.1	141.7	142.2	142.8	143.3	143.9	144.5	145.2	139.0	141.9	144.3
(millions)  Civilian Unemployment Rate															
(percent) Housing Starts	6.6	6.2	6.1	5.7	5.6	5.7	5.6	5.6	5.6	5.6	5.6	5.5	6.2	5.6	5.6
(millions - SAAR)	0.93	0.99	1.03	1.06	1.09	1.12	1.15	1.18	1.19	1.24	1.28	1.39	1.00	1.13	1.27
Industrial Production Indices (Index, 2007= Total Industrial Production	:100) 102.2	103.7	104.7	105.8	106.2	106.3	106.5	106.9	108.0	109.2	110.8	112.5	104.1	106.5	110.1
Manufacturing	99.4	101.2	102.4	103.5	104.2	104.4	104.6	105.3	106.3	107.4	108.7	110.5	101.6	104.6	108.3
Food	106.1	106.5	105.6	107.6	108.2	108.6	109.1	109.7	110.4	111.1	111.9	112.8	106.5	108.9	111.6
Paper	82.4	83.3	82.6	83.1	83.4	83.2	83.3	83.5	83.8	84.1	84.7	85.4	82.9	83.3	84.5
Petroleum and Coal Products	97.7	98.2	98.9	98.8	99.5	99.8	99.9	99.9	100.0	100.1	100.5	101.1	98.4	99.8	100.4
Chemicals	87.7	88.4	90.2	91.3	91.9	92.1	92.5	93.0	93.7	94.4	95.3	96.5	89.4	92.4	95.0
Nonmetallic Mineral Products	75.5	77.4	79.9	80.1	81.5	82.2	83.2	84.2	85.4	86.5	87.9	89.4	78.2	82.8	87.3
Primary Metals	101.9	106.2	108.1	105.7	106.5	104.4	104.1	105.1	106.4	107.9	110.4	114.1	105.5	105.0	109.7
Coal-weighted Manufacturing (a)	91.8	93.7	94.6	94.4	95.1	94.7	94.8	95.5	96.3	97.3	98.6	100.4	93.6	95.0	98.1
Distillate-weighted Manufacturing (a)	92.3	93.9	95.0	95.4	96.1	96.1	96.5	97.1	97.9	98.8	99.9	101.3	94.2	96.5	99.5
Electricity-weighted Manufacturing (a)	97.1	99.1	100.1	100.5	101.2	100.9	101.0	101.9	102.9	104.0	105.4	107.4	99.2	101.3	104.9
Natural Gas-weighted Manufacturing (a)	93.6	94.6	95.7	96.2	96.7	96.5	96.6	97.2	98.0	99.0	100.3	102.2	95.0	96.7	99.9
Price Indexes Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	2.35	2.37	2.38	2.37	2.35	2.36	2.37	2.39	2.42	2.43	2.44	2.45	2.37	2.37	2.44
(index, 1982=1.00)	2.06	2.07	2.07	2.02	1.95	1.95	1.97	1.99	2.01	2.03	2.04	2.05	2.05	1.97	2.03
Producer Price Index: Petroleum (index, 1982=1.00)	2.88	2.99	2.90	2.36	1.78	1.85	1.89	1.97	2.11	2.28	2.29	2.17	2.78	1.87	2.21
GDP Implicit Price Deflator (index, 2009=100)	107.7	108.3	108.6	108.6	109.2	109.8	110.3	110.9	111.5	112.0	112.5	113.0	108.3	110.1	112.3
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day) Air Travel Capacity	7,640	8,616	8,547	8,171	7,851	8,757	8,683	8,316	7,936	8,795	8,708	8,355	8,246	8,404	8,449
(Available ton-miles/day, thousands) Aircraft Utilization	503	548	558	528	515	545	549	525	515	548	553	529	535	534	536
(Revenue ton-miles/day, thousands) Airline Ticket Price Index	310	347	351	328	317	348	351	328	319	351	355	333	334	336	339
(index, 1982-1984=100) Raw Steel Production	297.3	334.3	301.0	298.2	288.3	305.4	295.4	297.8	302.1	322.6	313.0	313.6	307.7	296.7	312.8
(million short tons per day)	0.262	0.263	0.271	0.262	0.256	0.266	0.255	0.248	0.262	0.275	0.261	0.254	0.264	0.256	0.263
Carbon Dioxide (CO <sub>2</sub> ) Emissions (million r	-		==-	=								1		0.5	
Petroleum	548	556	568	578	552	565	576	576	559	567	576	577	2,250	2,269	2,279
Natural Gas	460	297	303	375	462	312	319	382	455	317	327	391	1,434	1,476	1,489
Coal	462 1.469	397	459 1 330	403	415	379 1 257	466 1 361	409	418	377 1 261	463 1 367	406	1,721 5.405	1,670 5.415	1,665 5.432
Total Fossil Fuels	1,469	1,249	1,330	1,356	1,430	1,257	1,361	1,368	1,431	1,261	1,367	1,373	5,405	5,415	5,432

<sup>- =</sup> no data available

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

Historical data: Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration. Minor discrepancies with published historical data are due to independent rounding.

