November 2014

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

Administration

## **Highlights**

- North Sea Brent crude oil spot prices fell from \$95/barrel (bbl) on October 1 to \$84/bbl at the end of the month. The causes included weakening outlooks for global economic and oil demand growth, the return to the market of previously disrupted Libyan crude oil production, and continued growth in U.S. tight oil production. Brent crude oil spot prices averaged \$87/bbl in October, the first month Brent prices have averaged below \$90/bbl since November 2010. EIA projects that Brent crude oil prices will average \$83/bbl in 2015, \$18/bbl lower than forecast in last month's STEO. There is significant uncertainty over the crude oil price forecast because of the range of potential supply responses from the Organization of the Petroleum Exporting Countries (OPEC), particularly Saudi Arabia, and U.S. tight oil producers to the new lower oil price environment.
- Driven largely by falling crude oil prices, U.S. weekly regular gasoline retail prices averaged \$2.99/gallon (gal) on November 3, the lowest level since December 20, 2010. U.S. regular gasoline retail prices are projected to continue to decline for the remainder of the year to an average of \$2.80/gal in December, \$0.33/gal lower than in last month's STEO. EIA expects U.S. regular gasoline retail prices, which averaged \$3.51/gal in 2013, to average \$3.39/gal in 2014 and \$2.94/gal in 2015.
- Total U.S. crude oil production averaged an estimated 8.9 million barrels per day (bbl/d) in October, and monthly average production is forecast to surpass 9.0 million bbl/d in December 2014. Projected total crude oil production averages 9.4 million bbl/d in 2015, a reduction of 0.1 million bbl/d from last month's STEO. If realized, the 2015 forecast would be the highest annual average crude oil production since 1972. Natural gas plant liquids production is expected to increase from an average of 2.6 million bbl/d in 2013 to 3.2 million bbl/d in 2015.
- Natural gas working inventories on October 31 totaled 3.57 trillion cubic feet (Tcf), 0.24 Tcf (6%) below the level at the same time a year ago and 0.26 Tcf (7%) below the previous five-year average (2009-13). Despite the lower stocks at the start of this winter's heating season, EIA expects the Henry Hub natural gas spot price to average \$3.97/million British thermal units (MMBtu) this winter compared with \$4.53/MMBtu last winter. This price forecast reflects both lower expected heating demand and significantly higher natural gas production this winter.

## **Global Petroleum and Other Liquids**

EIA made significant changes to its forecast global oil balance for this month's STEO. EIA expects that global oil markets will be looser than projected in last month's STEO, as global oil supply outpaces consumption by a larger amount, resulting in a global stock build of 0.4 million bbl/d in the fourth quarter of 2014 and a build of 0.4 million bbl/d in 2015. EIA's global supply forecast was revised upward by 0.2 million bbl/d to average 92.9 million bbl/d in 2015, mostly reflecting a smaller decline in Saudi Arabia's production compared with last month's forecast. The global demand forecast was revised downward by 0.2 million bbl/d to average 92.5 million bbl/d in 2015, based on weaker global economic growth prospects for next year.

Saudi Arabia's role in the oil market going forward is highly uncertain. Saudi Arabia has stated that it would rather maintain its export market share than cut production to keep prices higher. In the past, Saudi Arabia often played the role of the swing producer, cutting its production to accommodate supply growth elsewhere or increasing its output level to make up for a supply shortfall. EIA assumes that Saudi Arabia will continue to play some role as a swing producer, but perhaps to a lesser extent, as the country is sensitive to significant losses in market share. Saudi Arabia's production is still projected to decline in 2015 compared with this year, but by a smaller amount than previously expected. EIA projects that Saudi Arabia will cut production below its current level of 9.5 million bbl/d to avoid further downward pressure on oil prices amid high non-OPEC supply growth, but will maintain output above 9.0 million bbl/d through 2015.

EIA's projected global oil balance may be looser or tighter than expected depending on changes to Saudi Arabia's production level, Libya's supply outages, and global demand. Libya's crude oil production reached 1.0 million bbl/d in October 2014, its highest production level since early July 2013. However, Libya's production has since fallen because of new production outages. Intermittent supply outages in Libya will most likely persist as the country faces political instability and a deteriorated security environment in parts of the country.

Global Petroleum and Other Liquids Consumption. EIA estimates that global consumption grew by 1.3 million bbl/d in 2013, averaging 90.5 million bbl/d for the year. EIA expects global consumption to grow by 0.9 million bbl/d in 2014 and 1.1 million bbl/d in 2015. Projected global oil-consumption-weighted real gross domestic product (GDP), which increased by an estimated 2.7% in 2013, grows by 2.7% and 3.2% in 2014 and 2015, respectively. Global consumption was revised downward by 0.2 million bbl/d in 2015, based on a 0.1% reduction to forecast global oil-consumption-weighted real GDP growth. Short-term elasticities of demand with respect to income are more powerful (negatively) than the positive effects on demand from lower prices.

Consumption outside of the Organization for Economic Cooperation and Development (OECD) is projected to grow by 1.2 million bbl/d in 2014 and 1.0 million bbl/d in 2015, accounting for nearly all forecast global consumption growth during that period. China is the leading

contributor to projected global consumption growth, with consumption increasing by an annual average of 0.36 million bbl/d in 2014 and 2015.

EIA expects a 0.3-million-bbl/d decline in OECD consumption in 2014. Japan and Europe are expected to account for much of the projected OECD consumption decline. EIA expects Japan's consumption, which fell by 0.16 million bbl/d in 2013, to continue to decline by 0.14 million bbl/d in 2014 and 0.12 million bbl/d in 2015. Japan's oil consumption is expected to fall with less oil used in the electricity sector as the country returns some nuclear power plants to service in 2015 and increases the use of natural gas and coal to generate electricity. EIA projects that OECD Europe's consumption, which fell by 0.15 million bbl/d in 2013, will decline by 0.14 million bbl/d in 2014 and by a further 0.07 million bbl/d in 2015. U.S. consumption, which increased by 0.47 million bbl/d in 2013, is expected to decline by 0.06 million bbl/d in 2014 and then increase by 0.16 million bbl/d in 2015.

Non-OPEC Petroleum and Other Liquids Supply. EIA estimates that non-OPEC production grew by 1.4 million bbl/d in 2013, averaging 54.2 million bbl/d for the year. EIA expects non-OPEC production to grow by 1.9 million bbl/d in 2014 and 0.9 million bbl/d in 2015. The United States is the leading contributor to forecast non-OPEC supply growth, increasing by 1.5 million bbl/d in 2014 and 1.1 million bbl/d in 2015. EIA revised downward its U.S. total supply growth forecast by 0.1 million bbl/d in 2015 because of the recent decline in crude oil prices and the expectation that West Texas Intermediate crude oil spot prices will remain near \$80/bbl through 2015. EIA estimates that Eurasia's production will rise by an annual average of 0.06 million bbl/d in 2014 and decline by 0.09 million bbl/d in 2015, reflecting declines in Russia and Azerbaijan. In Russia, inadequate investment to offset natural decline rates at mature oil fields causes forecast production to decline by 0.05 million bbl/d in 2015.

Unplanned supply disruptions among non-OPEC producers averaged slightly lower than 0.6 million bbl/d in October, virtually unchanged from the previous month. South Sudan, Syria, and Yemen accounted for more than 90% of total non-OPEC supply disruptions.

**OPEC Petroleum and Other Liquids Supply**. EIA estimates that OPEC crude oil production averaged 29.9 million bbl/d in 2013, a decline of almost 1.0 million bbl/d from the previous year, primarily reflecting increased outages in Libya, Nigeria, Iran, and Iraq, along with strong non-OPEC supply growth. EIA expects OPEC crude oil production to fall by 0.10 million bbl/d in 2014 and by 0.15 million bbl/d in 2015. In last month's STEO, OPEC crude oil production was projected to decline by more than 0.4 million bbl/d in 2015, but the projected decline was reduced based on a reassessment of Saudi Arabia's willingness to cut production.

Unplanned crude oil supply disruptions among OPEC producers averaged 2.0 million bbl/d in October 2014, slightly lower than the previous month, as fewer outages in Libya offset new outages in the Neutral Zone shared by Kuwait and Saudi Arabia. Libya's production increased to 1.0 million bbl/d in October, its highest production level since early July 2013, but Libya's production has since fallen because of new production outages. Intermittent supply outages in

Libya will most likely persist as the country faces political instability and a deteriorated security environment. As a result, EIA does not expect Libya's oil production to recover to its preblockade level of 1.4 million bbl/d over the forecast period.

EIA expects OPEC surplus crude oil production capacity, which is concentrated in Saudi Arabia, to average 2.1 million bbl/d in 2014 and 2.7 million bbl/d in 2015. These estimates do not include additional capacity that may be available in Iran but is offline because of the effects of U.S. and European Union sanctions on Iran's ability to sell its oil.

**OECD Petroleum Inventories**. EIA estimates that OECD commercial oil inventories totaled 2.55 billion barrels at the end of 2013, equivalent to roughly 55 days of consumption. Projected OECD oil inventories rise to 2.65 billion barrels at the end of 2014.

**Crude Oil Prices.** North Sea Brent crude oil spot prices averaged \$87/bbl in October, a decrease of \$10/bbl from September and the first month Brent crude oil prices have averaged below \$90/bbl since November 2010. The combination of robust world crude oil supply and weak global demand contributed to <u>rising global inventories and lower crude oil prices</u>. The forecast Brent crude oil price averages \$83/bbl in 2015, \$18/bbl lower than projected in last month's STEO.

The monthly average WTI crude oil spot price fell from an average of \$93/bbl in September to \$84/bbl in October. High refinery runs contributed to the discount of WTI crude oil to Brent crude oil narrowing from an average of \$8/bbl during the first half of this year to an average of \$3/bbl in July. More recently, lower-than-expected demand in Europe and Asia combined with continued growth in global liquids supply depressed global crude oil benchmarks like Brent, contributed to the WTI discount to Brent again falling to \$3/bbl in October. EIA now expects WTI crude oil prices to average \$80/bbl in the fourth quarter of 2014 and \$78/bbl in 2015, \$11/bbl and \$17/bbl lower than projected in last month's STEO, respectively. The discount of WTI to Brent crude oil is forecast to widen slightly from current levels, averaging \$6/bbl in 2015.

Energy price forecasts are highly uncertain, and the current values of futures and options contracts suggest that prices could differ significantly from the forecast levels (*Market Prices and Uncertainty Report*). WTI futures contracts for February 2015 delivery, traded during the five-day period ending November 6, averaged \$79/bbl. Implied volatility averaged 28%, establishing the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in February 2015 at \$63/bbl and \$99/bbl, respectively. Last year at this time, WTI for February 2014 delivery averaged \$95/bbl and implied volatility averaged 20%. The corresponding lower and upper limits of the 95% confidence interval were \$80/bbl and \$112/bbl.

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

U.S. weekly regular gasoline retail prices averaged \$2.99/gal on November 3, which marked a decrease of 36 cents since the end of September and the first time gasoline prices have averaged below \$3.00/gal since December 20, 2010. In addition to typical seasonal downturns in gasoline demand and the switchover to winter-grade gasoline, falling crude oil prices have been largely responsible for the drop in retail gasoline prices. EIA expects that low crude oil prices and weak demand will help gasoline prices decrease further in the coming months, falling to an average of \$2.80/gal in December.

**Liquid Fuels Consumption.** Total U.S. liquid fuels consumption rose by 470,000 bbl/d (2.5%) in 2013, the largest increase since 2004. Consumption of hydrocarbon gas liquids (HGL) registered the largest gain, increasing by 190,000 bbl/d (8.5%). In 2014, total liquid fuels consumption is expected to fall by 60,000 bbl/d (0.3%), with declines in the consumption of HGL, residual fuel oil, and other oils offsetting increases in distillate fuel, jet fuel, and unfinished oils consumption. Total consumption grows by 160,000 bbl/d in 2015, with distillate consumption accounting for 100,000 bbl/d of the growth.

Motor gasoline consumption grew by 160,000 bbl/d (1.9%) in 2013, the largest increase since 2004. EIA expects gasoline consumption to remain mostly unchanged in 2014 and then decline by 20,000 bbl/d in 2015, as improving fuel economy in new vehicles continues to offset highway travel growth. Distillate fuel consumption increases by 110,000 bbl/d (3.0%) in 2014, reflecting colder-than-average first-quarter weather and economic growth. Consumption of that fuel rises by a further 100,000 bbl/d (2.5%) in 2015. Some of the growth in distillate fuel consumption in 2015 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. However, EIA also expects low-sulfur distillate fuels will continue to be blended into residual fuel to meet the new sulfur limit and reported as residual fuel production and consumption.

**Liquid Fuels Supply.** Forecast U.S. crude oil production increases from an average of 7.5 million bbl/d in 2013 to 8.6 million bbl/d in 2014 and 9.4 million bbl/d in 2015. Because of the recent decline in crude oil prices, EIA has revised U.S. crude oil production in 2015 downward by an average of 80,000 bbl/d compared with last month's forecast. As the WTI crude oil price is forecast to average \$78/bbl in 2015, EIA expects to see some reduction in drilling activity because of marginal economic returns in some areas. This will primarily occur in noncore areas of emerging and mature tight oil basins, where low-producing wells become less attractive at lower prices and companies scale back expensive exploration and research drilling. The production forecast is not affected significantly because the wells that will not be drilled at these prices produce relatively little compared to wells in the core areas of a formation. Oil prices remain high enough to support most drilling activity in the Bakken, Eagle Ford, Niobrara, and Permian Basin, which contribute the majority of U.S. oil production growth.

HGL production at natural gas liquids plants is projected to increase from 2.6 million bbl/d in 2013 to 3.2 million bbl/d in 2015. Ethane and propane are expected to contribute most to the projected growth, with the majority of production directed towards domestic petrochemical use or exports. EIA expects higher rates of ethane recoveries as a result of planned increases in petrochemical facility 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 production has contributed to a significant decline in petroleum imports. The share of total U.S. liquid fuels consumption met by net imports fell from 60% in 2005 to an average of 33% in 2013. EIA expects the net import share to decline to 21% in 2015, which would be the lowest level since 1969.

**Petroleum Product Prices.** Monthly U.S. average regular gasoline retail prices fell from \$3.69/gal in June to \$3.17/gal in October. EIA expects that U.S. regular gasoline retail prices will continue to fall to an average of \$2.80/gal in December 2014. The U.S. annual average regular gasoline retail price, which averaged \$3.51/gal in 2013, is projected to average \$3.39/gal in 2014 and \$2.94/gal in 2015, \$0.06/gal and \$0.44/gal lower than in last month's STEO, respectively. Diesel fuel prices, which averaged \$3.92/gal in 2013, are projected to fall to an average of \$3.82/gal in 2014 and \$3.38/gal in 2015, \$0.04 and \$0.41 lower than in last month's STEO, respectively.

The February 2015 New York Harbor reformulated blendstock for oxygenate blending (RBOB) futures contract averaged \$2.12/gal for the five trading days ending November 6, 2014. Based on the market value of futures and options contracts for this key petroleum component of gasoline, there is a 15% probability that the RBOB futures contract price at expiration will fall below \$1.85/gal, consistent with a monthly average regular-grade gasoline retail price less than \$2.50/gal in February 2015. There is also a 19% 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. 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.

Lower projected crude oil prices also contribute to a reduction in the forecast residential heating oil price and average household heating oil expenditures this winter. The average household that uses heating oil as its primary space heating fuel is expected to pay an average of \$3.27/gal this winter, \$0.36/gal lower than projected in last month's STEO. The average household is now expected to spend \$1,779 for heating oil this winter, \$213 lower than in last month's STEO.

#### **Natural Gas**

Following a strong injection season, working gas in storage ended the summer refill season at an estimated 3,571 Bcf. Sustained cold weather early this year left Lower 48 working gas stocks at 857 Bcf at the end of March, the lowest level since 2003. Beginning in mid-April, weekly storage injections have exceeded the five-year average for 29 consecutive weeks because of strong domestic production growth and a mild summer (implying less demand from electric generators to meet air conditioning demand). In addition, natural gas prices declined over the summer, as strong injections and production eased concerns about supply for this winter. Based on a forecast for a close-to-normal winter, EIA projects that inventories will end the winter season on March 31 at 1,562 Bcf.

**Natural Gas Consumption.** EIA expects total natural gas consumption to average 73.2 Bcf/d in 2014, an increase of 2.2% from 2013, with the industrial sector leading the growth. In 2015, total projected natural gas consumption is expected to be flat as continued industrial sector growth and higher electric power sector consumption offset lower residential and commercial consumption. Higher natural gas prices this year contribute to a 1.7% decline in natural gas consumption in the power sector to 22.0 Bcf/d in 2014. EIA expects natural gas consumption in the power sector to increase to 22.7 Bcf/d in 2015.

**Natural Gas Production and Trade.** EIA expects natural gas marketed production to grow by an annual rate of 4.8% in 2014 and 2.3% in 2015. EIA projects that the strong increases already seen in the Lower 48 states for most of this year will continue, more than offsetting the long-term declining trend in the Gulf of Mexico. As of August, the most recent month for which EIA data are available, dry natural gas production was 3.4 Bcf/d greater than it was in August 2013. Production usually declines in September; however, preliminary data indicate that growth has continued, with new production offsetting maintenance declines.

Growing domestic production is expected to continue to put downward pressure on natural gas imports from Canada and spur exports to Mexico. Exports to Mexico, particularly from the Eagle Ford Shale in South Texas, are expected to increase because of growing demand from Mexico's electric power sector and flat Mexican production.

Liquefied natural gas (LNG) imports have fallen over the past four years because higher prices in Europe and Asia are more attractive to sellers than the relatively low prices in the United States. LNG exports are still a very small part of the total market, however, and overall the United States will remain a net importer of natural gas because of pipeline imports from Canada.

**Natural Gas Inventories.** Natural gas working inventories totaled 3,571 Bcf as of October 31, which was 238 Bcf lower than at the same time last year and 261 Bcf lower than the previous five-year (2009-13) average. The injection season began somewhat slowly in April, but has continued at a strong pace, with injections above the five-year average throughout most of the injection season. The deficit to the five-year average and to last year's level has narrowed over

the injection season with substantial weekly stock builds. Heading into next summer, EIA projects that end-of-March 2015 inventories will total 1,562 Bcf, 94 Bcf below the five-year (2010-14) average.

**Natural Gas Prices.** The Henry Hub natural gas spot price averaged \$3.78/MMBtu in October, a decline of 14 cents from September. EIA expects spot prices to remain relatively low but to rise slightly with winter heating demand. Projected Henry Hub natural gas prices average \$4.44/MMBtu in 2014 and \$3.83/MMBtu in 2015.

Natural gas futures prices for February 2015 delivery (for the five-day period ending November 6) averaged \$4.19/MMBtu. Current options and futures prices imply that market participants place the lower and upper bounds for the 95% confidence interval for February 2015 contracts at \$2.76/MMBtu and \$6.38/MMBtu, respectively. At this time last year, the natural gas futures contract for February 2014 averaged \$3.57/MMBtu and the corresponding lower and upper limits of the 95% confidence interval were \$2.70/MMBtu and \$4.73/MMBtu.

#### Coal

According to data compiled by the Association of American Railroads (AAR), <u>year-to-date rail</u> <u>traffic</u> was up 4.5% as of November 1. AAR data show that, despite the large increase in overall rail traffic, <u>coal shipments</u> were only up 0.3%. Shipments of petroleum and grain are up year-to-date by 13.4% and 15.0%, respectively.

On October 8, the U.S. Surface Transportation Board (STB) announced that it is requiring all major freight (Class I) railroads that operate in the United States to publicly file <u>weekly data</u> <u>reports</u> regarding service performance. The measure was in response to ongoing rail service problems, particularly in the Midwest. These data, for which no ending date for their submission has been determined, are in addition to the STB annual requests for service assessments from all Class I railroads.

Several utilities in Minnesota and other Midwest states have cut back or curtailed operation of coal-fired generating units to conserve coal inventories. As a result, the governor of Minnesota and members of the state's congressional delegation <u>requested</u> that the Federal Energy Regulatory Commission (FERC) act to "convene a meeting to hear from utility and railroad representatives to discuss railroad coal-delivery matters and their impact on electric markets and reliability." The letter asked FERC "to protect utility consumers in Minnesota and the other impacted states from the adverse consequences of BNSF's service failures." BNSF, in a <u>response</u> to a petition filed earlier, stated to the STB that it would deliver approximately 24 million tons of coal in October, its highest total since August 2013.

**Coal Supply.** EIA estimates that coal production for the first 10 months of this year, 823 million short tons (MMst), was slightly lower (by 2 MMst, or 0.3%) than production over the same

period last year. EIA expects that annual production will grow by 0.8% to 992 MMst in 2014. In 2015, forecast U.S. coal production increases by 0.7% to 999 MMst.