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

SAAR = Seasonally-adjusted annual rate

<sup>(</sup>a) Fuel share weights of individual sector indices based on EIA Manufacturing Energy Consumption Survey .

<sup>(</sup>b) Total highway travel includes gasoline and diesel fuel vehicles.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Informati	on Admir	nistration	Short	t-Term I	nergy C	outlook -	March 2	015							
		201				201				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Real Gross State Product		,													
New England	858	865	875	880	883	887	891	894	898	903	910	917	869	889	907
Middle Atlantic	2,365	2,386	2,410	2,417	2,425	2,438	2,450	2,460	2,471	2,485	2,502	2,521	2,394	2,443	2,495
E. N. Central	2,186	2,207	2,229	2,241	2,250	2,259	2,268	2,278	2,288	2,301	2,318	2,337	2,216	2,264	2,311
W. N. Central	1,031	1,042	1,055	1,061	1,066	1,071	1,076	1,081	1,085	1,092	1,101	1,111	1,047	1,074	1,097
S. Atlantic		2,841	2,872	2,896	2,915	2,934	2,952	2,967	2,986	3,008	3,035	3,066	2,854	2,942	3,024
E. S. Central	724	732	742	747	751	755	<i>7</i> 58	762	766	771	777	784	736	756	774
W. S. Central	1,936	1,966	1,998	2,015	2,029	2,041	2,050	2,055	2,065	2,082	2,100	2,124	1,979	2,044	2,093
Mountain	1,028	1,041	1,055	1,063	1,070	1,076	1,080	1,085	1,092	1,101	1,112	1,124	1,047	1,078	1,107
Pacific	2,821	2,855	2,894	2,916	2,932	2,950	2,967	2,983	3,001	3,024	3,050	3,081	2,872	2,958	3,039
Industrial Output, Manufa	acturing (In		2007=100	0)											
New England	96.6	98.1	98.9	99.5	100.1	100.1	100.3	100.6	101.5	102.4	103.6	105.2	98.3	100.3	103.2
Middle Atlantic	94.1	94.9	95.4	96.4	97.2	97.2	97.4	97.9	98.8	99.8	101.0	102.6	95.2	97.4	100.6
E. N. Central	101.6	103.1	104.7	106.4	107.3	107.6	107.9	108.8	110.2	111.4	112.7	114.5	104.0	107.9	112.2
W. N. Central	102.8	104.7	105.7	106.9	107.7	107.9	108.1	108.8	109.8	111.0	112.3	114.2	105.0	108.1	111.8
S. Atlantic	94.9	96.7	97.9	99.3	100.1	100.3	100.4	101.0	101.9	102.9	104.1	105.7	97.2	100.5	103.6
E. S. Central	97.0	98.8	100.8	102.2	103.0	103.3	103.7	104.3	105.4	106.5	107.7	109.4	99.7	103.6	107.2
W. S. Central	104.7	106.9	108.4	109.4	109.9	110.0	110.3	110.8	111.9	113.0	114.4	116.4	107.3	110.3	113.9
Mountain	101.5	103.8	105.0	105.3	106.1	106.4	106.9	107.6	108.7	110.1	111.7	113.7	103.9	106.7	111.0
Pacific	100.0	101.5	102.5	103.6	104.4	104.4	104.5	105.0	106.0	107.1	108.5	110.3	101.9	104.6	108.0
Real Personal Income (Bi	illion \$2009	9)													
New England	759	761	765	773	784	789	792	794	799	804	810	818	765	790	808
Middle Atlantic	2,036	2,038	2,053	2,071	2,102	2,110	2,117	2,126	2,141	2,150	2,166	2,187	2,049	2,114	2,161