Electric power sector coal inventories fell to 121 MMst at the end of August, 4 MMst lower than the previous month. This stock drawdown was 1 MMst less than the same time last year. Coal inventories are more than 33 MMst lower when compared with last year.

**Coal Consumption.** Higher electricity demand and higher power sector natural gas prices are contributing to an increase in electric power sector coal consumption this year. EIA projects total coal consumption of 936 MMst in 2014 (870 MMst in the electric power sector), an increase of 1.2% from last year. Total coal consumption is projected to fall by 1.2% in 2015, as retirements of coal power plants rise in response to the implementation of the Mercury and Air Toxics Standards, electricity sales growth slows to 0.7%, and natural gas prices fall relative to coal prices.

**Coal Trade.** Exports of coal are projected to decline to 96 MMst in 2014 from 118 MMst in 2013, primarily because of slowing world coal demand growth, lower international coal prices, and increasing coal output in other coal-exporting countries. With no improvement in conditions in global markets, EIA projects coal exports to fall below 90 MMst in 2015, the lowest since 2010.

EIA expects coal imports, which account for about 1% of U.S. coal consumption, to total 11.4 MMst in 2014 and fall slightly to 10.7 MMst in 2015.

**Coal Prices.** The annual average coal price to the electric power industry fell from a historically high \$2.39/MMBtu in 2011 to \$2.35/MMBtu in 2013. EIA expects the average delivered coal price to be \$2.36/MMBtu in 2014 and remain at that level in 2015.

## **Electricity**

Nuclear plant outages during October 2014 averaged 9% more than in October 2013, as some plants on 18-month schedules refueled their units and performed other maintenance. The Vermont Yankee nuclear facility will only be operating for another month or two before beginning the process of retiring. The closure of this plant will have a measureable impact on the mix of fuels used for supplying electricity to the region. In recent years, the electricity industry in New England has been moving toward natural gas as a primary fuel for power generation, along with increased imports of hydroelectricity from Canada.

**Electricity Consumption**. Total U.S. electricity retail sales, which increased by 0.2% in 2013, grow by 0.9% and 0.7% in 2014 and 2015, respectively. U.S. residential electricity sales during 2014 are estimated to reach an average that is 1.5% higher than 2013, driven primarily by high consumption during the winter months earlier in the year. EIA expects relatively flat residential sales during 2015 as weather returns closer to normal levels.

**Electricity Generation.** EIA estimates that U.S. electricity generation in 2014 will average 11.2 terawatthours per day (TWh/d), which would be 0.1 TWh/d higher than average generation last year. Relative fuel costs have favored coal-fired generation over natural gas this year, leading to an expected increase in coal's share of total generation from 39.1% in 2013 to 39.6% this year, while the share supplied by natural gas falls from 27.4% to 27.0%. In 2015, EIA expects that natural gas's fuel share will rise to 27.6% and coal's fuel share will decline to 38.8%. Within the Northeast region, the share of total generation supplied by nuclear power falls from 35.1% in 2014 to 33.2% in 2015.

**Electricity Retail Prices.** EIA expects the U.S. residential price to average 12.5 cents per kilowatthour in 2014, which is 3.0% higher than the average last year. Prices increase in all regions of the country except along the Pacific Coast. Average U.S. residential electricity prices grow at a slower rate of 1.7% in 2015.

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

California's drought, which began in 2011, has <u>significantly limited hydropower</u>, requiring generation from other sources to make up for the shortfall. While the drought's effect on hydropower generation is most noticeable in California, the western United States as a whole has experienced a decline. Conventional hydropower, which is seasonal and typically peaks in the late spring and early summer, contributed 40% of electric power generation in the western United States in May 2011. That monthly maximum has steadily declined each year since. In May 2014, the maximum monthly contribution to western generation by the electric power sector from hydropower was 30%.

**Electricity and Heat Generation from Renewables.** EIA projects that total renewables used for electricity and heat generation will grow by 1.8% in 2014. Conventional hydropower generation is projected to fall by 4.2%, while nonhydropower renewables rise by 5.1%. Nonhydropower renewables generation surpasses hydropower on an annual basis for the first time in 2014. In 2015, total renewables consumption for electric power and heat generation increases by 4.5% as a result of a 4.2% increase in hydropower and a 4.6% increase in nonhydropower renewables.

EIA projects that wind power capacity will increase by 7.6% in 2014 and 17.8% in 2015. Electricity generation from wind is projected to contribute 4.7% of total electricity generation in 2015.

EIA expects continued robust growth in utility-scale solar power generation to an average of more than 60 gigawatthours per day in 2015, although this remains a small share (0.6%) of total U.S. generation. While solar growth has historically been concentrated in customer-sited distributed generation installations, utility-scale solar capacity slightly more than doubled in 2013. EIA expects that utility-scale solar capacity will nearly double again between the end of 2013 and the end of 2015; about two-thirds of this new capacity is being built in California. However, customer-sited photovoltaic capacity growth, which the STEO does not forecast, is

expected to exceed utility-scale solar growth between 2013 and 2015, according to <u>EIA's Annual</u> Energy Outlook 2014.

**Liquid Biofuels.** Ethanol production in June matched the monthly average production record of 959,000 bbl/d set in December 2011, and then fell back to an estimated average of 911,000 bbl/d in October. EIA expects ethanol production to average 927,000 bbl/d in 2014 and 934,000 bbl/d in 2015. Biodiesel production averaged 89,000 bbl/d in 2013 and is forecast to average 80,000 bbl/d in 2014 and 84,000 bbl/d in 2015.

Energy-Related Carbon Dioxide Emissions. EIA estimates that <u>carbon dioxide emissions from</u> fossil fuels increased by 2.5% in 2013 from the previous year. <u>Emissions are forecast to rise by 1.0% in 2014</u>, primarily because of cold weather early in the year, and then to decline by 0.1% in 2015. The increase in total emissions in 2013 and 2014 reflects increases in emissions from coal of 4.2% and 1.2%, respectively. The price of natural gas to electric power generators was \$0.91/MMBtu above its 2012 level in 2013 and is expected to rise by \$0.83/MMBtu in 2014, contributing to an increase in coal use. Coal emissions are projected to decline by 1.0% in 2015.

## **U.S. Economic Assumptions**

**Recent Economic Indicators**. The U.S. Bureau of Economic Analysis (BEA) reported that third-quarter <u>real gross domestic product (GDP)</u> grew at an annualized rate of 3.5% from the second quarter of 2014. Third-quarter GDP rose primarily because of increased government expenditures and exports. Results from other economic data show mixed impacts on consumption and investment. The Census Bureau reported that <u>new home sales</u> in September rose by 0.2% over August 2014 levels, and by 17.0% over September 2013 levels. Census also reported that <u>new orders for durable goods</u> fell by 1.3% from August to September, and fell by 0.2% excluding transportation. <u>Real personal consumption expenditures</u> fell by 0.2% from August to September, according to BEA, although real personal disposable income was unchanged during this time.

EIA used the October 2014 version of the IHS macroeconomic model with EIA's energy price forecasts as model inputs to develop the economic projections in the current STEO.

**Production and Income.** Real GDP growth reaches 2.3% in 2014 and accelerates to 2.7% in 2015, above the 2.2% forecast last month for 2014, but below the 2.9% forecast last month for 2015. The combination of increased investment spending and higher exports is behind the stronger 2014 forecast. The projection for real GDP growth in 2015 has been lowered because of reduced expectations for growth in exports, resulting from a stronger dollar and less demand from slower-growing economies. Real disposable income grows by 2.6% in 2014, just above the 2.5% forecast last month, and total industrial production grows at 4.0% in 2014, just below the 4.1% forecast last month. In 2015, these economic indicators grow at 2.7% and 2.9%, respectively.

**Expenditures.** Private real fixed investment growth averages 5.5% and 6.9% in 2014 and 2015, respectively. Growth is led by industrial and transportation equipment in 2014 and by a broad array of equipment categories in 2015. Real consumption expenditures grow at the same rate as real GDP in 2014 and 2015, at 2.3% and 2.7%. Durable goods expenditures drive consumption spending in both years. Export growth is 3.1% and 3.6% over the same two years, while import growth is 3.3% in 2014 and 4.0% in 2015. Total government expenditures fall by 0.4% in 2014, but increase by 0.5% in 2015.

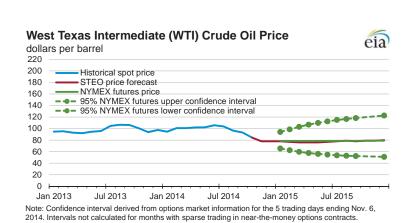
**U.S. Employment, Housing, and Prices.** Projected growth in nonfarm employment averages 1.8% in 2014 and 2015. This is accompanied by a gradually declining unemployment rate that reaches 5.6% at the end of 2015. The employment growth in 2015 is the same as projected last month, and the declines in the unemployment rate are slightly greater. Housing starts grow at an average of 7.2% and 19.6% in 2014 and 2015, respectively. Both consumer and producer price indexes increase at a moderate pace, and wages continue to show modest gains.

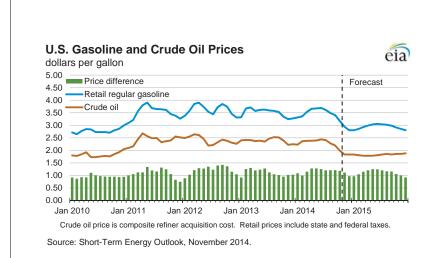
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views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

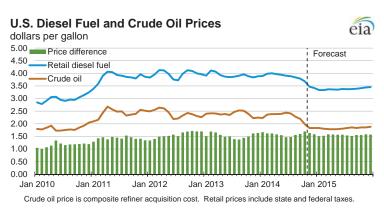


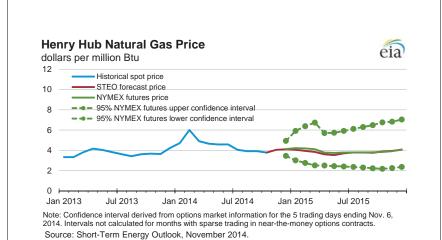
# **Short-Term Energy Outlook**

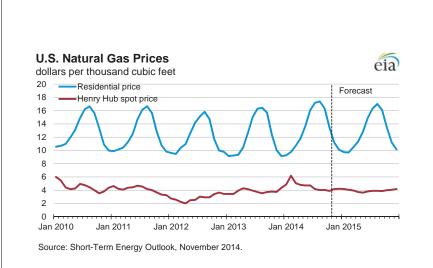
## Chart Gallery for November 2014

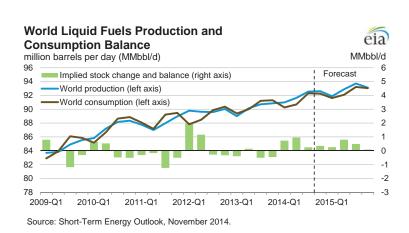


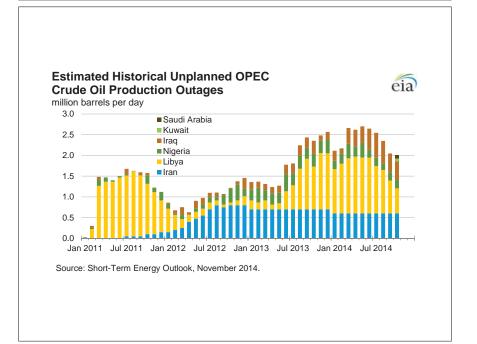


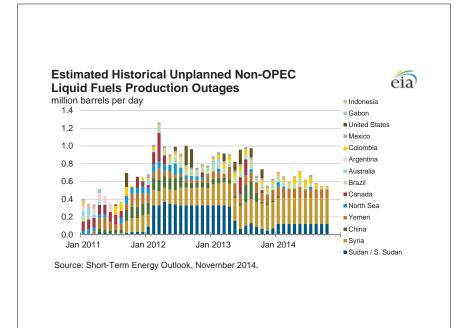


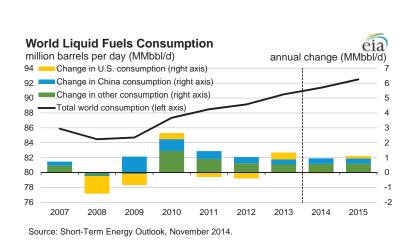


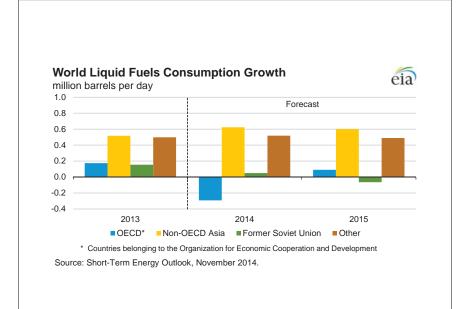


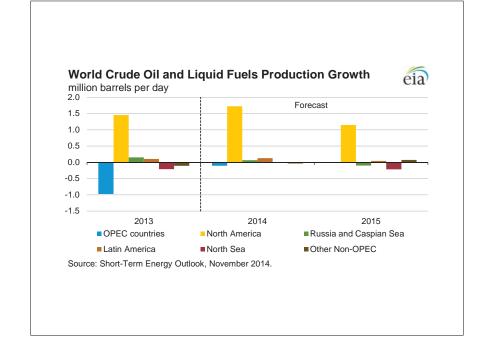


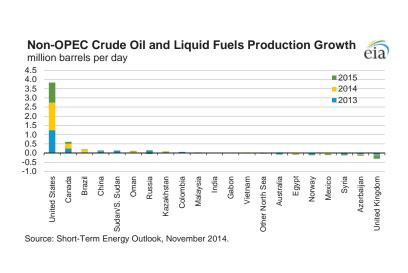


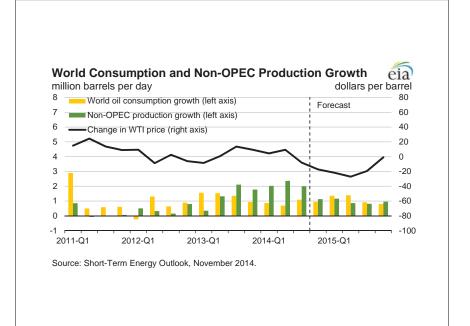


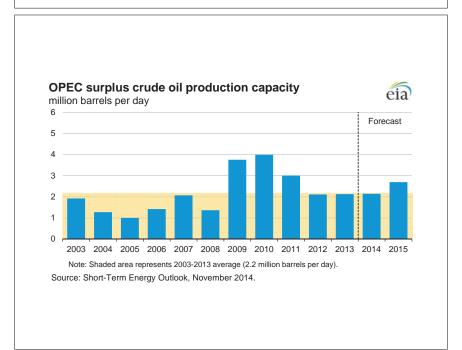


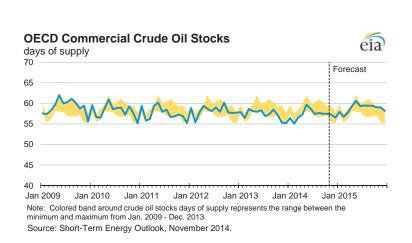


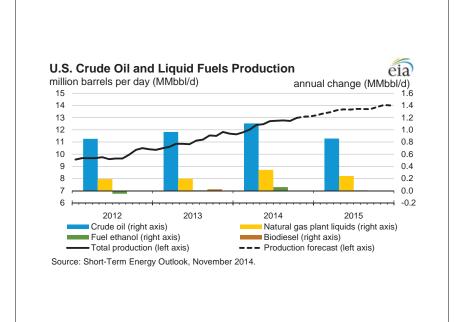


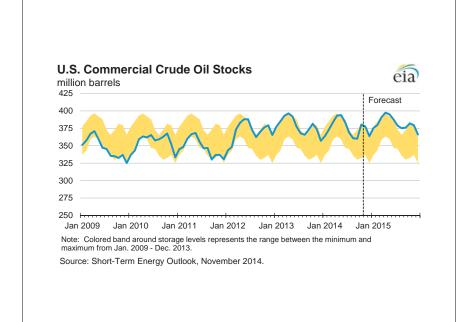


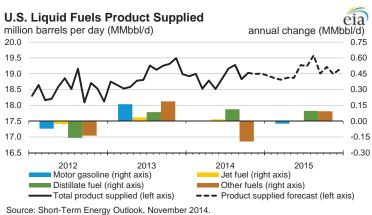


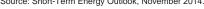


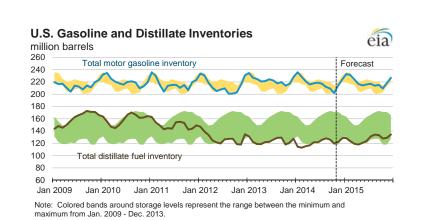


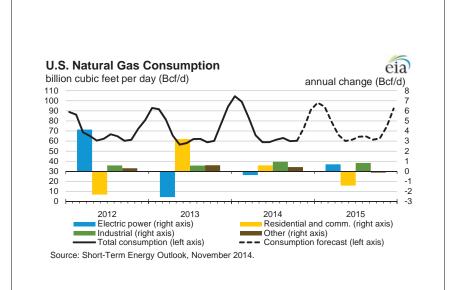


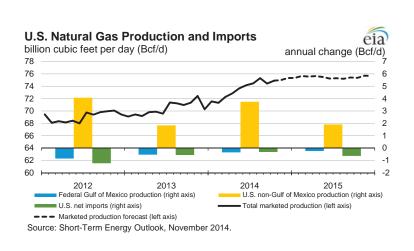


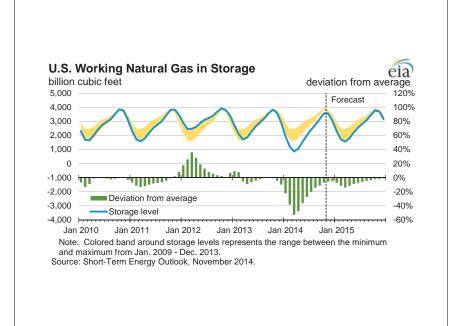


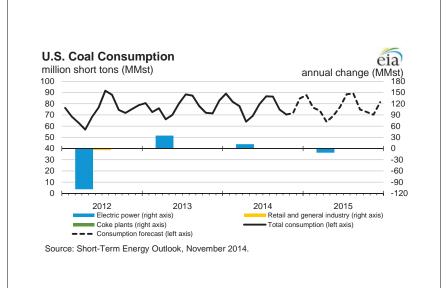


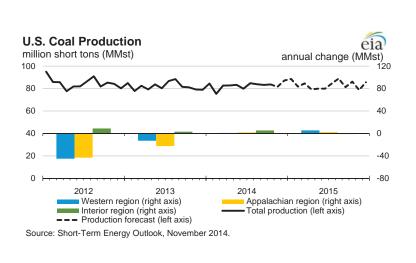


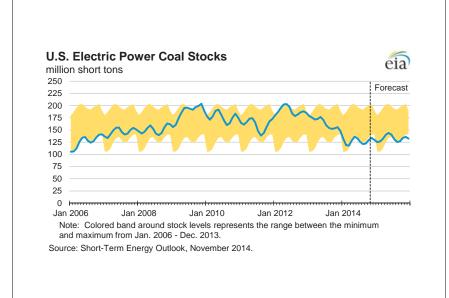


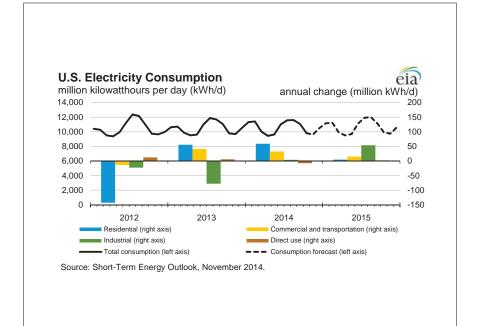


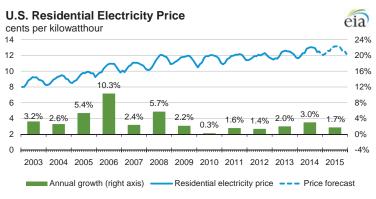






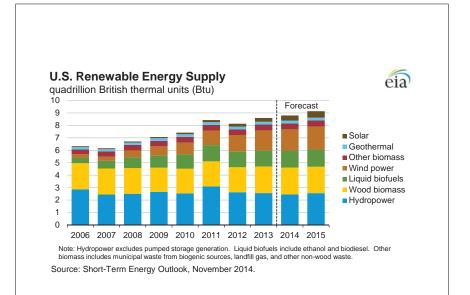


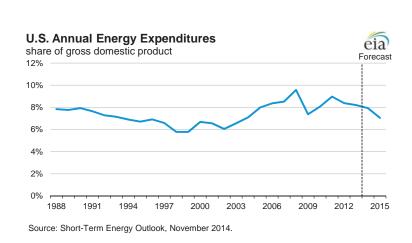


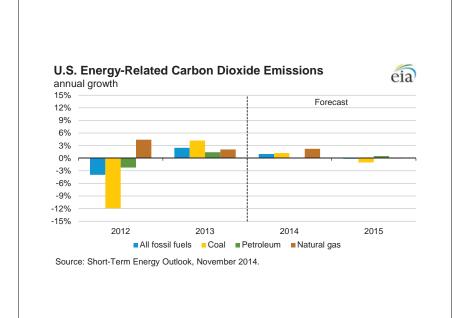


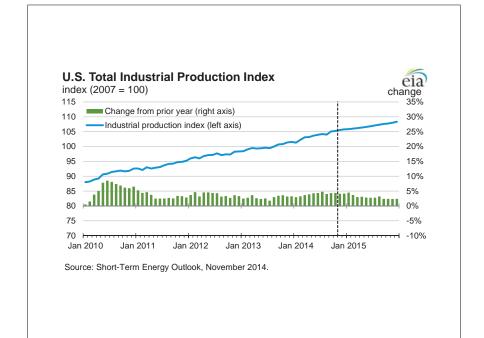
#### U.S. Electricity Generation by Fuel, All Sectors eia thousand megawatthours per day 14,000 Forecast 12,000 Coal 10,000 Natural gas ■ Petroleum 8.000 ■ Nuclear 6,000 Hydropower ■ Renewables 4,000 Other sources 2,000 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

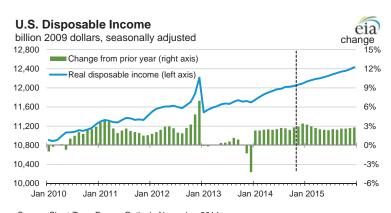
Note: Labels show percentage share of total generation provided by coal and natural gas.

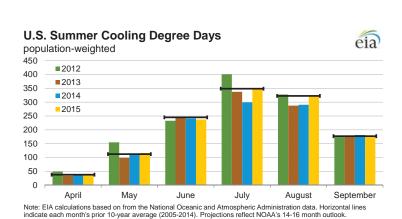




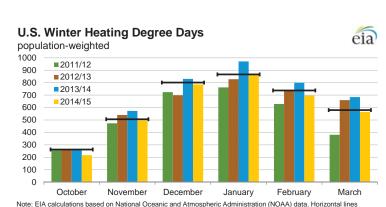








Source: Short-Term Energy Outlook, November 2014.



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. Source: Short-Term Energy Outlook, November 2014.

## U.S. Census Regions and Divisions



Table WF01. Average Consumer Prices and Expenditures for Heating Fuels During the Winter U.S. Energy Information Administration | Short-Term Energy Outlook - November 2014

U.S. Ellergy illioimation Admin		<u> </u>		Winter of				Fo	recast
Fuel / Region	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	% Change
	_	-		-	_	-		·	
Natural Gas									
Northeast									
Consumption (Mcf**)	75.2	80.3	75.7	80.7	66.4	76.1	84.1	75.6	-10.0
Price (\$/mcf)	15.18	15.83	13.31	12.66	12.21	11.77	11.62	12.29	5.8
Expenditures (\$) Midwest	1,141	1,272	1,007	1,022	812	895	977	930	-4.8
Consumption (Mcf)	78.2	80.7	78.6	80.2	65.4	77.6	88.1	76.9	-12.7
Price (\$/mcf)	11.40	11.47	9.44	9.23	9.07	8.41	8.70	9.11	4.7
Expenditures (\$) South	892	926	742	740	593	652	767	700	-8.7
Consumption (Mcf)	44.6	47.3	53.3	49.3	40.9	46.5	52.3	47.7	-8.7
	14.18	47.3 14.07		11.02		46.5 10.72			-o. <i>1</i> 5.2
Price (\$/mcf)	632	665	11.52 614	544	11.45 468	499	10.81 565	11.37	5.2 -4.0
Expenditures (\$) West	032	000	014	544	400	499	363	542	-4.0
Consumption (Mcf)	50.4	47.8	49.9	49.4	49.1	48.6	46.4	43.8	-5.6
Price (\$/mcf)	11.31	10.86	9.91	9.67	9.35	9.11	9.95	10.02	8.0
Expenditures (\$) U.S. Average	570	519	494	478	459	443	462	439	-4.9
Consumption (Mcf)	62.5	64.2	64.4	65.0	55.7	62.5	68.1	61.2	-10.1
Price (\$/mcf)	12.72	12.87	10.83	10.46	10.28	9.76	10.00	10.46	4.6
Expenditures (\$)	795	826	698	680	572	610	681	640	-6.0
Heating Oil									
U.S. Average									
Consumption (gallons)	537.9	576.7	544.8	580.7	471.2	545.6	607.6	543.5	-10.5
Price (\$/gallon)	3.33	2.65	2.85	3.38	3.73	3.87	3.88	3.27	-15.5
Expenditures (\$)	1,790	1,530	1,552	1,966	1,757	2,114	2,355	1,779	-24.5
Electricity									
Northeast									
Consumption (kWh***)	6,835	7,063	6,847	7,076	6,436	6,863	7,223	6,845	-5.2
Price (\$/kwh)	0.145	0.152	0.152	0.154	0.154	0.152	0.163	0.167	2.4
Expenditures (\$) Midwest	988	1,071	1,040	1,091	993	1,046	1,179	1,144	-2.9
Consumption (kWh)	8,631	8,751	8,660	8,733	7,897	8,588	9,169	8,543	-6.8
Price (\$/kwh)	0.090	0.097	0.099	0.105	0.111	0.111	0.112	0.116	4.0
Expenditures (\$) South	774	851	856	914	875	955	1,024	993	-3.1
Consumption (kWh)	7,778	8,057	8.486	8,224	7,471	7,979	8.394	8,041	-4.2
Price (\$/kwh)	0.098	0.109	0.103	0.104	0.107	0.107	0.109	0.112	3.1
Expenditures (\$)	765	878	874	856	798	851	913	902	-1.3
West									
Consumption (kWh)	7,288	7,084	7,239	7,216	7,190	7,153	6,988	6,792	-2.8
Price (\$/kwh)	0.104	0.107	0.110		0.115	0.119	0.124	0.126	1.7
Expenditures (\$) U.S. Average	756	755	800	809	825	852	864	854	-1.1
Consumption (kWh)	7,585	7,725	7,937	7,844	7,253	7,674	7,991	7,624	-4.6
Price (\$/kwh)	0.104	0.112	0.110	0.113	0.116	0.117	0.120	0.123	2.9
Expenditures (\$)	789	866	873	885	843	895	955	938	-1.8

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

C.C. Energy Information / turning				Winter of				Fo	recast
Fuel / Region	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	% Change
Propane									
Northeast									
Consumption (gallons)	648.0	690.1	648.1	692.7	573.3	651.9	745.5	674.4	-9.5
Price* (\$/gallon)	2.93	2.84	2.98	3.24	3.34	3.00	3.56	3.21	-9.8
Expenditures (\$)	1,897	1,961	1,933	2,241	1,916	1,959	2,654	2,165	-18.4
Midwest									
Consumption (gallons)	774.6	795.0	779.6	791.8	644.3	766.3	868.7	758.3	-12.7
Price* (\$/gallon)	2.25	2.11	1.99	2.11	2.23	1.74	2.61	1.86	-28.7
Expenditures (\$)	1,744	1,678	1,548	1,674	1,437	1,333	2,267	1,410	-37.8
Number of households by pri	mary enac	e heating	fuel (thou	ieande)					
Northeast	пагу зрас	cheating	raci (tilot	isanas <sub>j</sub>					
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	6,244	-4.1
Propane	6,184	5,999	5,936	5,829	5,707	5,782	5,707	5,479	-4.0
Electricity	39,332	40,159	41,029	42,380	43,734	44,810	45,795	46,861	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	5,597	4,938	-11.8
Midwest	5,603	5,810	5,639	5,773	4,484	5,544	6,452	5,482	-15.0
South	2,279	2,493	2,870	2,632	2,023	2,432	2,794	2,494	-10.7
West	3,339	3,116	3,285	3,258	3,230	3,182	2,993	2,773	-7.3
U.S. Average	3,729	3,869	3,937	3,939	3,225	3,723	4,115	3,624	-11.9
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		erm Ene	ergy Out	look - N						45			V	
	1st	20 <sup>-</sup> 2nd	13 3rd	4th	1st	20 <sup>2</sup>	14 3rd	4th	1st	20 2nd	15 3rd	4th	2013	Year 2014	2015
Energy Supply															
Crude Oil Production (a) (million barrels per day)	7.12	7.30	7.56	7.86	8.09	8.51	8.68	8.97	9.23	9.42	9.40	9.63	7.46	8.57	9.42
Dry Natural Gas Production (billion cubic feet per day)	65.58	66.07	67.43	67.57	67.83	69.33	70.35	70.68	71.09	71.04	70.89	71.14	66.67	69.56	71.04
Coal Production (million short tons)	245	243	257	239	242	246	252	252	255	239	255	250	984	992	999
Energy Consumption															
Liquid Fuels (million barrels per day)	18.64	18.72	19.21	19.26	18.81	18.71	19.09	19.01	18.87	19.00	19.28	19.12	18.96	18.91	19.07
Natural Gas (billion cubic feet per day)	88.47	59.95	61.03	77.16	95.49	61.19	61.50	74.86	90.37	62.51	63.51	76.48	71.59	73.17	73.15
Coal (b) (million short tons)	229	216	253	226	249	213	248	227	238	210	252	224	925	936	925
Electricity (billion kilowatt hours per day)	10.39	10.03	11.55	10.00	10.91	10.03	11.42	9.98	10.76	10.10	11.69	10.09	10.50	10.58	10.66
Renewables (c) (quadrillion Btu)	2.11	2.32	2.08	2.11	2.17	2.37	2.12	2.11	2.22	2.43	2.20	2.23	8.62	8.78	9.08
Total Energy Consumption (d) (quadrillion Btu)	25.47	22.95	24.17	25.04	26.62	23.03	24.13	24.61	25.96	23.31	24.45	24.85	97.64	98.40	98.57
Energy Prices															
Crude Oil (e) (dollars per barrel)	101.14	99.45	105.24	95.97	97.56	101.02	96.46	79.12	76.00	75.34	77.34	78.34	100.46	93.57	76.76
Natural Gas Henry Hub Spot (dollars per million Btu)	3.49	4.01	3.55	3.85	5.21	4.61	3.96	3.98	3.95	3.62	3.78	3.97	3.73	4.44	3.83
Coal (dollars per million Btu)	2.35	2.37	2.33	2.34	2.33	2.39	2.37	2.36	2.36	2.37	2.36	2.36	2.35	2.36	2.36
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR) Percent change from prior year	15,538 1.7	15,607 1.8	15,780 2.3	15,916 3.1	15,832 1.9	16,010 2.6	16,151 2.4	16,271 2.2	16,363 3.4	16,454 2.8	16,551 2.5	16,645 2.3	15,710 2.2	16,066 2.3	16,503 2.7
GDP Implicit Price Deflator (Index, 2009=100) Percent change from prior year	106.2 1.6	106.5 1.5	106.9 1.4	107.3 1.4	107.7 1.4	108.3 1.7	108.5 1.4	109.0 1.6	109.6 1.8	110.0 1.6	110.4 1.8	111.0 1.8	106.7 1.5	108.4 1.5	110.2 1.7
Real Disposable Personal Income (billion chained 2009 dollars - SAAR) Percent change from prior year	11,539 -0.1	11,647 0.3	11,706 0.9	11,712 -1.9	11,810 2.4	11,937 2.5	12,010 2.6	12,068 3.0	12,161 3.0	12,227 2.4	12,313 2.5	12,395 2.7	11,651 -0.2	11,956 2.6	12,274 2.7
Manufacturing Production Index (Index, 2007=100)	97.1 3.2	97.5 2.7	97.9 2.7	99.0 3.2	99.4 2.4	101.1 3.8	102.1 4.4	103.0 4.1	103.5 4.1	104.1 3.0	104.9 2.7	105.6 2.5	97.9 2.9	101.4 3.6	104.5 3.1
Weather	J.2			U. <u>L</u>	27	0.0				0.0	2.,	2.0	2.3	0.0	0.1
U.S. Heating Degree-Days	2,222 37	511 377	76 802	1,661 86	2,454 34	482 391	80 771	1,500 100	2,124 38	476 390	77 845	1,540 94	4,470 1,302	4,516 1,296	4,217 1 366
0.5. Cooling Degree-Days	3/	311	002	00	34	391	///	100	30	390	040	94	1,302	1,290	1,366

<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 - November 2014

		201	3			20	14			20	15			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Crude Oil (dollars per barrel)										-		-		-	-
West Texas Intermediate Spot Average	94.34	94.10	105.84	97.34	98.75	103.35	97.78	80.13	77.00	76.33	78.33	79.33	97.91	95.00	77.75
Brent Spot Average	112.49	102.58	110.27	109.21	108.17	109.70	101.82	84.48	82.00	81.67	84.00	86.00	108.64	101.04	83.42
Imported Average	98.71	97.39	103.07	92.95	94.10	98.59	93.94	76.80	73.51	72.83	74.84	75.82	98.12	91.12	74.24
Refiner Average Acquisition Cost	101.14	99.45	105.24	95.97	97.56	101.02	96.46	79.12	76.00	75.34	77.34	78.34	100.46	93.57	76.76
Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	289	290	288	259	272	298	277	223	219	234	232	217	281	268	226
Diesel Fuel	312	295	306	299	303	300	287	250	247	247	251	255	303	285	250
Heating Oil	308	276	295	296	303	289	275	241	243	234	236	250	297	274	242
Refiner Prices to End Users															
Jet Fuel	316	287	298	294	297	295	287	247	244	244	246	250	298	282	246
No. 6 Residual Fuel Oil (a)	252	244	247	250	249	244	244	211	194	188	193	196	248	236	193
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	357	360	357	329	340	368	350	297	286	303	302	286	351	339	294
Gasoline All Grades (b)	363	367	364	337	348	375	358	306	295	311	310	294	358	347	303
On-highway Diesel Fuel	403	388	391	387	396	394	384	352	335	336	338	343	392	382	338
Heating Oil	389	365	366	373	397	382	369	328	327	320	316	326	378	372	325
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	3.59	4.13	3.66	3.97	5.36	4.75	4.08	4.10	4.07	3.72	3.90	4.09	3.84	4.57	3.94
Henry Hub Spot (dollars per Million Btu)	3.49	4.01	3.55	3.85	5.21	4.61	3.96	3.98	3.95	3.62	3.78	3.97	3.73	4.44	3.83
End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	4.57	4.95	4.38	4.68	6.17	5.60	5.01	5.04	5.26	4.56	4.73	5.09	4.64	5.47	4.93
Commercial Sector	7.77	8.53	8.95	7.96	8.66	9.61	9.73	8.92	8.98	9.01	9.52	8.99	8.08	8.99	9.05
Residential Sector	9.24	11.90	16.13	9.90	9.83	13.18	16.97	10.90	9.93	12.48	16.44	10.97	10.30	11.05	11.06
Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.35	2.37	2.33	2.34	2.33	2.39	2.37	2.36	2.36	2.37	2.36	2.36	2.35	2.36	2.36
Natural Gas	4.35	4.56	4.06	4.41	6.82	4.93	4.37	4.86	4.83	4.29	4.45	4.86	4.32	5.16	4.59
Residual Fuel Oil (c)	19.37	19.83	18.76	19.47	19.95	20.44	19.46	17.30	15.49	14.86	14.80	14.90	19.33	19.50	15.01
Distillate Fuel Oil	23.44	22.62	23.23	22.97	23.39	22.74	21.30	19.13	19.29	18.98	19.19	20.23	23.08	22.21	19.42
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.55	6.79	7.24	6.67	7.02	6.94	7.36	6.82	6.75	6.97	7.42	6.84	6.82	7.04	7.00
Commercial Sector	9.96	10.33	10.68	10.14	10.57	10.63	11.07	10.44	10.56	10.90	11.31	10.67	10.29	10.69	10.88
Residential Sector	11.56	12.31	12.54	12.01	11.90	12.73	13.00	12.32	12.29	12.92	13.12	12.44	12.12	12.48	12.70

<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.

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;

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

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.

<sup>(</sup>a) Average for all sulfur contents.

<sup>(</sup>b) Average self-service cash price.

<sup>(</sup>c) Includes fuel oils No. 4, No. 5, No. 6, and topped crude.

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

U.S. Energy Information Adminis	Juanon	201		lorgy Ot	ILIOUR 3 I	ovembe 201		J		201	15			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Supply (million barrels per day) (a)															
OECD	23.10	23.27	23.90	24.57	24.96	25.38	25.70	25.84	26.11	26.21	26.37	26.89	23.72	25.47	26.40
U.S. (50 States)	11.68	12.11	12.63	13.01	13.09	13.82	14.14	14.36	14.58	14.93	15.02	15.26	12.36	13.86	14.95
Canada	4.12	3.86	4.11	4.31	4.37	4.32	4.36	4.42	4.42	4.30	4.45	4.69	4.10	4.37	4.47
Mexico	2.93	2.89	2.88	2.90	2.91	2.89	2.86	2.81	2.86	2.84	2.81	2.78	2.90	2.87	2.82
North Sea (b)	2.88	2.87	2.72	2.85	3.05	2.80	2.76	2.69	2.70	2.59	2.52	2.61	2.83	2.82	2.60
Other OECD	1.49	1.54	1.56	1.50	1.54	1.55	1.58	1.56	1.55	1.55	1.57	1.55	1.52	1.56	1.55
Non-OECD	65.90	66.87	66.81	66.28	66.02	66.27	66.85	66.77	65.76	66.67	67.34	66.24	66.47	66.48	66.51
OPEC	35.97	36.47	36.21	35.46	35.93	35.61	36.05	36.08	35.67	35.99	36.40	35.65	36.03	35.92	35.93
Crude Oil Portion	29.85	30.38	30.12	29.34	29.79	29.51	30.01	29.96	29.48	29.77	30.10	29.31	29.92	29.82	29.67
Other Liquids	6.12	6.09	6.09	6.12	6.14	6.11	6.04	6.13	6.19	6.22	6.31	6.34	6.11	6.10	6.26
Eurasia	13.52	13.45	13.50	13.73	13.64	13.57	13.60	13.62	13.54	13.51	13.53	13.49	13.55	13.61	13.52
China	4.45	4.49	4.38	4.52	4.46	4.49	4.42	4.48	4.48	4.51	4.51	4.52	4.46	4.46	4.50
Other Non-OECD	11.96	12.46	12.72	12.58	11.99	12.60	12.78	12.58	12.08	12.67	12.90	12.58	12.43	12.49	12.56
Total World Supply	89.00	90.14	90.71	90.85	90.98	91.64	92.55	92.61	91.88	92.88	93.71	93.13	90.18	91.95	92.91
Non-OPEC Supply	53.02	53.67	54.50	55.39	55.05	56.03	56.50	56.52	56.21	56.89	57.31	57.48	54.16	56.03	56.98
Consumption (million barrels per day)	) (c)														
OECD	45.87	45.55	46.35	46.50	45.72	44.81	46.05	46.54	46.22	45.08	45.89	46.28	46.07	45.78	45.87
U.S. (50 States)	18.64	18.72	19.21	19.26	18.81	18.71	19.09	19.01	18.87	19.00	19.28	19.12	18.96	18.91	19.07
U.S. Territories	0.32	0.32	0.32	0.32	0.34	0.34	0.34	0.34	0.36	0.36	0.36	0.36	0.32	0.34	0.36
Canada	2.45	2.40	2.43	2.42	2.41	2.38	2.37	2.35	2.34	2.28	2.39	2.37	2.42	2.38	2.34
Europe	13.18	13.80	13.96	13.52	12.99	13.39	13.78	13.74	13.40	13.13	13.57	13.53	13.62	13.48	13.41
Japan	5.05	4.08	4.28	4.72	5.02	3.87	4.15	4.54	4.72	3.97	4.00	4.39	4.53	4.39	4.27
Other OECD	6.22	6.23	6.14	6.26	6.14	6.11	6.32	6.56	6.52	6.34	6.28	6.52	6.21	6.29	6.41
Non-OECD	43.52	44.45	44.87	44.80	44.54	45.88	46.26	45.71	45.40	47.00	47.33	46.76	44.41	45.60	46.63
Eurasia	4.56	4.49	4.76	4.74	4.63	4.56	4.77	4.75	4.53	4.46	4.72	4.71	4.64	4.68	4.61
Europe	0.70	0.71	0.73	0.72	0.71	0.71	0.73	0.73	0.71	0.72	0.74	0.74	0.71	0.72	0.73
China	10.50	10.56	10.51	10.87	10.58	11.16	11.11	11.07	10.92	11.52	11.47	11.43	10.61	10.98	11.34
Other Asia	11.14	11.36	10.94	11.23	11.39	11.62	11.18	11.48	11.64	11.87	11.42	11.72	11.17	11.42	11.66
Other Non-OECD	16.63	17.33	17.93	17.24	17.24	17.83	18.46	17.68	17.60	18.42	18.97	18.17	17.29	17.80	18.29
Total World Consumption	89.39	90.00	91.21	91.30	90.25	90.69	92.31	92.25	91.61	92.08	93.22	93.05	90.48	91.38	92.50
Inventory Net Withdrawals (million ba	rrels per d	ay)													
U.S. (50 States)	0.16	-0.28	-0.16	0.78	0.09	-0.67	-0.12	0.36	-0.10	-0.35	-0.17	0.50	0.13	-0.08	-0.03
Other OECD	-0.23	0.35	-0.27	0.67	-0.26	-0.08	-0.04	-0.27	-0.06	-0.16	-0.12	-0.22	0.13	-0.16	-0.14
Other Stock Draws and Balance	0.46	-0.20	0.93	-1.00	-0.56	-0.21	-0.08	-0.45	-0.10	-0.29	-0.21	-0.37	0.04	-0.32	-0.24
Total Stock Draw	0.39	-0.14	0.51	0.45	-0.73	-0.95	-0.24	-0.36	-0.26	-0.80	-0.49	-0.08	0.30	-0.57	-0.41
End-of-period Inventories (million bar	rels)														
U.S. Commercial Inventory	1,097	1,123	1,137	1,065	1,057	1,123	1,134	1,101	1,110	1,142	1,158	1,111	1,065	1,101	1,111
OECD Commercial Inventory	2,651	2,646	2,685	2,551	2,567	2,640	2,655	2,646	2,661	2,708	2,734	2,707	2,551	2,646	2,707

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

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland,

France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

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

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

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.