E. N. Central	1,854	1,864	1,873	1,892	1,919	1,929	1,936	1,942	1,955	1,966	1,980	1,997	1,871	1,931	1,975
W. N. Central	873	882	884	894	906	912	916	921	926	932	940	948	883	914	937
S. Atlantic	2,476	2,495	2,508	2,536	2,578	2,594	2,608	2,621	2,642	2,663	2,688	2,717	2,503	2,600	2,678
E. S. Central	653	657	660	666	676	680	683	685	690	694	700	706	659	681	698
W. S. Central	1,544	1,557	1,570	1,589	1,613	1,622	1,630	1,635	1,647	1,660	1,677	1,697	1,565	1,625	1,670
Mountain	868	873	879	888	902	908	913	917	925	933	943	954	877	910	939
Pacific	2,325	2,345	2,359	2,384	2,424	2,440	2,454	2,467	2,486	2,504	2,528	2,554	2,353	2,446	2,518
Households (Thousands)	)														
New England	5,754	5,756	5,755	5,762	5,768	5,772	5,777	5,784	5,791	5,801	5,812	5,824	5,762	5,784	5,824
Middle Atlantic	15,806	15,810	15,806	15,822	15,836	15,846	15,854	15,869	15,885	15,911	15,941	15,971	15,822	15,869	15,971
E. N. Central	18,527	18,532	18,520	18,530	18,541	18,550	18,559	18,578	18,601	18,633	18,669	18,707	18,530	18,578	18,707
W. N. Central	8,391	8,403	8,410	8,427	8,443	8,458	8,472	8,490	8,508	8,531	8,557	8,584	8,427	8,490	8,584
S. Atlantic	24,163	24,221	24,265	24,343	24,424	24,499	24,574	24,661	24,752	24,856	24,966	25,079	24,343	24,661	25,079
E. S. Central	7,431	7,434	7,432	7,440	7,449	7,456	7,463	7,474	7,488	7,508	7,528	7,550	7,440	7,474	7,550
W. S. Central	14,068	14,111	14,142	14,191	14,240	14,285	14,328	14,378	14,428	14,488	14,551	14,614	14,191	14,378	14,614
Mountain	8,582	8,604	8,624	8,654	8,685	8,714	8,742	8,776	8,811	8,853	8,900	8,948	8,654	8,776	8,948
Pacific	18,149	18,198	18,235	18,295	18,351	18,401	18,447	18,498	18,557	18,625	18,694	18,766	18,295	18,498	18,766
Total Non-farm Employm	ent (Millior	ıs)													
New England	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.4	7.1	7.2	7.3
Middle Atlantic	18.6	18.7	18.8	18.8	18.9	19.0	19.0	19.1	19.1	19.2	19.2	19.3	18.7	19.0	19.2
E. N. Central	21.0	21.1	21.1	21.3	21.4	21.4	21.5	21.6	21.6	21.7	21.8	21.9	21.1	21.5	21.8
W. N. Central	10.3	10.4	10.4	10.5	10.5	10.6	10.6	10.6	10.7	10.7	10.8	10.8	10.4	10.6	10.7
S. Atlantic		26.3	26.4	26.6	26.8	27.0	27.1	27.2	27.4	27.5	27.6	27.8	26.3	27.0	27.6
E. S. Central	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	8.0	8.0	8.0	7.7	7.9	8.0
W. S. Central	16.2	16.3	16.5	16.6	16.7	16.8	16.8	16.9	16.9	17.0	17.1	17.2	16.4	16.8	17.1
Mountain		9.7	9.8	9.9	9.9	10.0	10.0	10.1	10.3	10.2	10.3	10.3	9.8	10.0	10.2
Pacific	21.0	21.2	21.3	21.4	21.6	21.7	21.8	21.9	22.0	22.1	22.2	22.3	21.2	21.7	22.1
							_ 7.0					0			