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

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

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

<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-			JUOOK - I	Novembe								l	V	
	1st	201 2nd	3rd	4th	1st	20 <sup>-</sup> 2nd	3rd	4th	1st	201 2nd	3rd	4th	2013	Year 2014	2015
			0.0				0.0				0.0				
North America	18.73	18.87	19.62	20.22	20.37	21.02	21.36	21.60	21.87	22.07	22.28	22.73	19.37	21.09	22.24
Canada	4.12	3.86	4.11	4.31	4.37	4.32	4.36	4.42	4.42	4.30	4.45	4.69	4.10	4.37	4.47
Mexico	2.93	2.89	2.88	2.90	2.91	2.89	2.86	2.81	2.86	2.84	2.81	2.78	2.90	2.87	2.82
United States	11.68	12.11	12.63	13.01	13.09	13.82	14.14	14.36	14.58	14.93	15.02	15.26	12.36	13.86	14.95
Central and South America	4.42	4.94	5.25	5.03	4.54	5.15	5.39	5.06	4.59	5.20	5.43	5.10	4.91	5.04	5.08
Argentina	0.69	0.70	0.72	0.72	0.70	0.71	0.71	0.73	0.71	0.72	0.73	0.74	0.71	0.71	0.72
Brazil	2.21	2.74	3.01	2.81	2.34	2.97	3.17	2.83	2.36	3.00	3.19	2.85	2.69	2.83	2.85
Colombia	1.03	1.02	1.04	1.03	1.02	0.99	1.02	1.03	1.02	0.99	1.02	1.02	1.03	1.02	1.01
Other Central and S. America	0.49	0.48	0.48	0.47	0.49	0.49	0.48	0.48	0.50	0.50	0.49	0.49	0.48	0.48	0.49
Europe	3.84	3.83	3.70	3.83	4.03	3.79	3.74	3.66	3.66	3.55	3.47	3.56	3.80	3.80	3.56
Norway	1.82	1.82	1.80	1.82	1.94	1.78	1.86	1.77	1.82	1.79	1.77	1.85	1.81	1.84	1.81
United Kingdom (offshore)	0.85	0.86	0.74	0.86	0.93	0.85	0.71	0.71	0.68	0.63	0.58	0.59	0.83	0.80	0.62
Other North Sea	0.21	0.19	0.18	0.18	0.18	0.17	0.19	0.21	0.20	0.18	0.17	0.17	0.19	0.19	0.18
Eurasia	13.54	13.47	13.51	13.74	13.65	13.59	13.61	13.64	13.55	13.52	13.54	13.51	13.56	13.62	13.53
Azerbaijan	0.90	0.89	0.86	0.87	0.85	0.86	0.85	0.83	0.82	0.80	0.78	0.77	0.88	0.85	0.79
Kazakhstan	1.67	1.61	1.61	1.74	1.73	1.66	1.71	1.72	1.72	1.71	1.71	1.71	1.66	1.70	1.71
Russia	10.47	10.47	10.55	10.64	10.60	10.57	10.53	10.55	10.50	10.49	10.53	10.51	10.53	10.56	10.51
Turkmenistan	0.26	0.26	0.26	0.26	0.27	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.26	0.28	0.29
Other Eurasia	0.23	0.23	0.23	0.23	0.20	0.21	0.24	0.25	0.23	0.23	0.23	0.23	0.23	0.22	0.23
Middle East	1.27	1.19	1.21	1.19	1.19	1.22	1.25	1.26	1.27	1.26	1.27	1.26	1.21	1.23	1.27
Oman	0.94	0.94	0.95	0.95	0.96	0.99	1.02	1.04	1.03	1.03	1.04	1.04	0.94	1.00	1.03
Syria	0.10	0.08	0.07	0.05	0.04	0.04	0.03	0.03	0.04	0.04	0.03	0.03	0.07	0.03	0.03
Yemen	0.17	0.11	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Asia and Oceania	9.02	9.05	8.82	8.94	8.95	8.96	8.85	9.02	9.06	9.09	9.12	9.10	8.95	8.95	9.10
Australia	0.41	0.46	0.48	0.43	0.45	0.46	0.48	0.46	0.47	0.48	0.50	0.47	0.45	0.46	0.48
China	4.45	4.49	4.38	4.52	4.46	4.49	4.42	4.48	4.48	4.51	4.51	4.52	4.46	4.46	4.50
India	0.98	0.98	0.97	0.98	0.98	0.98	0.96	0.98	0.99	0.99	0.99	0.99	0.98	0.97	0.99
Indonesia	0.97	0.97	0.92	0.91	0.92	0.91	0.92	0.92	0.94	0.94	0.94	0.94	0.94	0.92	0.94
Malaysia	0.70	0.66	0.65	0.66	0.69	0.69	0.63	0.70	0.71	0.70	0.70	0.70	0.67	0.68	0.70
Vietnam	0.36	0.36	0.34	0.35	0.33	0.32	0.32	0.33	0.34	0.34	0.34	0.34	0.35	0.33	0.34
Africa	2.21	2.32	2.39	2.45	2.31	2.30	2.29	2.28	2.21	2.20	2.19	2.21	2.34	2.29	2.20
Egypt	0.71	0.70	0.69	0.68	0.67	0.67	0.66	0.65	0.64	0.63	0.62	0.61	0.69	0.66	0.63
Equatorial Guinea	0.28	0.28	0.30	0.31	0.27	0.27	0.27	0.27	0.24	0.24	0.24	0.24	0.29	0.27	0.24
Gabon	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.24	0.24	0.24
Sudan	0.11	0.24	0.30	0.35	0.26	0.26	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.26	0.25
Total non-OPEC liquids	53.02	53.67	54.50	55.39	55.05	56.03	56.50	56.52	56.21	56.89	57.31	57.48	54.16	56.03	56.98
OPEC non-crude liquids	6.12	6.09	6.09	6.12	6.14	6.11	6.04	6.13	6.19	6.22	6.31	6.34	6.11	6.10	6.26
Non-OPEC + OPEC non-crude	59.14	59.76	60.59	61.52	61.19	62.14	62.54	62.65	62.40	63.11	63.62	63.82	60.26	62.13	63.24
Hantana da an OPEO E. d. d. C.						a			,			,			
Unplanned non-OPEC Production Outages	0.91	0.90	0.88	0.64	0.66	0.67	0.60	n/a	n/a	n/a	n/a	n/a	0.83	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)

			13			20	)14			20	15			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Crude Oil															,
Algeria	1.20	1.20	1.20	1.17	1.15	1.15	n/a	n/a	n/a	n/a	n/a	n/a	1.19	n/a	n/a
Angola	1.75	1.78	1.70	1.73	1.63	1.63	n/a	n/a	n/a	n/a	n/a	n/a	1.74	n/a	n/a
Ecudaor	0.51	0.52	0.53	0.54	0.55	0.56	n/a	n/a	n/a	n/a	n/a	n/a	0.53	n/a	n/a
Iran	2.68	2.68	2.68	2.69	2.80	2.80	n/a	n/a	n/a	n/a	n/a	n/a	2.68	n/a	n/a
Iraq	3.05	3.09	3.04	2.93	3.26	3.26	n/a	n/a	n/a	n/a	n/a	n/a	3.03	n/a	n/a
Kuwait	2.60	2.60	2.60	2.60	2.60	2.60	n/a	n/a	n/a	n/a	n/a	n/a	2.60	n/a	n/a
Libya	1.37	1.33	0.65	0.33	0.38	0.23	n/a	n/a	n/a	n/a	n/a	n/a	0.92	n/a	n/a
Nigeria	1.97	1.94	1.98	1.91	1.98	1.98	n/a	n/a	n/a	n/a	n/a	n/a	1.95	n/a	n/a
Qatar	0.73	0.73	0.73	0.73	0.74	0.75	n/a	n/a	n/a	n/a	n/a	n/a	0.73	n/a	n/a
Saudi Arabia	9.10	9.60	10.10	9.80	9.80	9.65	n/a	n/a	n/a	n/a	n/a	n/a	9.65	n/a	n/a
United Arab Emirates	2.70	2.70	2.70	2.70	2.70	2.70	n/a	n/a	n/a	n/a	n/a	n/a	2.70	n/a	n/a
Venezuela	2.20	2.20	2.20	2.20	2.20	2.20	n/a	n/a	n/a	n/a	n/a	n/a	2.20	n/a	n/a
OPEC Total	29.85	30.38	30.12	29.34	29.79	29.51	30.01	29.96	29.48	29.77	30.10	29.31	29.92	29.82	29.67
Other Liquids	6.12	6.09	6.09	6.12	6.14	6.11	6.04	6.13	6.19	6.22	6.31	6.34	6.11	6.10	6.26
Total OPEC Supply	35.97	36.47	36.21	35.46	35.93	35.61	36.05	36.08	35.67	35.99	36.40	35.65	36.03	35.92	35.93
Crude Oil Production Capacity															
Africa	6.28	6.26	5.52	5.14	5.13	4.98	5.43	5.67	5.51	5.51	5.52	5.53	5.80	5.31	5.52
South America	2.71	2.72	2.73	2.74	2.75	2.75	2.75	2.75	2.76	2.76	2.76	2.76	2.72	2.75	2.76
Middle East	23.56	23.62	23.53	23.42	23.86	23.90	23.88	23.98	24.05	24.09	24.14	24.04	23.53	23.90	24.08
OPEC Total	32.55	32.60	31.78	31.29	31.74	31.63	32.06	32.40	32.32	32.37	32.42	32.33	32.05	31.96	32.36
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	2.69	2.21	1.67	1.96	1.95	2.13	2.05	2.44	2.84	2.60	2.33	3.02	2.13	2.14	2.69
OPEC Total	2.69	2.21	1.67	1.96	1.95	2.13	2.05	2.44	2.84	2.60	2.33	3.02	2.13	2.14	2.69
Unplanned OPEC Production Outages	1.34	1.43	2.16	2.47	2.32	2.66	2.32	n/a	n/a	n/a	n/a	n/a	1.85	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	SHOIT-16		rgy Outio	JOK - INO	verriber .		4.4				45				
	Q1	Q2	Q3	Q4	Q1	Q2	14 Q3	Q4	Q1	Q2	15 Q3	Q4	2013	2014	2015
	QΙ	QZ	чs	Q4	Q I	QΖ	ųз	Q4	W.I	QΖ	Q3	Q4	2013	2014	2013
North America	23.15	23.22	23.68	23.70	23.18	23.07	23.59	23.50	23.27	23.36	23.72	23.55	23.44	23.34	23.48
Canada		2.40	2.43	2.42	2.41	2.38	2.37	2.35	2.34	2.28	2.39	2.37	2.42	2.38	2.34
Mexico		2.08	2.03	2.02	1.95	1.97	2.12	2.13	2.05	2.07	2.04	2.05	2.04	2.05	2.05
United States	18.64	18.72	19.21	19.26	18.81	18.71	19.09	19.01	18.87	19.00	19.28	19.12	18.96	18.91	19.07
Central and South America	. 6.71	6.97	6.99	6.97	6.89	7.13	7.21	7.18	7.02	7.28	7.32	7.29	6.91	7.10	7.23
Brazil	2.83	2.94	3.00	2.99	2.97	3.08	3.15	3.14	3.03	3.15	3.21	3.20	2.94	3.09	3.15
Europe	13.88	14.51	14.69	14.25	13.70	14.10	14.51	14.47	14.12	13.85	14.31	14.27	14.33	14.20	14.14
Eurasia	4.58	4.52	4.79	4.77	4.66	4.59	4.80	4.78	4.56	4.49	4.76	4.74	4.67	4.71	4.64
Russia	3.24	3.19	3.38	3.37	3.30	3.25	3.44	3.43	3.24	3.20	3.39	3.37	3.30	3.36	3.30
Middle East	7.38	7.83	8.44	7.73	7.70	8.04	8.75	7.95	7.92	8.50	9.07	8.23	7.85	8.11	8.43
Asia and Oceania	30.24	29.52	29.24	30.47	30.58	30.20	29.94	30.84	31.06	30.94	30.43	31.32	29.87	30.39	30.94
China	10.50	10.56	10.51	10.87	10.58	11.16	11.11	11.07	10.92	11.52	11.47	11.43	10.61	10.98	11.34
Japan	5.05	4.08	4.28	4.72	5.02	3.87	4.15	4.54	4.72	3.97	4.00	4.39	4.53	4.39	4.27
India	3.78	3.77	3.45	3.73	3.89	3.87	3.55	3.84	3.99	3.97	3.64	3.94	3.68	3.78	3.88
Africa	3.44	3.44	3.39	3.41	3.55	3.55	3.50	3.52	3.67	3.67	3.62	3.64	3.42	3.53	3.65
Total OECD Liquid Fuels Consumption	45.87	45.55	46.35	46.50	45.72	44.81	46.05	46.54	46.22	45.08	45.89	46.28	46.07	45.78	45.87
Total non-OECD Liquid Fuels Consumption	43.52	44.45	44.87	44.80	44.54	45.88	46.26	45.71	45.40	47.00	47.33	46.76	44.41	45.60	46.63
Total World Liquid Fuels Consumption	89.39	90.00	91.21	91.30	90.25	90.69	92.31	92.25	91.61	92.08	93.22	93.05	90.48	91.38	92.50
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	. 109.9	110.8	111.8	112.7	113.0	113.8	114.7	115.6	116.5	117.4	118.4	119.3	111.3	114.3	117.9
Percent change from prior year		2.5	2.8	3.2	2.9	2.7	2.6	2.6	3.0	3.2	3.3	3.2	2.7	2.7	3.2
OECD Index, 2010 Q1 = 100	. 105.3	105.7	106.5	107.1	107.3	107.8	108.5	109.1	109.8	110.4	111.1	111.5	106.1	108.2	110.7
Percent change from prior year		1.2	1.7	2.3	1.9	2.0	1.9	1.9	2.3	2.4	2.4	2.2	1.5	1.9	2.3
Non-OECD Index, 2010 Q1 = 100	. 115.8	117.2	118.5	119.9	120.5	121.6	122.7	124.1	125.2	126.7	128.1	129.6	117.9	122.2	127.4
Percent change from prior year	. 3.9	4.2	4.3	4.4	4.0	3.7	3.5	3.5	3.9	4.2	4.3	4.5	4.2	3.7	4.2
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100		105.59	106.88	106.37	107.93	107.71	108.82	111.78	112.20	112.75	113.25	113.48	105.73	109.06	112.92
Percent change from prior year	. 3.8	3.6	4.1	3.0	3.7	2.0	1.8	5.1	4.0	4.7	4.1	1.5	3.6	3.1	3.5

<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.

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

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

 $\begin{picture}(100,0)\put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$ 

<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   S	Short-Teri	m Energy 201		K - NOVE	ember 20	201	1	1		20	15			Year	
	1st	201 2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Supply (million barrels per day)	100	Liid	oru		100	Ziid	oru	7611	100	Liiu	o.u	7611	2010	2017	
Crude Oil Supply															
Domestic Production (a)	7.12	7.30	7.56	7.86	8.09	8.51	8.68	8.97	9.23	9.42	9.40	9.63	7.46	8.57	9.42
Alaska		0.51	0.48	0.53	0.53	0.52	0.43	0.49	0.48	0.45	0.40	0.47	0.51	0.49	0.45
Federal Gulf of Mexico (b)		1.22	1.25	1.25	1.32	1.42	1.45	1.53	1.64	1.69	1.59	1.65	1.25	1.43	1.64
Lower 48 States (excl GOM)		5.57	5.84	6.07	6.25	6.58	6.80	6.94	7.11	7.28	7.40	7.52	5.69	6.64	7.33
Crude Oil Net Imports (c)		7.61	7.93	7.36	7.11	6.94	7.13	6.44	5.99	6.13	6.37	5.63	7.60	6.90	6.03
SPR Net Withdrawals	-0.01	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Commercial Inventory Net Withdrawals	-0.31	0.17	0.05	0.17	-0.30	0.00	0.26	-0.04	-0.30	0.04	0.13	0.11	0.02	-0.02	-0.01
Crude Oil Adjustment (d)	0.23	0.25	0.28	0.17	0.28	0.37	0.26	0.11	0.18	0.20	0.22	0.09	0.23	0.25	0.17
Total Crude Oil Input to Refineries		15.33	15.83	15.56	15.18	15.88	16.33	15.48	15.09	15.79	16.12	15.47	15.31	15.72	15.62
Other Supply															
Refinery Processing Gain	1.01	1.07	1.13	1.13	1.07	1.08	1.13	1.09	1.06	1.08	1.12	1.09	1.09	1.09	1.09
Natural Gas Plant Liquids Production	2.45	2.54	2.71	2.72	2.71	2.95	3.07	3.06	3.05	3.18	3.25	3.28	2.61	2.95	3.19
Renewables and Oxygenate Production (e)		1.00	1.01	1.08	1.01	1.06	1.05	1.05	1.05	1.05	1.05	1.05	1.00	1.04	1.05
Fuel Ethanol Production	0.81	0.87	0.86	0.93	0.91	0.94	0.93	0.93	0.94	0.93	0.93	0.93	0.87	0.93	0.93
Petroleum Products Adjustment (f)	0.19	0.20	0.22	0.22	0.20	0.22	0.21	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.20
Product Net Imports (c)		-0.97	-1.47	-2.06	-1.73	-1.76	-2.32	-2.27	-1.78	-1.90	-2.17	-2.37	-1.36	-2.02	-2.06
Hydrocarbon Gas Liquids		-0.25	-0.36	-0.40	-0.37	-0.58	-0.66	-0.75	-0.73	-0.83	-0.89	-0.83	-0.29	-0.59	-0.82
Unfinished Oils	0.52	0.60	0.64	0.42	0.46	0.49	0.36	0.49	0.46	0.61	0.64	0.53	0.55	0.45	0.56
Other HC/Oxygenates		-0.06	-0.04	-0.05	-0.09	-0.09	-0.09	-0.10	-0.10	-0.10	-0.10	-0.10	-0.05	-0.09	-0.10
Motor Gasoline Blend Comp	0.41	0.63	0.46	0.36	0.29	0.58	0.46	0.41	0.41	0.50	0.44	0.37	0.46	0.44	0.43
Finished Motor Gasoline		-0.22	-0.29	-0.43	-0.41	-0.36	-0.36	-0.38	-0.32	-0.23	-0.26	-0.39	-0.33	-0.38	-0.30
Jet Fuel		-0.04	-0.23	-0.11	-0.07	-0.02	-0.10	-0.10	-0.06	-0.23	-0.26	-0.08	-0.07	-0.07	-0.06
Distillate Fuel Oil	-0.63	-0.91	-1.22	-1.16	-0.67	-1.01	-1.18	-1.09	-0.67	-0.97	-1.10	-1.10	-0.98	-0.99	-0.96
Residual Fuel Oil		-0.22	-0.08	-0.15	-0.24	-0.18	-0.19	-0.19	-0.26	-0.27	-0.27	-0.22	-0.14	-0.20	-0.26
Other Oils (g)		-0.51	-0.53	-0.15	-0.64	-0.58	-0.15	-0.13	-0.51	-0.56	-0.57	-0.55	-0.51	-0.59	-0.55
Product Inventory Net Withdrawals		-0.46	-0.21	0.61	0.39	-0.72	-0.38	0.40	0.20	-0.39	-0.29	0.40	0.11	-0.08	-0.02
Total Supply		18.72	19.21	19.26	18.84	18.71	19.10	19.05	18.87	19.00	19.28	19.12	18.96	18.93	19.07
Total Cupply				.0.20				70.00	.0.0.	70.00	70.20		10.00	70.00	70.07
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	2.70	2.22	2.30	2.77	2.66	2.06	2.29	2.64	2.69	2.26	2.35	2.69	2.50	2.41	2.49
Unfinished Oils	-0.03	-0.03	0.03	0.06	0.08	0.02	-0.05	0.08	0.00	0.03	0.03	0.04	0.01	0.03	0.03
Motor Gasoline	8.46	8.99	9.07	8.84	8.52	9.01	9.07	8.79	8.54	9.00	9.03	8.72	8.84	8.85	8.83
Fuel Ethanol blended into Motor Gasoline	0.81	0.89	0.87	0.88	0.84	0.89	0.88	0.87	0.85	0.88	0.87	0.86	0.86	0.87	0.86
Jet Fuel		1.45	1.50	1.44	1.40	1.47	1.50	1.44	1.39	1.47	1.50	1.43	1.43	1.45	1.45
Distillate Fuel Oil	3.94	3.76	3.68	3.94	4.17	3.93	3.83	3.85	4.16	3.97	3.94	4.08	3.83	3.94	4.04
Residual Fuel Oil	0.36	0.27	0.38	0.27	0.23	0.26	0.23	0.26	0.21	0.21	0.20	0.21	0.32	0.24	0.20
Other Oils (g)		2.07	2.25	1.94	1.75	1.96	2.22	1.96	1.88	2.06	2.23	1.95	2.03	1.97	2.03
Total Consumption	18.64	18.72	19.21	19.26	18.81	18.71	19.09	19.01	18.87	19.00	19.28	19.12	18.96	18.91	19.07
Total Petroleum and Other Liquids Net Imports	. 6.56	6.64	6.46	5.30	5.38	5.18	4.82	4.17	4.21	4.23	4.20	3.26	6.24	4.88	3.97
Ford of monic different order (million in consta)															
End-of-period Inventories (million barrels)															
Commercial Inventory	000.4	077.4	070.0	057.4	200 7	000.0	200.0	000.0	004.4	007.5	070.0	000.0	057.4	000.0	000.0
Crude Oil (excluding SPR)		377.4	373.0	357.1	383.7	383.9	360.2	363.8	391.1	387.5	376.0	366.2	357.1	363.8	366.2
Hydrocarbon Gas Liquids		160.4	190.8	128.4	98.1	164.1	206.9	161.0	129.2	172.7	200.3	159.2	128.4	161.0	159.2
Unfinished Oils	89.9	86.8	81.6	78.0	91.3	87.3	85.4	81.2	90.7	88.0	85.8	80.5	78.0	81.2	80.5
Other HC/Oxygenates		19.9	20.0	21.6	22.6	23.0	23.3	22.7	25.2	23.8	23.1	23.5	21.6	22.7	23.5
Total Motor Gasoline	224.7	224.4	219.8	228.0	220.9	218.8	209.3	223.9	224.0	215.9	215.2	226.5	228.0	223.9	226.5
Finished Motor Gasoline		48.6	39.8	39.0	34.3	28.9	27.9	32.5	29.3	29.7	29.0	31.0	39.0	32.5	31.0
Motor Gasoline Blend Comp	177.3	175.7	180.0	189.1	186.6	190.0	181.4	191.4	194.7	186.2	186.2	195.5	189.1	191.4	195.5
Jet Fuel		40.4	41.1	37.2	36.0	36.3	40.6	35.8	38.1	40.2	42.4	37.9	37.2	35.8	37.9
Distillate Fuel Oil	118.7	122.5	129.3	127.5	115.3	121.7	126.0	128.4	119.2	123.9	133.5	134.4	127.5	128.4	134.4
Residual Fuel Oil	37.0	37.6	35.6	38.1	36.4	36.7	36.0	36.3	37.1	36.6	35.1	35.6	38.1	36.3	35.6
Other Oils (g)		53.6	46.1	49.4	52.8	50.9	46.2	47.5	55.3	53.7	46.1	47.5	49.4	47.5	47.5
Total Commercial Inventory		1,123	1,137	1,065	1,057	1,123	1,134	1,101	1,110	1,142	1,158	1,111	1,065	1,101	1,111
Crude Oil in SPR	696	696	696	696	696	691	691	691	691	691	691	691	696	691	691

<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	CHOIL	-16111161		ALIOOK I	TOVETTIBE									V	
	164	201	3 3rd	4th	164	201		4th	1st	201 2nd		4th	2013	Year 2014	2015
HGL Production	1st	2nd	sru	4tn	1st	2nd	3rd	4111	ısı	ZIIU	3rd	4111	2013	2014	2013
												i			
Natural Gas Processing Plants Ethane	0.94	0.92	0.99	1.04	1.03	1.09	1.09	1.17	1.19	1.19	1.21	1.27	0.97	1.09	1.21
Propane	0.76	0.92	0.99	0.86	0.87	0.95	1.09	0.97	0.98	1.19	1.08	1.08	0.82	0.95	1.05
•			0.65	0.88		0.52	0.56		0.51	0.53		0.54	0.82		0.53
Butanes	0.43	0.46			0.48			0.54			0.54			0.53	
Natural Gasoline (Pentanes Plus)	0.31	0.35	0.38	0.35	0.33	0.39	0.42	0.38	0.37	0.41	0.42	0.40	0.35	0.38	0.40
Refinery and Blender Net Production	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
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	0.55	0.57	0.58	0.57	0.57	0.60	0.60	0.58	0.56	0.58	0.58	0.56	0.56	0.59	0.57
Butanes/Butylenes	-0.04	0.27	0.19	-0.21	-0.04	0.27	0.21	-0.16	-0.04	0.25	0.17	-0.16	0.05	0.07	0.05
Renewable Fuels and Oxygenate Plant Net Pro															
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
HOLD ALL COMPANIES															
HGL Net Imports															
Ethane	0.00	0.00	0.00	0.00	-0.01	-0.02	-0.05	-0.08	-0.09	-0.09	-0.11	-0.11	0.00	-0.04	-0.10
Propane/Propylene	-0.05	-0.19	-0.21	-0.25	-0.17	-0.34	-0.34	-0.40	-0.38	-0.46	-0.49	-0.46	-0.18	-0.31	-0.45
Butanes/Butylenes	-0.01	-0.01	-0.02	0.00	-0.03	-0.06	-0.09	-0.11	-0.09	-0.12	-0.12	-0.09	-0.01	-0.07	-0.10
Natural Gasoline (Pentanes Plus)	-0.09	-0.05	-0.13	-0.15	-0.15	-0.16	-0.18	-0.17	-0.17	-0.16	-0.18	-0.17	-0.10	-0.17	-0.17
Hel Boron and Blood and the															
HGL Refinery and Blender Net Inputs					c			0.40	0.00	0.05	0.00	0 40		0.00	0.00
Butanes/Butylenes	0.34	0.26	0.30	0.43	0.37	0.28	0.29	0.40	0.33	0.25	0.28	0.42	0.33	0.33	0.32
Natural Gasoline (Pentanes Plus)	0.18	0.15	0.17	0.16	0.14	0.15	0.16	0.18	0.16	0.17	0.17	0.18	0.17	0.16	0.17
Hel e															
HGL Consumption			4.00	4.00	4.04		4.00	4 40	4.40	4.07	4 40			404	4 40
Ethane/Ethylene	0.96	0.92	1.00	1.09	1.01	0.97	1.08	1.12	1.10	1.07	1.13	1.17	0.99	1.04	1.12
Propane/Propylene	1.56	1.03	1.08	1.43	1.46	0.89	1.01	1.32	1.41	0.97	1.02	1.31	1.28	1.17	1.18
Butanes/Butylenes	0.15	0.18	0.17	0.19	0.16	0.17	0.16	0.17	0.16	0.18	0.15	0.16	0.17	0.17	0.16
Natural Gasoline (Pentanes Plus)	0.03	80.0	0.05	0.06	0.03	0.03	0.04	0.04	0.03	0.04	0.05	0.05	0.06	0.04	0.04
UCI Inventories (million berrels)															
HGL Inventories (million barrels)	24.00	25.40	24.40	20.70	00.00	27.00	20.72	00.05	25.00	20.00	07.00	07.05	24.47	05.04	07.40
Ethane/Ethylene	34.26	35.18	34.46	32.79	29.90	37.06	38.73	36.65	35.99	38.69	37.89	37.35	34.17	35.61	37.49
Propane/Propylene Butanes/Butylenes	40.68 27.94	55.31 52.84	68.10 69.60	45.08 38.06	28.32 25.95	57.12 52.24	80.52 72.56	64.40	42.10 36.05	60.66 56.57	74.82	62.62 44.46	45.08 38.06	64.40 45.91	62.62 44.46
Natural Gasoline (Pentanes Plus)	13.05	17.23	18.36	14.47	13.04	14.82	16.49	45.91 14.75	36.05 14.32	16.19	71.04 16.90	44.46 15.18	36.06 14.47	45.91 14.75	44.46 15.18
Natural Gasoline (Feritalies Flus)	13.03	17.23	10.30	14.47	13.04	14.02	10.49	14.75	14.32	10.19	10.90	15.16	14.47	14.75	15.16
Definery and Blander Net Innuts															
Refinery and Blender Net Inputs															.=
Crude OII		15.33	15.83	15.56	15.18	15.88	16.33	15.48	15.09	15.79	16.12	15.47	15.31	15.72	15.62
Hydrocarbon Gas Liquids	0.51	0.41	0.48	0.58	0.52	0.43	0.45	0.57	0.49	0.42	0.45	0.61	0.50	0.49	0.49
Other Hydrocarbons/Oxygenates	1.04	1.12	1.15	1.15	1.08	1.16	1.14	1.10	1.09	1.13	1.11	1.11	1.12	1.12	1.11
Unfinished Oils	0.47	0.66	0.67	0.40	0.24	0.51	0.44	0.46	0.35	0.61	0.63	0.55	0.55	0.41	0.54
Motor Gasoline Blend Components	0.52	0.72	0.46	0.50	0.71	1.06	0.87	0.48	0.56	0.77	0.61	0.44	0.55	0.78	0.59
Aviation Gasoline Blend Components		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs		18.24	18.58	18.19	17.73	19.04	19.22	18.10	17.58	18.72	18.93	18.16	18.02	18.52	18.35
Total Relifiery and Biender Net Inputs	17.03	10.24	10.30	10.19	17.73	19.04	19.22	10.10	17.56	10.72	10.93	16.10	10.02	10.32	10.33
Refinery Processing Gain	1.01	1.07	1.13	1.13	1.07	1.08	1.13	1.09	1.06	1.08	1.12	1.09	1.09	1.09	1.09
Definence and Disorder Net Description															
Refinery and Blender Net Production					651	6.07	6.04	0.40	0.50	0.00	0.75			0.00	0.00
Hydrocarbon Gas Liquids		0.84	0.77	0.37	0.54	0.87	0.81	0.42	0.52	0.83	0.75	0.41	0.62	0.66	0.63
Finished Motor Gasoline	8.87	9.27	9.30	9.49	9.26	9.82	9.74	9.38	9.01	9.41	9.44	9.30	9.23	9.55	9.29
Jet Fuel	. 1.43	1.50	1.57	1.50	1.45	1.49	1.65	1.48	1.47	1.54	1.59	1.46	1.50	1.52	1.51
Distillate Fuel	4.35	4.66	4.92	4.99	4.66	4.96	4.99	4.91	4.69	4.95	5.10	5.13	4.73	4.88	4.97
Residual Fuel		0.49	0.44	0.45	0.46	0.44	0.42	0.45	0.48	0.47	0.45	0.43	0.47	0.44	0.46
Other Oils (a)		2.55	2.70	2.53	2.43	2.52	2.73	2.55	2.48	2.60	2.71	2.52	2.55	2.56	2.58
Total Refinery and Blender Net Production	18.06	19.31	19.71	19.32	18.80	20.11	20.35	19.19	18.64	19.80	20.05	19.25	19.11	19.61	19.44
Refinery Distillation Inputs	14.80	15.77	16.31	15.99	15.51	16.17	16.64	15.86	15. <b>4</b> 2	16.10	16.47	15.84	15.72	16.05	15.96
Refinery Operable Distillation Capacity	17.82	17.81	17.82	17.82	17.93	17.89	17.81	17.81	17.81	17.81	17.81	17.81	17.82	17.86	17.81
Refinery Distillation Utilization Factor	0.83	0.89	0.92	0.90	0.87	0.90	0.93	0.89	0.87	0.90	0.92	0.89	0.88	0.90	0.90

<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

		201	13			201	14			20 <sup>-</sup>	15			Year	· · · · ·
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Prices (cents per gallon)				•											
Refiner Wholesale Price	289	290	288	259	272	298	277	223	219	234	232	217	281	268	226
Gasoline Regular Grade Retail Prices In	cluding T	axes													
PADD 1	362	350	355	334	344	365	348	299	288	297	297	287	350	339	292
PADD 2	350	368	352	319	337	365	343	290	281	302	300	279	347	334	291
PADD 3	338	336	337	308	318	345	329	276	269	285	281	265	329	317	275
PADD 4	323	361	362	325	326	350	363	302	271	297	302	283	343	336	288
PADD 5	382	390	385	355	362	401	386	327	314	333	334	316	378	370	324
U.S. Average	357	360	357	329	340	368	350	297	286	303	302	286	351	339	294
Gasoline All Grades Including Taxes	363	367	364	337	348	375	358	306	295	311	310	294	358	347	303
End-of-period Inventories (million barrels	s)														
Total Gasoline Inventories															
PADD 1	59.5	62.0	58.1	61.1	57.7	63.1	54.5	57.9	58.6	58.0	56.3	59.5	61.1	57.9	59.5
PADD 2	53.8	49.3	49.8	51.5	49.0	49.7	47.2	49.2	52.0	48.1	49.3	49.7	51.5	49.2	49.7
PADD 3	75.6	77.5	77.3	76.3	77.7	72.8	72.4	78.4	76.1	74.8	74.6	78.8	76.3	78.4	78.8
PADD 4	6.8	6.5	6.3	7.1	6.5	6.1	7.5	7.3	6.8	6.7	6.8	7.4	7.1	7.3	7.4
PADD 5	29.1	29.1	28.2	32.1	30.0	27.1	27.7	31.1	30.5	28.2	28.2	31.2	32.1	31.1	31.2
U.S. Total	224.7	224.4	219.8	228.0	220.9	218.8	209.3	223.9	224.0	215.9	215.2	226.5	228.0	223.9	226.5
Finished Gasoline Inventories															
U.S. Total	47.3	48.6	39.8	39.0	34.3	28.9	27.9	32.5	29.3	29.7	29.0	31.0	39.0	32.5	31.0
Gasoline Blending Components Invent	ories														
U.S. Total	177.3	175.7	180.0	189.1	186.6	190.0	181.4	191.4	194.7	186.2	186.2	195.5	189.1	191.4	195.5

<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

O.S. Energy information Admin	2013					201				201	15			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Supply (billion cubic feet per day)							•		•		•		•	•	
Total Marketed Production	69.23	69.75	71.19	71.33	71.73	73.56	74.74	75.08	75.52	75.46	75.30	75.57	70.39	73.79	75.46
Alaska	1.05	0.91	0.79	0.96	0.99	0.93	0.83	0.95	0.98	0.84	0.76	0.91	0.93	0.92	0.87
Federal GOM (a)	3.87	3.63	3.46	3.40	3.29	3.42	3.22	3.06	3.11	3.10	2.91	2.92	3.59	3.24	3.01
Lower 48 States (excl GOM)	64.32	65.21	66.94	66.98	67.45	69.22	70.69	71.08	71.42	71.53	71.63	71.74	65.87	69.62	71.58
Total Dry Gas Production	65.58	66.07	67.43	67.57	67.83	69.33	70.35	70.68	71.09	71.04	70.89	71.14	66.67	69.56	71.04
LNG Gross Imports	0.37	0.21	0.37	0.12	0.17	0.17	0.15	0.19	0.17	0.17	0.18	0.17	0.27	0.17	0.17
LNG Gross Exports	0.00	0.00	0.00	0.03	0.03	0.02	0.06	0.00	0.00	0.00	0.43	0.59	0.01	0.03	0.26
Pipeline Gross Imports	8.11	7.39	7.42	7.62	8.44	6.52	6.79	7.36	7.78	6.87	7.39	7.41	7.63	7.27	7.36
Pipeline Gross Exports	4.84	4.41	4.14	3.81	4.67	3.89	3.80	4.21	4.45	4.65	4.56	4.87	4.30	4.14	4.63
Supplemental Gaseous Fuels	0.15	0.15	0.15	0.15	0.17	0.16	0.14	0.19	0.19	0.16	0.17	0.19	0.15	0.16	0.18
Net Inventory Withdrawals	18.70	-10.17	-9.79	7.31	22.75	-12.71	-12.64	1.30	16.43	-10.97	-9.65	3.00	1.45	-0.42	-0.36
Total Supply	88.06	59.24	61.44	78.93	94.66	59.57	60.94	75.49	91.20	62.62	63.98	76.46	71.86	72.58	73.50
Balancing Item (b)	0.41	0.71	-0.41	-1.77	0.83	1.63	0.56	-0.62	-0.83	-0.11	-0.47	0.02	-0.27	0.59	-0.34
Total Primary Supply	88.47	59.95	61.03	77.16	95.49	61.19	61.50	74.86	90.37	62.51	63.51	76.48	71.59	73.17	73.15
Consumption (billion cubic feet per	day)														
Residential	25.47	7.58	3.68	17.32	28.78	7.36	3.60	15.56	24.94	7.21	3.50	15.75	13.46	13.76	12.80
Commercial	14.38	6.06	4.48	11.09	16.39	6.14	4.54	10.16	14.48	5.98	4.60	10.33	8.98	9.28	8.82
Industrial	21.66	19.28	18.94	21.39	22.98	20.03	19.78	22.25	23.75	20.95	20.64	23.03	20.31	21.25	22.09
Electric Power (c)	19.94	20.97	27.76	20.61	19.70	21.04	26.95	20.12	19.94	21.82	28.25	20.57	22.34	21.97	22.66
Lease and Plant Fuel	3.98	4.00	4.09	4.10	4.41	4.52	4.59	4.62	4.64	4.64	4.63	4.65	4.04	4.54	4.64
Pipeline and Distribution Use	2.95	1.95	1.99	2.55	3.14	2.01	1.95	2.07	2.53	1.82	1.80	2.06	2.36	2.29	2.05
Vehicle Use	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total Consumption	88.47	59.95	61.03	77.16	95.49	61.19	61.50	74.86	90.37	62.51	63.51	76.48	71.59	73.17	73.15
End-of-period Inventories (billion c	ubic feet)														
Working Gas Inventory	1,720	2,643	3,565	2,890	857	2,005	3,160	3,041	1,562	2,561	3,448	3,172	2,890	3,041	3,172
Producing Region (d)	703	973	1,174	1,022	358	691	951	1,030	672	962	1,115	1,105	1,022	1,030	1,105
East Consuming Region (d)	659	1,208	1,833	1,445	315	952	1,749	1,579	607	1,154	1,788	1,556	1,445	1,579	1,556
West Consuming Region (d)	357	461	558	423	184	362	459	432	283	445	545	511	423	432	511