<sup>- =</sup> no data available

**Notes:** The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics. Regions refer to U.S. Census divisions.

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

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

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

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Informat					Energy (	Jutlook -	March 2	2015							
		201				20				20	-			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Heating Degree Days															
New England	-	883	147	2,087	3,650	878	136	2,192	3,197	880	136	2,192	6,683	6,856	6,405
Middle Atlantic	3,441	705	99	1,967	3,372	692	91	2,001	2,930	696	91	2,001	6,211	6,155	5,718
E. N. Central	3,935	727	168	2,364	3,584	721	128	2,257	3,147	734	128	2,257	7,194	6,690	6,267
W. N. Central		754	176	2,509	3,412	679	154	2,435	3,222	685	154	2,436	7,298	6,680	6,497
South Atlantic		195	14	1,033	1,655	213	16	1,006	1,469	214	16	1,005	2,951	2,890	2,703
E. S. Central	2,270	231	17	1,412	2,144	266	22	1,336	1,864	266	22	1,336	3,931	3,768	3,489
W. S. Central	1,485	93	4	850	1,402	96	5	827	1,196	92	5	826	2,432	2,330	2,119
Mountain		716	153	1,765	1,994	650	139	1,817	2,181	659	139	1,817	4,762	4,601	4,797
Pacific	1,259	470	57	980	1,117	446	81	1,117	1,379	511	81	1,117	2,766	2,760	3,088
U.S. Average	2,452	480	80	1,539	2,301	469	75	1,540	2,122	482	75	1,537	4,552	4,385	4,217
Heating Degree Days, Pr	ior 10-year	Average													
New England	3,152	836	134	2,167	3,166	838	134	2,148	3,192	830	140	2,145	6,289	6,286	6,307
Middle Atlantic	2,905	660	88	1,983	2,936	666	90	1,976	2,962	659	95	1,972	5,636	5,668	5,688
E. N. Central	3,117	690	120	2,243	3,192	694	123	2,262	3,236	695	131	2,257	6,170	6,272	6,318
W. N. Central	3,209	686	149	2,404	3,272	691	150	2,432	3,301	696	156	2,439	6,449	6,545	6,592
South Atlantic	1,465	194	14	1,006	1,481	196	14	1,012	1,499	191	15	1,009	2,679	2,702	2,714
E. S. Central	1,810	236	19	1,336	1,853	236	19	1,358	1,898	233	20	1,353	3,402	3,466	3,505
W. S. Central	1,157	85	5	827	1,189	86	5	834	1,222	86	5	836	2,075	2,114	2,149
Mountain	. 2,267	728	156	1,887	2,259	731	151	1,873	2,241	720	149	1,875	5,038	5,013	4,984
Pacific	1,554	625	96	1,236	1,534	622	92	1,205	1,498	602	89	1,203	3,511	3,453	3,391
U.S. Average	2,161	492	77	1,569	2,183	493	77	1,567	2,195	486	79	1,563	4,298	4,319	4,323
Cooling Degree Days															
New England	. 0	76	339	0	0	85	409	1	0	85	409	1	415	494	494
Middle Atlantic	. 0	154	433	6	0	162	553	5	0	162	553	5	593	720	721
E. N. Central	. 0	230	378	3	0	218	544	8	0	216	544	8	611	769	768
W. N. Central	. 0	263	539	12	3	275	683	11	3	274	683	11	814	971	970
South Atlantic	110	649	1,065	199	102	615	1,137	224	114	615	1,138	224	2,023	2,077	2,091
E. S. Central	. 6	504	923	65	20	493	1,036	65	27	493	1,036	65	1,499	1,615	1,621
W. S. Central	. 34	776	1,437	218	55	819	1,472	193	78	831	1,473	193	2,465	2,539	2,575
Mountain	. 31	438	870	95	20	446	968	88	21	445	968	88	1,433	1,522	1,523
Pacific	. 39	225	695	112	32	205	585	74	31	202	584	74	1,071	897	891
U.S. Average	. 35	394	776	96	35	390	844	92	41	391	845	93	1,301	1,361	1,370
Cooling Degree Days, Pr	ior 10-year	Average													
New England	. 0	83	417	1	0	85	419	1	0	82	411	1	500	505	495
Middle Atlantic	. 0	167	558	5	0	168	557	5	0	165	542	6	730	731	713
E. N. Central	. 3	230	546	6	3	234	545	6	3	228	533	6	785	787	770
W. N. Central	. 7	277	678	9	7	282	683	9	7	280	676	9	972	981	972
South Atlantic	110	636	1,154	213	110	635	1,155	210	110	645	1,142	211	2,112	2,111	2,108
E. S. Central	. 35	528	1,045	57	33	526	1,053	52	32	533	1,040	53	1,666	1,664	1,658
W. S. Central	102	882	1,506	190	94	883	1,518	183	91	886	1,507	184	2,680	2,678	2,667
Mountain	. 18	420	922	70	17	424	930	<i>7</i> 5	18	431	935	76	1,431	1,446	1,461
Pacific	. 26	166	589	58	26	170	602	65	27	178	603	67	839	863	875
U.S. Average		393	843	83	41	396	849	84	41	399	842	85	1,361	1,369	1,366

<sup>- =</sup> 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).