<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

U.S. Energy information	i Auminis	2013						Dei 2014	+				1	V	
	1st	201 2nd	13 3rd	4th	1st	20 <sup>2</sup>	14 3rd	4th	1st	20 <sup>-</sup> 2nd	15 3rd	4th	2013	Year 2014	2015
Wholesale/Spot	151	ZIIU	Siu	4111	151	ZIIU	Siu	4111	151	ZIIU	Siu	4111	2013	2014	2015
Henry Hub Spot Price	3.59	4.13	3.66	3.97	5.36	4.75	4.08	4.10	4.07	3.72	3.90	4.09	3.84	4.57	3.94
Residential	3.39	4.13	3.00	3.91	3.30	4.73	4.00	4.10	4.07	3.72	3.90	4.09	3.04	4.57	3.94
New England	13.07	13.63	16.89	13.75	13.92	16.55	17.74	14.27	13.65	14.76	17.50	14.21	13.66	14.70	14.29
Middle Atlantic	11.00	13.34	17.79	11.37	10.68	13.36	17.74	12.42	11.37	13.79	18.14	12.69	11.90	11.93	12.55
E. N. Central	7.74	10.76	15.76	8.13	8.67	12.96	17.43	9.42	8.57	11.62	16.14	9.51	8.71	9.86	9.74
W. N. Central	8.10	10.76	17.53	9.13	9.10	11.73	18.05	9.42	8.64	11.24	17.42	9.94	9.27	10.12	9.74
S. Atlantic	11.10	15.40	22.32	12.72	11.34	16.39	23.09	9.99 13.47	0.04 11.81	16.72	22.65	13.41	12.87	13.20	9.66 13.57
E. S. Central	9.18	12.48	18.31	10.54	9.63	14.08	19.53	11.68	10.08	13.90	18.65	11.63	10.52	11.11	11.42
W. S. Central	8.36	12.40	19.77	10.34	8.53	14.00	19.79	11.27	8.88	13.64	18.90	11.38	10.32	10.73	10.93
	8.01	9.81	13.78	8.76	9.07	11.22	15.32	10.14	9.22	10.29	13.85	9.44	8.92	10.73	9.81
Mountain	9.47	10.81	11.27	10.20	10.97	11.66	12.25	10.14	10.08	10.29		-	10.13	11.07	9.61 10.45
Pacific	9.47	11.90	16.13	9.90	9.83	13.18	16.97	10.40	9.93	12.48	11.45 16.44	10.45 10.97	10.13	11.07	11.06
U.S. Average	9.24	11.90	16.13	9.90	9.83	13.18	16.97	10.90	9.93	12.48	10.44	10.97	10.30	11.05	11.06
Commercial	10.87	10.45	9.70	0.00	11.42	40.00	44.40	44.46	44.05	44.07	40.00	11 11	10.37	11 55	11.34
New England	8.82	8.66	9.70 7.95	9.89 8.28	9.30	12.66 9.06	11.49 8.11	11.16	11.65 9.84	11.07 9.19	10.99 8.86	11.11 9.72	8.53	11.55 9.15	9.56
Middle Atlantic	7.01	8.25	8.89	7.04	8.02	9.06		9.43 8.17	9.64 8.18		9.72	9.72 8.20	7.33	9.13 8.48	9.30 8.43
E. N. Central	7.01	7.79	9.25	7.04	8.35	9.96	10.44 9.91	8.09		9.11	9.72	8.20	7.33	8.49	8.43 8.15
W. N. Central									8.11	8.05			-		
S. Atlantic	8.76	10.02	10.51	9.35	9.23	10.56	10.97	10.11	10.17	10.46	10.98	10.17	9.37	9.89	10.32
E. S. Central	8.15	9.53	10.30	9.00	8.90	10.71	11.11	9.76	9.68	10.25	10.63	9.82	8.86	9.61	9.91
W. S. Central	6.84	8.05	8.70	7.52	7.49	9.24	9.21	8.25	7.92	8.19	8.78	8.26	7.53	8.22	8.18
Mountain	6.93	7.54	8.55	7.48	7.81	8.74	9.89	8.58	8.26	7.96	9.25	8.44	7.36	8.44	8.37
Pacific	8.11	8.74	8.84	8.56	9.29	9.26	9.53	9.03	8.93	8.42	9.28	9.23	8.48	9.24	8.98
U.S. Average	7.77	8.53	8.95	7.96	8.66	9.61	9.73	8.92	8.98	9.01	9.52	8.99	8.08	8.99	9.05
Industrial															
New England	8.68	8.49	7.38	8.87	10.15	9.58	7.99	9.33	9.57	8.72	8.62	9.72	8.47	9.47	9.27
Middle Atlantic	8.17	8.13	8.21	8.12	9.28	8.83	8.36	8.67	8.89	8.00	8.32	8.93	8.16	8.95	8.68
E. N. Central	6.11	6.58	6.04	5.91	8.03	8.87	7.87	7.01	7.25	6.61	6.68	6.88	6.12	7.86	6.97
W. N. Central	5.16	5.40	4.92	5.40	7.34	6.28	5.73	5.58	5.68	4.83	5.14	5.89	5.23	6.30	5.43
S. Atlantic	5.39	5.81	5.32	5.52	6.91	6.42	5.93	6.20	6.24	5.67	5.86	6.16	5.51	6.39	6.00
E. S. Central	5.25	5.57	5.14	5.45	6.37	6.14	5.33	5.76	5.99	5.47	5.68	5.79	5.35	5.93	5.75
W. S. Central	3.61	4.38	3.84	3.92	5.15	4.91	4.46	4.16	4.24	3.90	4.13	4.21	3.94	4.66	4.12
Mountain	5.60	5.96	6.13	5.99	6.55	6.68	7.00	6.84	6.40	5.98	6.45	6.60	5.88	6.75	6.38
Pacific	6.69	7.11	6.92	6.80	7.84	7.63	7.62	7.08	6.83	6.27	6.83	7.18	6.86	7.54	6.80
U.S. Average	4.57	4.95	4.38	4.68	6.17	5.60	5.01	5.04	5.26	4.56	4.73	5.09	4.64	5.47	4.93

<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 Administr	ration	Short-	Term Er	iergy Ou	itlook - N	Novembe	er 2014								
		201				201				201			_	Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Supply (million short tons)															
Production	245.1	243.1	256.7	239.1	242.3	245.8	251.7	252.3	254.8	239.0	254.6	250.4	984.0	992.1	998.7
Appalachia	70.4	71.3	66.2	63.8	66.6	69.7	68.6	68.6	73.9	70.1	65.8	66.0	271.6	273.5	275.7
Interior	45.5	45.0	48.1	44.0	46.3	44.8	49.0	47.9	46.2	45.4	47.9	47.4	182.7	188.0	186.9
Western	129.2	126.8	142.4	131.3	129.3	131.4	134.2	135.7	134.7	123.5	140.9	137.0	529.7	530.6	536.1
Primary Inventory Withdrawals	5.5	-1.1	1.6	-2.6	1.0	-0.1	0.6	-2.3	0.5	-0.1	0.6	-2.3	3.5	-0.8	-1.3
Imports	1.4	2.8	2.4	2.3	2.4	3.5	2.7	2.7	2.2	2.4	3.3	2.9	8.9	11.4	10.7
Exports	31.8	29.4	28.6	27.8	27.7	24.6	22.0	21.7	20.3	24.1	21.8	23.2	117.7	96.0	89.4
Metallurgical Coal	18.2	16.1	15.9	15.4	16.9	15.8	14.7	14.1	13.2	13.5	11.5	12.6	65.7	61.4	50.9
Steam Coal	13.7	13.3	12.7	12.4	10.9	8.8	7.3	7.7	7.1	10.6	10.3	10.6	52.0	34.6	38.5
Total Primary Supply	220.1	215.4	232.1	211.1	218.0	224.7	233.0	230.9	237.1	217.2	236.7	227.7	878.7	906.7	918.8
Secondary Inventory Withdrawals	14.5	0.7	17.9	4.8	31.1	-15.2	9.8	-7.7	-1.3	-9.1	13.0	-5.9	37.9	18.0	-3.3
Waste Coal (a)	2.9	2.6	2.5	2.3	3.2	2.8	3.2	3.0	2.8	2.5	3.2	3.0	10.2	12.1	11.3
Total Supply	237.5	218.6	252.5	218.2	252.3	212.3	246.0	226.2	238.5	210.6	252.9	224.7	926.8	936.8	926.8
Consumption (million short tons)															
Coke Plants	5.3	5.5	5.4	5.3	4.8	5.1	5.2	5.3	4.8	4.9	5.7	5.7	21.5	20.4	21.1
Electric Power Sector (b)	212.0	200.2	237.3	208.9	231.7	196.8	231.8	209.8	221.7	194.5	235.9	206.9	858.4	870.1	859.0
Retail and Other Industry	11.8	10.8	10.8	11.9	12.0	10.9	10.8	11.6	11.5	10.7	10.7	11.5	45.3	45.3	44.5
Residential and Commercial	0.7	0.4	0.4	0.5	0.7	0.4	0.5	0.6	0.7	0.5	0.4	0.6	2.0	2.2	2.3
Other Industrial	11.1	10.4	10.4	11.4	11.3	10.5	10.4	10.9	10.8	10.3	10.3	10.9	43.3	43.1	42.2
Total Consumption	229.0	216.5	253.5	226.1	248.6	212.9	247.8	226.6	238.0	210.1	252.4	224.2	925.1	935.9	924.6
Discrepancy (c)	8.4	2.1	-1.0	-7.9	3.7	-0.5	-1.8	-0.4	0.5	0.5	0.5	0.6	1.7	0.9	2.2
End-of-period Inventories (million short	t tons)														
Primary Inventories (d)	40.7	41.7	40.1	42.7	41.7	41.7	41.1	43.4	42.9	43.0	42.4	44.7	42.7	43.4	44.7
Secondary Inventories	178.2	177.5	159.6	154.8	123.7	138.9	129.1	136.8	138.1	147.2	134.2	140.1	154.8	136.8	140.1
Electric Power Sector	171.5	170.5	152.2	148.0	118.0	132.9	122.5	129.7	132.0	140.3	126.7	132.3	148.0	129.7	132.3
Retail and General Industry	4.0	4.0	4.3	4.1	3.5	3.6	4.4	4.8	4.1	4.5	5.1	5.5	4.1	4.8	5.5
Coke Plants	2.2	2.5	2.5	2.2	1.8	1.9	1.8	1.9	1.6	2.0	1.9	1.9	2.2	1.9	1.9
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.55	5.55	5.55	5.55	5.47	5.47	5.47	5.47	5.61	5.61	5.61	5.61	5.55	5.47	5.61
Total Raw Steel Production															
(Million short tons per day)	0.259	0.267	0.267	0.260	0.262	0.263	0.271	0.264	0.269	0.280	0.266	0.258	0.263	0.265	0.268
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.35	2.37	2.33	2.34	2.33	2.39	2.37	2.36	2.36	2.37	2.36	2.36	2.35	2.36	2.36

<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.

<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

U.S. Energy information Admini	Stration			iergy Ot	ILIOOK - I	ovembe					_				
	1st	201		441-	1st	201	3rd	4th	4-4	201		441-	2042	Year	2045
Electricity Supply (billion kilowatthou		2nd	3rd	4th	ist	2nd	3ra	4tn	1st	2nd	3rd	4th	2013	2014	2015
, ,,,,		,	40.45	40.00	44.47	40.75	40.04	40.50	44.05	40.00	40.00	40.74	44.40	44.04	44.00
Electricity Generation		10.73	12.15	10.66	11.47	10.75	12.04	10.59	11.25	10.89	12.32	10.71	11.12	11.21	11.30
Electric Power Sector (a)		10.31 0.42	11.71 0.45	10.23	11.04	10.34	11.61 0.44	10.15	10.81	10.49	11.89	10.27	10.68	10.78	10.86
Comm. and Indus. Sectors (b)	0.44			0.44	0.43	0.40		0.44	0.44	0.41	0.44	0.44	0.44	0.43	0.43 0.11
Net Imports		0.14	0.17	0.13	0.11	0.12	0.14	0.10	0.11	0.11	0.14	0.10	0.14	0.12	
Total Supply		10.87	12.32	10.79	11.58	10.87	12.19	10.69	11.36	11.00	12.46	10.81	11.26	11.33	11.41
Losses and Unaccounted for (c)	0.66	0.84	0.77	0.79	0.67	0.84	0.77	0.71	0.60	0.90	0.77	0.72	0.77	0.75	0.75
Electricity Consumption (billion kilow	atthours	oer day un	less note	d)											
Retail Sales	10.01	9.66	11.16	9.62	10.53	9.67	11.04	9.60	10.38	9.75	11.31	9.70	10.11	10.21	10.28
Residential Sector	3.96	3.38	4.37	3.53	4.35	3.36	4.27	3.51	4.15	3.36	4.43	3.55	3.81	3.87	3.87
Commercial Sector	3.47	3.60	4.07	3.53	3.62	3.64	4.04	3.50	3.62	3.66	4.08	3.50	3.67	3.70	3.71
Industrial Sector	2.56	2.65	2.70	2.55	2.54	2.66	2.71	2.56	2.59	2.70	2.77	2.63	2.62	2.62	2.67
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	0.37	0.39	0.38	0.38	0.35	0.38	0.39	0.38	0.36	0.38	0.39	0.38	0.37	0.38
Total Consumption	10.39	10.03	11.55	10.00	10.91	10.03	11.42	9.98	10.76	10.10	11.69	10.09	10.50	10.58	10.66
Average residential electricity															
usage per customer (kWh)	2,795	2,414	3,149	2,538	3,053	2,380	3,057	2,511	2,895	2,366	3,147	2,515	10,896	11,001	10,923
Prices															
Power Generation Fuel Costs (dolla	rs per mil	ion Btu)													
Coal	2.35	2.37	2.33	2.34	2.33	2.39	2.37	2.36	2.36	2.37	2.36	2.36	2.35	2.36	2.36
Natural Gas	4.35	4.56	4.06	4.41	6.82	4.93	4.37	4.86	4.83	4.29	4.45	4.86	4.32	5.16	4.59
Residual Fuel Oil	19.37	19.83	18.76	19.47	19.95	20.44	19.46	17.30	15.49	14.86	14.80	14.90	19.33	19.50	15.01
Distillate Fuel Oil	23.44	22.62	23.23	22.97	23.39	22.74	21.30	19.13	19.29	18.98	19.19	20.23	23.08	22.21	19.42
End-Use Prices (cents per kilowatth	our)														
Residential Sector	11.56	12.31	12.54	12.01	11.90	12.73	13.00	12.32	12.29	12.92	13.12	12.44	12.12	12.48	12.70
Commercial Sector	9.96	10.33	10.68	10.14	10.57	10.63	11.07	10.44	10.56	10.90	11.31	10.67	10.29	10.69	10.88
Industrial Sector	6.55	6.79	7.24	6.67	7.02	6.94	7.36	6.82	6.75	6.97	7.42	6.84	6.82	7.04	7.00

<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	201	-	ort-Terri	Energy	201	- Noverr	ibei 20	14	201	5			Year	
	1st	2nd	3rd	4th	1st	201 2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Residential Sector			***												
New England	144	115	146	122	154	111	134	122	147	113	136	124	132	130	130
Middle Atlantic	390	324	416	330	423	315	385	330	399	317	409	335	365	363	365
E. N. Central	562	447	553	495	616	446	514	484	570	439	558	490	514	515	514
W. N. Central	322	247	310	275	352	246	296	266	327	245	317	270	288	290	290
S. Atlantic	962	846	1,075	873	1,081	858	1,091	873	1,042	857	1,131	888	939	975	979
E. S. Central	344	280	366	294	404	278	365	296	375	279	379	293	321	336	332
W. S. Central	529	517	755	517	641	501	730	520	605	518	737	521	580	598	595
Mountain	253	248	328	227	239	242	321	227	247	242	344	233	264	257	266
Pacific contiguous	436	346	412	385	421	347	422	384	427	342	411	384	395	394	391
AK and HI	14	12	12	13	14	11	12	13	14	12	12	13	13	13	13
Total	3,955	3,384	4,373	3,531	4,345	3,355	4,270	3,515	4,152	3,363	4,434	3,551	3,811	3,870	3,875
Commercial Sector															
New England	121	118	135	117	153	138	154	135	151	137	157	134	123	145	145
Middle Atlantic	427	414	474	412	442	413	458	402	440	414	462	402	432	429	429
E. N. Central	492	490	539	489	510	490	522	475	506	496	537	478	503	499	504
W. N. Central	270	266	298	271	284	273	295	265	279	277	297	268	277	279	280
S. Atlantic	781	832	918	799	803	842	922	787	800	842	917	784	833	839	836
E. S. Central	228	243	288	231	239	237	267	225	240	236	286	225	248	242	247
W. S. Central	462	514	610	504	495	522	606	499	496	529	616	496	523	531	535
Mountain	237	262	287	243	239	257	289	245	243	263	290	244	257	257	260
Pacific contiguous	430	448	500	444	438	447	507	451	443	449	501	447	456	461	460
AK and HI	17	16	17	17	17	16	17	17	17	16	17	17	17	16	17
Total	3,466	3,604	4,066	3,527	3,620	3,636	4,036	3,501	3,615	3,660	4,081	3,496	3,667	3,699	3,713
Industrial Sector															
New England	72	73	78	71	49	49	53	48	49	49	54	49	74	50	50
Middle Atlantic	188	186	193	188	201	198	202	190	198	199	205	198	189	198	200
E. N. Central	533	534	539	513	525	532	539	511	532	540	551	527	530	527	538
W. N. Central	230	239	251	238	234	240	251	243	245	253	269	257	240	242	256
S. Atlantic	367	388	397	373	372	397	398	380	373	401	405	386	381	387	391
E. S. Central	317	312	286	277	279	287	290	278	287	292	290	287	298	283	289
W. S. Central	407	435	448	422	431	465	474	439	440	466	462	443	428	452	453
Mountain	210	235	246	217	213	239	249	226	223	246	264	230	227	232	241
Pacific contiguous	224	235	251	234	226	240	244	233	226	242	257	241	236	236	241
AK and HI	13	14	14	14	13	14	14	14	14	14	15	14	14	14	14
Total	2,563	2,650	2,703	2,546	2,543	2,660	2,714	2,561	2,587	2,702	2,771	2,633	2,616	2,620	2,674
Total All Sectors (a)															
New England	339	308	360	311	357	300	342	307	349	301	349	308	330	326	327
Middle Atlantic	1,017	935	1,095	940	1,078	936	1,056	932	1,049	941	1,087	948	997	1,000	1,006
E. N. Central	1,589	1,473	1,632	1,497	1,654	1,469	1,576	1,471	1,610	1,478	1,647	1,496	1,548	1,542	1,558
W. N. Central	823	752	859	784	870	760	842	775	851	775	884	794	805	812	826
S. Atlantic	2,114	2,070	2,393	2,049	2,260	2,100	2,414	2,044	2,218	2,103	2,456	2,062	2,157	2,205	2,210
E. S. Central	890	836	940	801	922	803	923	799	902	807	956	806	867	861	868
W. S. Central	1,399	1,467	1,813	1,443	1,567	1,488	1,810	1,458	1,541	1,514	1,815	1,460	1,531	1,581	1,583
Mountain	700	745	862	686	692	739	859	697	714	751	898	707	749	747	768
Pacific contiguous	1,092	1,031	1,165	1,066	1,087	1,037	1,175	1,070	1,098	1,035	1,171	1,074	1,088	1,092	1,095
AK and HI	43	42	43	44	44	41	43	44	44	42	43	45	43	43	43
Total	10,006	9,658	11,163	9,623	10,531	9,673	11,040	9,597	10,377	9,746	11,307	9,701	10,114	10,210	10,284

<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. Energy Informa	L.O. / WIII	201	- '	.5.0 1011	n Energy	201		1.1551 20		201	5			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Residential Sector		I	1		1		L			<u> </u>	1		I		
New England	15.59	16.12	16.01	17.21	17.46	18.03	17.63	18.18	18.26	18.44	18.51	18.48	16.20	17.80	18.42
Middle Atlantic		15.70	16.48	15.53	16.28	16.58	16.71	16.04	16.26	17.00	17.14	16.54	15.72	16.40	16.74
E. N. Central	11.48	12.45	12.30	11.87	11.56	12.95	13.03	12.30	12.13	13.22	13.28	12.51	12.01	12.41	12.77
W. N. Central	9.95	11.40	12.06	10.43	10.05	11.80	12.33	10.73	10.41	12.06	12.51	10.95	10.95	11.16	11.46
S. Atlantic	10.88	11.48	11.77	11.27	11.31	11.98	12.09	11.59	11.57	12.10	12.10	11.55	11.37	11.74	11.83
E. S. Central	10.05	10.71	10.64	10.28	10.30	11.21	10.99	10.51	10.76	11.30	11.08	10.53	10.42	10.72	10.91
W. S. Central	10.23	10.95	10.92	10.75	10.37	11.44	11.35	11.04	10.84	11.19	11.12	10.70	10.73	11.04	10.97
Mountain	10.46	11.52	11.99	11.09	10.94	12.02	12.33	11.43	11.24	12.32	12.65	11.75	11.32	11.74	12.06
Pacific	12.80	13.72	14.60	13.32	12.97	12.77	15.53	13.11	13.40	13.39	15.77	13.62	13.60	13.65	14.08
U.S. Average	11.56	12.31	12.54	12.01	11.90	12.73	13.00	12.32	12.29	12.92	13.12	12.44	12.12	12.48	12.70
Commercial Sector															
New England	14.37	13.76	13.83	14.40	15.24	14.07	14.51	14.75	15.43	15.10	15.30	15.25	14.08	14.65	15.27
Middle Atlantic	12.70	12.85	13.89	12.45	14.26	13.28	13.85	12.60	13.29	13.74	14.48	13.24	13.00	13.52	13.71
E. N. Central	9.34	9.65	9.65	9.39	9.69	9.93	10.01	9.53	9.73	9.98	10.08	9.71	9.51	9.79	9.88
W. N. Central	8.36	9.22	9.66	8.49	8.60	9.38	9.88	8.70	8.63	9.53	10.14	8.90	8.95	9.16	9.32
S. Atlantic	9.30	9.34	9.48	9.42	9.83	9.67	9.68	9.67	9.93	9.95	9.99	9.96	9.39	9.71	9.96
E. S. Central	9.82	9.91	9.76	9.78	10.28	10.51	10.49	10.43	10.58	10.73	10.61	10.62	9.82	10.43	10.63
W. S. Central	8.07	8.19	8.14	8.02	8.12	8.29	8.30	8.08	8.11	8.06	8.07	7.84	8.11	8.20	8.02
Mountain	8.83	9.47	9.80	9.26	9.18	9.82	10.11	9.54	9.28	10.08	10.35	9.72	9.37	9.69	9.89
Pacific	11.04	12.94	14.38	12.43	11.95	13.14	15.51	13.06	12.42	14.05	16.10	13.45	12.77	13.49	14.08
U.S. Average	9.96	10.33	10.68	10.14	10.57	10.63	11.07	10.44	10.56	10.90	11.31	10.67	10.29	10.69	10.88
Industrial Sector															
New England	12.38	11.92	12.46	11.89	12.96	11.28	11.53	12.20	12.07	11.94	12.15	11.82	12.17	11.98	12.00
Middle Atlantic		7.23	7.47	7.00	8.75	7.37	7.24	7.26	7.67	7.62	7.68	7.38	7.25	7.66	7.59
E. N. Central	6.42	6.62	6.75	6.49	7.00	6.83	6.99	6.80	6.75	6.87	7.08	6.80	6.57	6.91	6.88
W. N. Central		6.58	7.15	6.28	6.56	6.68	7.31	6.43	6.45	6.77	7.51	6.52	6.60	6.75	6.83
S. Atlantic	6.30	6.44	6.77	6.41	6.80	6.68	7.01	6.55	6.66	6.79	7.10	6.69	6.48	6.76	6.82
E. S. Central	5.65	5.91	6.63	5.65	6.18	6.22	6.80	5.78	5.99	6.30	6.70	6.00	5.96	6.25	6.25
W. S. Central	5.60	5.88	6.17	5.73	5.87	6.04	6.33	5.83	5.66	5.88	6.22	5.75	5.86	6.02	5.88
Mountain		6.44	7.18	6.23	6.21	6.76	7.41	6.40	6.30	6.86	7.64	6.49	6.46	6.72	6.86
Pacific		8.14	8.93	8.22	7.96	8.30	9.48	8.54	7.78	8.28	9.20	8.36	8.20	8.59	8.43
U.S. Average	6.55	6.79	7.24	6.67	7.02	6.94	7.36	6.82	6.75	6.97	7.42	6.84	6.82	7.04	7.00
All Sectors (a)															
New England	14.43	14.18	14.40	14.92	15.85	15.05	15.25	15.69	16.11	15.80	16.04	15.97	14.48	15.47	15.99
Middle Atlantic		12.70	13.73	12.43	14.00	13.13	13.61	12.71	13.34	13.52	14.17	13.16	12.90	13.39	13.57
E. N. Central		9.40	9.59	9.21	9.53	9.72	9.96	9.49	9.59	9.81	10.16	9.60	9.33	9.67	9.79
W. N. Central		9.09	9.79	8.50	8.64	9.31	9.98	8.69	8.68	9.43	10.19	8.83	8.96	9.16	9.30
S. Atlantic		9.67	10.06	9.66	10.04	10.05	10.33	9.91	10.15	10.22	10.48	10.03	9.73	10.09	10.23
E. S. Central		8.68	9.15	8.53	9.05	9.22	9.53	8.84	9.19	9.32	9.61	8.94	8.71	9.17	9.28
W. S. Central		8.48	8.81	8.33	8.42	8.65	9.01	8.45	8.48	8.46	8.83	8.23	8.47	8.65	8.52
Mountain		9.20	9.89	8.91	8.87	9.56	10.16	9.13	9.03	9.75	10.44	9.34	9.18	9.47	9.69
Pacific		12.10	13.28	11.82	11.51	11.89	14.25	12.09	11.84	12.47	14.46	12.36	12.07	12.48	12.82
U.S. Average	9.72	10.05	10.58	9.91	10.26	10.34	10.91	10.16	10.30	10.51	11.07	10.27	10.08	10.43	10.56

<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)

U.S. Energy Information Admi	inotration.	201	ort-Term 13	Lilorgy	Gallook	201		1		20	15			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
United States	•	-	-	-	-	•	-	-	-	-	-			•	
Coal	4,367	4,077	4,747	4,187	4,873	4,037	4,645	4,205	4,613	3,988	4,764	4,157	4,345	4,439	4,380
Natural Gas	2,802	2,843	3,694	2,858	2,700	2,870	3,670	2,860	2,822	2,957	3,779	2,903	3,051	3,027	3,117
Petroleum (a)	74	73	81	66	147	63	67	65	77	67	73	64	74	85	70
Other Gases	32	33	36	33	28	29	35	34	28	30	36	35	34	32	32
Nuclear	2,176	2,044	2,257	2,168	2,201	2,060	2,292	2.060	2,144	2,074	2,206	2,055	2,162	2,153	2,120
Renewable Energy Sources:	•	•	•	•	,	•	,					,	*		
Conventional Hydropower	736	886	716	613	703	850	670	602	747	865	696	640	737	706	736
Wind	491	520	353	475	553	549	369	491	538	590	435	565	459	490	532
Wood Biomass	110	100	114	113	116	112	119	115	117	114	124	118	109	116	118
Waste Biomass	53	56	55	54	51	53	56	57	55	57	60	59	55	54	58
Geothermal	46	45	45	45	45	45	44	46	46	45	46	47	45	45	46
Solar	16	27	31	27	33	61	60	37	39	82	83	48	25	48	63
Pumped Storage Hydropower	-13	-11	-13	-12	-12	-17	-20	-14	-12	-11	-15	-13	-12	-16	-13
Other Nonrenewable Fuels (b)	33	34	36	33	31	33	35	33	33	35	36	34	34	33	34
Total Generation	10,925	10,727	12,153	10,661	11,470	10,746	12,044	10,591	11,248	10,892	12,325	10,711	11,118	11,213	11,295
Northeast Census Region	.0,020	,	,	.0,00.	, •	,	,	. 0,00 .	,2 .0	.0,002	12,020	. 0,	,	,2 . 0	,200
Coal	330	276	287	238	359	250	214	217	341	202	259	234	283	260	258
Natural Gas	451	480	610	445	409	480	620	468	463	517	633	494	497	495	527
Petroleum (a)	12	4	8	6	55	2	3	3	703	4	5	4	7	16	5
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	561	489	543	533	542	471	541	501	490	474	504	468	532	51 <i>4</i>	484
		95	91	95	97								95	98	105
Hydropower (c)	101 66	95 61	55	68	72	104 63	91 60	101 69	106 71	113 63	99 61	100 72	62	96 66	67
Other Renewables (d)						12							12		
Other Nonrenewable Fuels (b)	12	13	13	12	11		12	12	11	12	12	12		12	12
Total Generation	1,535	1,421	1,609	1,399	1,547	1,384	1,543	1,374	1,492	1,387	1,575	1,385	1,491	1,462	1,460
South Census Region	4 770	4 750	0.007	4 754	0.400	4.054	0.404	4 744	4.004	4 770	0.070	4.004	4 0 4 0	4.050	4.000
Coal	1,776	1,753	2,087	1,754	2,122	1,851	2,101	1,741	1,934	1,773	2,072	1,664	1,843	1,953	1,860
Natural Gas	1,599	1,673	2,049	1,590	1,538	1,722	2,080	1,578	1,624	1,786	2,159	1,641	1,729	1,731	1,804
Petroleum (a)	27	36	38	25	54	28	29	26	33	28	31	25	32	34	29
Other Gases	12	14	15	14	11	11	13	13	10	11	14	14	14	12	12
Nuclear	908	929	1,007	935	966	882	995	915	955	923	982	920	945	940	945
Hydropower (c)	150	147	134	116	146	103	86	119	157	113	95	119	137	113	121
Other Renewables (d)	218	239	181	215	239	254	202	235	253	280	234	279	213	232	261
Other Nonrenewable Fuels (b)	13	13	14	13	13	13	14	13	14	14	14	13	13	13	14
Total Generation	4,705	4,803	5,526	4,660	5,089	4,862	5,520	4,641	4,978	4,929	5,602	4,674	4,925	5,028	5,047
Midwest Census Region															
Coal	1,656	1,500	1,753	1,599	1,805	1,440	1,694	1,615	1,751	1,484	1,794	1,635	1,627	1,638	1,666
Natural Gas	197	186	244	176	194	179	190	170	173	175	225	160	201	183	183
Petroleum (a)	11	10	12	13	14	13	12	11	12	11	12	11	11	12	12
Other Gases	11	11	13	12	11	12	14	13	11	12	14	13	12	12	13
Nuclear	548	476	534	549	533	543	585	496	538	520	553	513	527	539	531
Hydropower (c)	30	41	35	26	30	42	39	28	33	46	43	28	33	35	38
Other Renewables (d)	216	199	141	221	251	213	149	227	241	231	167	252	194	210	222
Other Nonrenewable Fuels (b)	4	4	5	4	4	5	5	4	4	5	5	4	4	4	4
Total Generation	2,673	2,429	2,737	2,599	2,841	2,446	2,687	2,564	2,762	2,485	2,814	2,616	2,609	2,634	2,669
West Census Region															
Coal	605	547	620	596	587	497	636	631	587	529	640	624	592	588	595
Natural Gas	555	504	790	647	558	489	781	643	562	479	762	608	625	618	603
Petroleum (a)	24	23	23	23	24	21	23	25	24	24	25	25	23	23	25
Other Gases	6	6	6	6	5	5	6	6	5	5	6	6	6	6	5
Nuclear	159	150	173	152	160	164	171	148	162	156	166	154	158	161	160
Hydropower (c)	442	592	443	364	418	585	434	340	439	580	443	380	460	444	460
Other Renewables (d)	217	249	222	210	236	290	239	215	232	313	287	234	225	245	267
Other Nonrenewable Fuels (b)	4	3	4	4	4	3	4	4	4	4	5	4	4	4	4
Total Generation	2,013	2,075	2,281	2,003	1,992	2,054	2,293	2,012	2,015	2,091	2,333	2,036	2,093	2,088	2,119
(a) Desidual fuel all distillate fuel all				Z,000	-	-,007	_,	2,012	2,010	2,001	2,000	2,000	_,000	2,000	2,113

<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

		20	13			201	14			20	15			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Fuel Consumption for Electricity Ge	eneration,	All Secto	rs												
United States															
Coal (thousand st/d)	2,361	2,207	2,586	2,278	2,582	2,169	2,528	2,286	2,469	2,143	2,571	2,255	2,358	2,391	2,359
Natural Gas (million cf/d)	20,952	21,902	28,751	21,615	20,530	21,903	27,912	21,203	20,991	22,706	29,154	21,637	23,322	22,902	23,639
Petroleum (thousand b/d)	128	127	144	119	258	110	116	117	137	119	129	116	129	150	125
Residual Fuel Oil	38	28	36	30	86	24	29	27	28	26	29	25	33	41	27
Distillate Fuel Oil	26	24	27	26	85	23	23	29	34	26	28	27	25	40	29
Petroleum Coke (a)	59	72	78	60	70	61	61	56	68	62	67	59	67	62	64
Other Petroleum Liquids (b)	5	3	4	4	17	2	3	4	8	5	5	5	4	7	6
Northeast Census Region															
Coal (thousand st/d)	149	125	132	108	164	116	104	103	158	94	122	110	128	122	121
Natural Gas (million cf/d)	3,415	3,668	4,716	3,352	3,153	3,659	4,790	3,504	3,504	3,975	4,943	3,728	3,790	3,780	4,040
Petroleum (thousand b/d)	20	7	15	11	92	4	6	6	13	7	10	7	13	27	9
South Census Region															
Coal (thousand st/d)	940	937	1,119	933	1,084	969	1,114	920	999	925	1,084	876	983	1,021	971
Natural Gas (million cf/d)	11,919	12,884	16,050	12,043	11,689	13,113	15,790	11,688	12,039	13,698	16,641	12,204	13,232	13,077	13,654
Petroleum (thousand b/d)	52	67	72	47	103	52	54	50	64	54	58	48	60	64	56
Midwest Census Region															
Coal (thousand st/d)	933	842	989	902	1,006	811	957	909	982	831	1,010	919	917	920	936
Natural Gas (million cf/d)	1,530	1,518	2,064	1,441	1,587	1,441	1,533	1,334	1,356	1,430	1,861	1,265	1,639	1,473	1,479
Petroleum (thousand b/d)	20	17	20	23	27	23	21	21	22	20	21	21	20	23	21
West Census Region															
Coal (thousand st/d)	340	302	346	335	328	274	353	355	330	292	356	351	331	328	332
Natural Gas (million cf/d)	4,089	3,832	5,922	4,779	4,101	3,690	5,798	4,677	4,092	3,603	5,709	4,440	4,661	4,572	4,466
Petroleum (thousand b/d)	37	35	36	37	37	31	36	40	38	38	40	40	36	36	39
End-of-period U.S. Fuel Inventories	Held by E	lectric Po	ower Sect	or											
Coal (million short tons)	171.5	170.5	152.2	148.0	118.0	132.9	122.5	129.7	132.0	140.3	126.7	132.3	148.0	129.7	132.3
Residual Fuel Oil (mmb)	12.9	12.1	12.2	12.9	10.5	10.7	11.0	11.7	11.8	11.9	11.7	11.8	12.9	11.7	11.8
Distillate Fuel Oil (mmb)	16.2	15.9	15.5	15.7	15.4	15.6	15.4	15.7	15.7	15.6	15.5	15.7	15.7	15.7	15.7
Petroleum Coke (mmb)	2.0	2.0	1.5	1.9	1.7	2.0	2.0	2.1	2.2	2.3	2.4	2.5	1.9	2.1	2.5

<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)

U.S. Energy Information Adm	2013				Outlook	201		<del></del>		201	15			Year	
ŀ	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Electric Power Sector												-			
Hydroelectric Power (a)	0.621	0.759	0.619	0.529	0.595	0.731	0.580	0.520	0.632	0.743	0.603	0.553	2.529	2.425	2.531
Wood Biomass (b)	0.049	0.045	0.056	0.056	0.065	0.059	0.064	0.062	0.065	0.059	0.073	0.066	0.207	0.250	0.262
Waste Biomass (c)	0.062	0.065	0.065	0.067	0.061	0.062	0.067	0.069	0.066	0.069	0.072	0.071	0.258	0.259	0.277
Wind	0.420	0.450	0.309	0.416	0.473	0.475	0.323	0.430	0.461	0.510	0.381	0.494	1.595	1.702	1.846
Geothermal	0.040	0.039	0.039	0.039	0.038	0.039	0.039	0.040	0.040	0.039	0.040	0.041	0.157	0.156	0.160
Solar	0.013	0.023	0.026	0.023	0.028	0.051	0.052	0.032	0.033	0.070	0.072	0.042	0.085	0.163	0.216
Subtotal	1.206	1.380	1.115	1.130	1.260	1.417	1.149	1.152	1.295	1.489	1.241	1.267	4.831	4.978	5.292
Industrial Sector															
Hydroelectric Power (a)	0.009	0.008	0.007	0.007	0.008	0.005	0.007	0.007	0.006	0.006	0.006	0.006	0.032	0.027	0.025
Wood Biomass (b)	0.318	0.310	0.328	0.324	0.305	0.317	0.317	0.311	0.296	0.290	0.304	0.308	1.281	1.250	1.198
Waste Biomass (c)	0.042	0.042	0.043	0.044	0.042	0.042	0.045	0.044	0.042	0.040	0.043	0.044	0.171	0.172	0.169
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
Subtotal	0.374	0.366	0.384	0.380	0.359	0.370	0.375	0.367	0.349	0.341	0.359	0.363	1.505	1.471	1.412
Commercial Sector															
Wood Biomass (b)	0.017	0.017	0.018	0.018	0.018	0.018	0.021	0.023	0.023	0.022	0.023	0.024	0.070	0.079	0.091
Waste Biomass (c)	0.012	0.011	0.011	0.012	0.011	0.011	0.012	0.012	0.011	0.011	0.012	0.012	0.046	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	0.035	0.034	0.035	0.036	0.035	0.034	0.039	0.041	0.040	0.038	0.041	0.041	0.140	0.149	0.160
Residential Sector															
Wood Biomass (b)	0.143	0.145	0.146	0.146	0.143	0.145	0.146	0.146	0.141	0.142	0.144	0.144	0.580	0.580	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	0.039	0.039
Solar (d)	0.054	0.055	0.055	0.055	0.062	0.063	0.063	0.063	0.075	0.076	0.076	0.076	0.219	0.252	0.303
Subtotal	0.207	0.209	0.211	0.211	0.215	0.217	0.220	0.220	0.226	0.228	0.230	0.230	0.839	0.871	0.914
Transportation Sector															
Ethanol (e)	0.256	0.282	0.280	0.282	0.263	0.284	0.290	0.279	0.267	0.280	0.280	0.276	1.100	1.115	1.103
Biodiesel (e)	0.033	0.046	0.056	0.071	0.040	0.048	0.051	0.051	0.047	0.049	0.050	0.051	0.205	0.191	0.196
Subtotal	0.288	0.328	0.336	0.353	0.303	0.332	0.340	0.330	0.313	0.329	0.329	0.327	1.306	1.305	1.299
All Sectors Total															
Hydroelectric Power (a)	0.631	0.767	0.627	0.536	0.602	0.736	0.588	0.526	0.638	0.749	0.610	0.560	2.561	2.453	2.556
Wood Biomass (b)	0.528	0.517	0.549	0.544	0.530	0.539	0.553	0.542	0.524	0.513	0.544	0.541	2.138	2.164	2.123
Waste Biomass (c)	0.117	0.118	0.119	0.123	0.114	0.115	0.125	0.125	0.119	0.119	0.127	0.126	0.476	0.478	0.492
Wind	0.420	0.450	0.309	0.416	0.473	0.475	0.323	0.430	0.461	0.510	0.381	0.494	1.595	1.702	1.846
Geothermal	0.055	0.055	0.055	0.055	0.054	0.055	0.055	0.056	0.055	0.055	0.056	0.057	0.221	0.219	0.223
Solar	0.068	0.078	0.082	0.079	0.091	0.116	0.115	0.095	0.108	0.145	0.148	0.118	0.307	0.417	0.519
Ethanol (e)	0.260	0.287	0.285	0.287	0.268	0.289	0.287	0.286	0.272	0.285	0.285	0.281	1.120	1.130	1.123
Biodiesel (e)	0.033	0.046	0.056	0.071	0.040	0.048	0.051	0.051	0.047	0.049	0.050	0.051	0.205	0.191	0.196
Total Consumption	2.111	2.318	2.082	2.111	2.173	2.372	2.122	2.109	2.224	2.425	2.201	2.228	8.622	8.775	9.078

<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 heating oil.

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

U.S. Energy Information Administration	n   500			Outlook	- Noverr										
	1st	201 2nd	3 3rd	4th	1st	201 2nd	4 3rd	4th	1st	20 <sup>-</sup> 2nd	15 3rd	4th	2013	Year 2014	2015
Macroeconomic	131	ZIIU	Jiu	401	131	Ziiu	Jiu	401	131	Ziiu	Jiu	401	2013	2014	2013
Real Gross Domestic Product															
(billion chained 2009 dollars - SAAR)	15,538	15,607	15,780	15,916	15,832	16,010	16,151	16,271	16,363	16,454	16,551	16,645	15,710	16,066	16,503
Real Personal Consumption Expend.	10,000	10,001	10,100	10,010	10,002	10,010	10,101	10,211	70,000	10, 101	10,001	10,010	10,710	70,000	70,000
(billion chained 2009 dollars - SAAR)	10,614	10,660	10,713	10,811	10,844	10,913	10,966	11,049	11,126	11,200	11,274	11,349	10,700	10,943	11,237
Real Fixed Investment	10,014	10,000	10,110	10,011	10,044	10,010	10,000	11,010	11,120	11,200	,	11,010	10,700	10,010	11,201
(billion chained 2009 dollars - SAAR)	2,428	2,457	2,497	2,535	2,536	2,595	2,648	2,686	2,735	2,780	2,820	2,852	2,479	2,616	2,797
Business Inventory Change	2,420	2,431	2,431	2,000	2,550	2,000	2,040	2,000	2,700	2,700	2,020	2,002	2,473	2,010	2,737
(billion chained 2009 dollars - SAAR)	44	51	111	91	40	100	94	76	66	49	47	47	74	78	52
Real Government Expenditures		٥.	• • • • • • • • • • • • • • • • • • • •	٥.	40	100	34	70	00	43	77	77	,,,	70	02
(billion chained 2009 dollars - SAAR)	2,900	2,901	2,902	2,875	2,869	2,881	2,885	2,893	2.895	2,896	2.896	2,901	2,894	2,882	2,897
Real Exports of Goods & Services	2,300	2,301	2,302	2,013	2,003	2,001	2,000	2,000	2,000	2,000	2,000	2,301	2,034	2,002	2,007
(billion chained 2009 dollars - SAAR)	1,972	2,003	2,028	2,077	2,027	2,081	2,103	2,121	2,132	2,148	2,166	2,185	2,020	2,083	2,158
Real Imports of Goods & Services	1,572	2,003	2,020	2,011	2,021	2,001	2,103	2,121	2,102	2,140	2,700	2,100	2,020	2,000	2,100
(billion chained 2009 dollars - SAAR)	2,399	2,449	2,452	2,460	2,474	2,541	2,531	2,541	2,576	2,605	2,637	2,671	2,440	2,522	2,622
Real Disposable Personal Income	2,333	2,443	2,432	2,400	2,414	2,541	2,331	2,041	2,570	2,000	2,037	2,071	2,440	2,022	2,022
(billion chained 2009 dollars - SAAR)	11,539	11,647	11,706	11,712	11,810	11,937	12,010	12,068	12,161	12,227	12,313	12,395	11,651	11,956	12,274
Non-Farm Employment	11,555	11,047	11,700	11,712	11,010	11,337	12,010	12,000	12,101	12,221	12,515	12,330	11,031	11,300	12,214
· •	135.5	136.1	136.6	137.2	137.8	138.5	139.2	139.9	140.5	1/11 2	141.7	142.2	136.4	138.8	141.4
(millions)  Civilian Unemployment Rate	133.3	130.1	130.0	137.2	137.0	130.5	139.2	139.9	140.5	141.2	141.7	142.2	130.4	130.0	141.4
	77	7.5	7.0	7.0	6.7	6.2	6.4	<i>5</i> 0	<i>E</i> 0	5.7	F 6	5.6	7.4	6.2	<i>5</i> 7
(percent)	7.7	7.5	7.2	7.0	6.7	0.2	6.1	5.9	5.8	5.7	5.6	5.6	7.4	0.2	5.7
Housing Starts	0.05	0.00	0.00	4.00	0.00	0.00	4.00	4.05	4.40	4.47	4.00	4.05	0.00	4.00	4.40
(millions - SAAR)	0.95	0.86	0.88	1.03	0.93	0.99	1.02	1.05	1.12	1.17	1.22	1.25	0.93	1.00	1.19
Industrial Braduation Indians (Index, 2007	400\														
Industrial Production Indices (Index, 2007=	99.0	00.4	100.1	101 2	102.2	102.6	101.1	10E E	106.0	106.6	107.2	100.0	99.9	103.9	107.0
Total Industrial Production		99.4		101.3		103.6	104.4	105.5			107.3	108.0			107.0
Manufacturing	97.1	97.5	97.9	99.0	99.4	101.1	102.1	103.0	103.5	104.1	104.9	105.6	97.9	101.4	104.5
Food	104.0	104.2	104.3	105.2	106.1	106.6	105.5	106.1	106.7	107.3	107.9	108.6	104.5	106.1	107.6
Paper	85.3	85.6	85.1	83.9	82.4	83.3	82.7	83.0	83.4	83.8	84.3	84.7	85.0	82.8	84.1
Petroleum and Coal Products	96.6	95.5	96.2	96.7	97.7	98.2	98.9	99.1	99.4	99.7	99.9	100.3	96.2	98.5	99.8
Chemicals	87.1	87.8	87.5	87.7	87.7	88.4	89.6	90.0	90.5	91.2	91.9	92.4	87.5	88.9	91.5
Nonmetallic Mineral Products	73.5	73.4	74.3	74.7	75.5	77.4	79.9	80.9	82.0	83.4	85.2	87.0	74.0	78.4	84.4
Primary Metals	99.7	99.4	100.8	103.1	101.9	105.7	108.0	108.9	110.2	110.9	112.1	113.4	100.8	106.1	111.7
Coal-weighted Manufacturing (a)	91.0	90.9	91.3	92.0	91.8	93.5	94.5	95.0	95.9	96.6	97.6	98.4	91.3	93.7	97.1
Distillate-weighted Manufacturing (a)	90.5	90.3	91.1	92.2	92.3	93.8	94.9	95.6	96.5	97.3	98.4	99.4	91.0	94.2	97.9
Electricity-weighted Manufacturing (a)	95.4	95.6	96.2	97.2	97.1	99.0	99.9	100.6	101.5	102.3	103.4	104.3	96.1	99.2	102.9
Natural Gas-weighted Manufacturing (a)	92.5	92.6	93.0	93.9	93.6	94.5	95.1	95.5	96.2	97.0	97.8	98.5	93.0	94.7	97.4
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	2.32	2.32	2.33	2.34	2.35	2.37	2.38	2.39	2.40	2.41	2.41	2.42	2.33	2.37	2.41
Producer Price Index: All Commodities															
(index, 1982=1.00)	2.04	2.03	2.04	2.03	2.06	2.07	2.07	2.07	2.07	2.07	2.09	2.09	2.03	2.07	2.08
Producer Price Index: Petroleum															
(index, 1982=1.00)	3.01	2.96	2.99	2.83	2.88	2.99	2.90	2.44	2.35	2.41	2.43	2.38	2.95	2.80	2.39
GDP Implicit Price Deflator															
(index, 2009=100)	106.2	106.5	106.9	107.3	107.7	108.3	108.5	109.0	109.6	110.0	110.4	111.0	106.7	108.4	110.2
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	7,664	8,459	8,375	7,995	7,615	8,574	8,463	8,114	7,764	8,640	8,532	8,166	8,125	8,194	8,277
Air Travel Capacity															
(Available ton-miles/day, thousands)	507	536	542	516	503	545	554	515	509	550	556	519	526	529	534
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	309	337	342	322	310	345	349	319	313	352	352	323	328	331	335
Airline Ticket Price Index															
(index, 1982-1984=100)	310.4	323.5	307.0	309.9	297.3	334.3	301.0	289.1	294.4	327.4	316.8	300.0	312.7	305.4	309.6
Raw Steel Production															
(million short tons per day)	0.259	0.267	0.267	0.260	0.262	0.263	0.271	0.264	0.269	0.280	0.266	0.258	0.263	0.265	0.268
													•		
Carbon Dioxide (CO 2) Emissions (million n	netric tons)												_		
Petroleum	550	563	581	578	557	568	577	572	556	572	582	575	2,272	2,274	2,285
Natural Gas	424	290	299	378	458	296	302	366	433	303	311	374	1,391	1,422	1,421
Coal	427	403	471	421	460	395	468	421	444	393	471	419	1,722	1,743	1,726
Total Fossil Fuels	1,401	1,257	1,351	1,376	1,474	1,259	1,346	1,359	1,433	1,267	1,363	1,368	5,385	5,439	5,431

<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  $\it Manufacturing Energy Consumption Survey$  .

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

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Informat	ion Admir		•	ort-Term	Energy			bei 20	14						
		201		4.1		201				201				Year	
D. 10	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2013	2014	2015
Real Gross State Produc	•	•	050	000	050	005	074	070	000	004	000	000	054	007	000
New England	848	847	858	863	858	865	871	876	880	884	888	892	854	867	886
Middle Atlantic	2,329	2,352	2,365	2,381	2,365	2,386	2,401	2,414	2,425	2,436	2,448	2,460	2,357	2,392	2,442
E. N. Central	•	2,173	2,180	2,199	2,186	2,207	2,221	2,234	2,244	2,253	2,263	2,272	2,180	2,212	2,258
W. N. Central	1,019	1,017	1,031	1,038	1,031	1,042	1,051	1,059	1,065	1,071	1,077	1,083	1,026	1,046	1,074
S. Atlantic		2,771	2,792	2,820	2,807	2,841	2,866	2,888	2,906	2,923	2,941	2,959	2,788	2,850	2,932
E. S. Central	720	718	726	730	724	732	738	743	747	751	755	759	723	735	753
W. S. Central	1,872	1,888	1,915	1,938	1,936	1,966	1,992	2,012	2,026	2,041	2,057	2,072	1,903	1,976	2,049
Mountain		1,013	1,022	1,034	1,028	1,041	1,051	1,061	1,067	1,074	1,082	1,089	1,019	1,045	1,078
Pacific	2,733	2,753	2,814	2,838	2,821	2,855	2,884	2,907	2,925	2,944	2,963	2,981	2,785	2,867	2,953
Industrial Output, Manufa				-											
New England	95.3	95.5	95.6	96.2	96.6	98.1	98.8	99.6	100.0	100.4	101.0	101.5	95.7	98.3	100.7
Middle Atlantic	93.2	93.3	93.4	94.1	94.1	94.9	94.9	95.7	96.2	96.7	97.3	97.9	93.5	94.9	97.0
E. N. Central		98.8	99.3	100.9	101.6	103.1	104.5	105.5	105.9	106.8	107.6	108.3	99.4	103.7	107.1
W. N. Central	100.2	100.6	100.9	102.3	102.8	104.7	105.4	106.3	106.7	107.4	108.2	108.9	101.0	104.8	107.8
S. Atlantic	92.7	93.0	93.5	94.6	94.9	96.7	97.8	98.5	98.9	99.3	99.9	100.4	93.4	97.0	99.6
E. S. Central	94.6	95.0	95.7	96.8	96.9	98.8	100.5	101.4	101.9	102.6	103.4	104.1	95.5	99.4	103.0
W. S. Central	102.1	102.3	102.6	104.0	104.7	106.8	108.3	109.2	109.9	110.6	111.4	112.3	102.8	107.2	111.0
Mountain	98.7	99.2	99.7	100.9	101.5	103.7	104.5	105.6	106.2	106.9	107.8	108.7	99.6	103.8	107.4
Pacific	98.0	98.5	98.9	99.9	100.0	101.5	102.3	103.1	103.5	104.1	104.8	105.4	98.8	101.7	104.5
Real Personal Income (B	illion \$2009	9)													
New England	741	747	749	751	759	765	770	775	782	786	790	795	747	767	788
Middle Atlantic	1,987	2,010	2,014	2,020	2,036	2,050	2,063	2,079	2,096	2,105	2,116	2,132	2,008	2,057	2,112
E. N. Central	1,825	1,838	1,839	1,840	1,852	1,871	1,881	1,891	1,906	1,917	1,927	1,938	1,836	1,874	1,922
W. N. Central	868	871	877	873	873	885	889	895	904	910	917	924	872	885	914
S. Atlantic	2,424	2,444	2,449	2,454	2,475	2,498	2,515	2,534	2,559	2,577	2,595	2,614	2,443	2,506	2,586
E. S. Central	643	646	650	648	653	658	662	666	672	676	681	685	647	660	679
W. S. Central	1,493	1,510	1,519	1,521	1,545	1,565	1,579	1,593	1,609	1,623	1,636	1,650	1,511	1,570	1,630
Mountain	840	850	854	856	867	876	882	890	899	906	913	921	850	879	910
Pacific	2,243	2,276	2,295	2,308	2,328	2,349	2,365	2,383	2,405	2,424	2,442	2,461	2,281	2,356	2,433
Households (Thousands	)	•	•	•	•	•	•						•		
New England	, 5,771	5,774	5,773	5,771	5,766	5,769	5,768	5.767	5,767	5,770	5,775	5,781	5,771	5,767	5,781
Middle Atlantic	15,893	15,908	15,909	15,906	15,897	15,910	15,910	15,911	15,916	15,926	15,944	15,965	15,906	15,911	15,965
E. N. Central	18,449	18,463	18,460	18,450	18,437	18,444	18,437	18,428	18,422	18,426	18,441	18,460	18,450	18,428	18,460
W. N. Central	8,355	8,371	8,382	8,388	8,392	8,406	8,412	8,418	8,427	8,439	8,455	8,473	8,388	8,418	8,473
S. Atlantic	•	24,130	24,181	24,222	24,258	24,324	24,362	24,401	24,446	24,501	24,568	24,641	24,222	24,401	24,641
E. S. Central	7,445	7,451	7,449	7,446	7,440	7,445	7,444	7,443	7,444	7,449	7,460	7,473	7,446	7,443	7,473
W. S. Central	13,877	13,912	13,939	13,960	13,977	14,012	14,039	14,067	14,099	14,140	14,186	14,235	13,960	14,067	14,235
Mountain	8,584	8,612	8,636	8,656	8,674	8,703	8,724	8,746	8,769	8,797	8,830	8,865	8,656	8,746	8,865
Pacific	17,938	17,973	18,000	18,014	18,027	18,056	18,090	18,128	18,168	18,219	18,276	18,331	18,014	18,128	18,331
Total Non-farm Employm	•	-	,	,	,	,	,	,	,	,=	,	,	,	,	,
New England	7.0	7.0	7.0	7.0	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.2	7.0	7.1	7.2
Middle Atlantic	18.5	18.5	18.6	18.6	18.6	18.7	18.8	18.8	18.9	18.9	19.0	19.0	18.5	18.7	19.0
E. N. Central		20.8	20.9	21.0	21.0	21.0	21.1	21.2	21.3	21.3	21.4	21.4	20.8	21.1	21.4
W. N. Central		10.2	10.2	10.3	10.3	10.4	10.4	10.5	10.5	10.5	10.6	10.6	10.2	10.4	10.6
S. Atlantic		25.7	25.8	26.0	26.1	26.2	26.4	26.5	26.6	26.8	26.9	27.0	25.8	26.3	26.8
E. S. Central		25.7 7.6	25.6 7.6	26.0 7.6	7.6	26.2 7.7	26.4 7.7	20.5 7.7	20.6 7.8	20.8 7.8	26.9 7.8	27.0 7.9	25.6 7.6	20.3 7.7	26.8 7.8
W. S. Central		7.6 15.9	15.9									7.9 16.9			
				16.0	16.2	16.3	16.4	16.6	16.7	16.7	16.8		15.9	16.4	16.8
Mountain		9.5	9.5	9.6	9.7	9.7	9.8	9.9	9.9	10.0	10.0	10.1	9.5	9.8	10.0
Pacific	20.5	20.6	20.8	20.9	21.0	21.1	21.3	21.4	21.5	21.6	21.7	21.8	20.7	21.2	21.6

<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 Informati	on Aami	Administration   Short-Term						nber 20	14	202	15			Veer	
	1st	201 2nd	3 3rd	4th	1st	201 2nd	14 3rd	4th	1st	201 2nd	3rd	4th	2013	Year 2014	2015
Heating Degree Days	131	Liiu	ora	7(11	131	ZIIU	J. u	7(1)	131	LIIU	ora	7(1)	2010	2017	2010
New England	3,118	846	167	2,295	3,562	886	146	2.088	3,151	857	135	2,193	6,427	6,682	6.336
Middle Atlantic	2,950	694	128	2,064	3,441	706	100	1,917	2,915	672	93	2,009	5,836	6,163	5,690
E. N. Central	3,288	760	119	2,458	3,935	728	168	2.264	3,146	732	129	2,255	6,625	7,095	6,261
W. N. Central	-	904	101	2,721	3,861	754	174	2,417	3,224	686	153	2,437	7,133	7,206	6,500
South Atlantic	1,517	212	20	989	1,714	197	14	995	1,495	215	17	999	2,739	2,921	2,726
E. S. Central	1,932	286	16	1,414	2,271	230	18	1,339	1,894	268	22	1,331	3,647	3,858	3,515
W. S. Central	1,180	139	1	1,013	1,489	93	4	859	1,280	98	5	817	2,333	2,445	2,200
Mountain	,	731	126	1,995	2,128	714	153	1,737	2,183	649	132	1,826	5,269	4,733	4,790
Pacific	1,559	499	82	1,232	1,256	471	57	980	1,279	493	91	1,123	3,373	2,764	2,986
U.S. Average	2,222	511	76	1,661	2,454	482	80	1,500	2,124	476	77	1,540	4,470	4,516	4,217
Heating Degree Days, Pri	,			.,	_,			.,000	_,			.,00	., •	.,0.0	.,
New England	3,197	860	129	2,158	3,152	836	134	2.167	3,166	838	134	2,148	6,344	6,289	6,286
Middle Atlantic	2,937	678	84	1,978	2,905	660	88	1,983	2,936	667	90	1,971	5,678	5,636	5,663
E. N. Central	,	696	122	2,212	3,117	691	120	2,243	3,192	695	123	2,252	6,161	6,170	6,262
W. N. Central	-	667	156	2,362	3,209	686	149	2,404	3,272	691	150	2,423	6,394	6,448	6,536
South Atlantic	1,474	198	14	1,009	1,465	194	14	1,006	1,481	196	14	1,009	2,694	2,679	2,700
E. S. Central	1,819	231	21	1,323	1,810	236	19	1,336	1,853	236	19	1,351	3,393	3,402	3,459
W. S. Central	1,177	79	6	801	1,158	86	5	828	1,190	86	5	835	2,063	2,076	2,116
Mountain	•	728	158	1,869	2,267	728	156	1,887	2,259	730	151	1,870	4,993	5,038	5,010
Pacific	,	645	94	1,236	1,554	625	96	1,237	1,534	622	92	1,205	3,510	3,512	3,454
U.S. Average	2,172	499	77	1,558	2,161	492	77	1,569	2,183	493	77	1,564	4,306	4,299	4,316
Cooling Degree Days	•			,	•							,	,		
New England	0	96	444	0	0	74	340	6	0	87	409	0	541	420	497
Middle Atlantic	0	156	522	6	0	154	432	6	0	167	550	5	684	591	722
E. N. Central	0	213	471	5	0	231	377	2	0	215	541	8	689	610	765
W. N. Central	0	230	655	7	0	262	540	11	3	273	685	11	892	813	972
South Atlantic	108	591	1,035	254	107	640	1,059	217	109	615	1,136	229	1,988	2,022	2,089
E. S. Central	14	454	918	59	6	505	922	71	25	497	1,041	67	1,445	1,504	1,630
W. S. Central	73	780	1,510	164	34	774	1,436	237	68	824	1,485	196	2,527	2,481	2,573
Mountain		479	911	50	31	440	868	81	20	451	983	86	1,462	1,420	1,539
Pacific	26	216	593	49	39	220	678	100	31	199	577	74	884	1,037	881
U.S. Average	37	377	802	86	34	391	771	100	38	390	845	94	1,302	1,296	1,366
Cooling Degree Days, Pri	or 10-year	Average													
New England	0	77	416	1	0	83	417	1	0	85	419	1	494	500	506
Middle Atlantic	0	159	560	4	0	167	558	5	0	168	557	6	724	730	730
E. N. Central	3	220	548	6	3	230	546	6	3	234	545	6	778	785	787
W. N. Central	7	273	684	9	7	277	678	9	7	282	683	9	974	972	981
South Atlantic	112	633	1,157	208	109	636	1,153	212	110	634	1,154	212	2,110	2,111	2,109
E. S. Central	36	525	1,049	57	36	528	1,046	57	33	526	1,053	53	1,667	1,666	1,665
W. S. Central	100	889	1,494	194	102	882	1,505	190	94	882	1,518	185	2,676	2,679	2,679
Mountain		411	934	77	18	420	922	71	17	424	929	74	1,440	1,431	1,444
Pacific	26	159	598	63	26	166	588	58	26	170	600	64	847	838	859
U.S. Average	42	387	844	84	41	393	843	83	40	395	849	84	1,357	1,360	1,368

<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).