Short-Term Energy Outlook (STEO)

Highlights

- North Sea Brent crude oil prices averaged \$47/barrel (b) in August, a \$10/b decrease from July. This third consecutive monthly decrease in prices likely reflects concerns about lower economic growth in emerging markets, expectations of higher oil exports from Iran, and continuing growth in global inventories. Crude oil price volatility increased significantly, with Brent prices showing daily changes of more than 5% for four consecutive trading days from August 27 to September 1, the longest such stretch since December 2008.
- EIA forecasts that Brent crude oil prices will average \$54/b in 2015 and \$59/b in 2016, unchanged from last month's STEO. Forecast West Texas Intermediate (WTI) crude oil prices in 2015 and 2016 average \$5/b lower than the Brent price. The current values of futures and options contracts for December 2015 delivery (Market Prices and Uncertainty Report) suggest the market expects WTI prices to range from \$32/b to \$73/b (at the 95% confidence interval) in December 2015.
- U.S. regular gasoline monthly retail prices averaged \$2.64/gallon (gal) in August, a decrease
 of 16 cents/gal from July and 85 cents/gal lower than in August 2014. EIA expects monthly
 gasoline prices to decline from the August level to an average of \$2.11/gal during the fourth
 quarter of 2015. EIA forecasts U.S. regular gasoline retail prices to average \$2.38/gal in
 2016.
- EIA estimates total U.S. crude oil production declined by 140,000 barrels per day (b/d) in August compared with July production. Crude oil production is forecast to continue decreasing through mid-2016 before growth resumes late in 2016. Projected U.S. crude oil production averages 9.2 million b/d in 2015 and 8.8 million b/d in 2016, which are both 0.1 million b/d lower than in the prior STEO.
- Natural gas working inventories were 3,193 billion cubic feet (Bcf) on August 28. This level was 18% higher than a year ago and 4% higher than the previous five-year average (2010-14) for this week. EIA projects inventories will close the injection season at the end of October at 3,840 Bcf, which would be the third-highest end-of-October level on record.

Global Petroleum and Other Liquids

Global liquids production continues to outpace consumption, leading to strong inventory builds throughout the forecast period. Global oil inventory builds in the second quarter of 2015 averaged 2.9 million b/d, compared with 1.9 million b/d in the first quarter. The pace of inventory builds is expected to slow in the second half of 2015, to roughly 1.8 million b/d. In 2016, inventory builds are forecast to slow to an average of 1.1 million b/d.

Global Petroleum and Other Liquids Consumption. EIA estimates that global consumption of petroleum and other liquids grew by 1.2 million b/d in 2014, averaging 92.4 million b/d for the year. EIA expects global consumption of petroleum and other liquids to grow by 1.2 million b/d in 2015 and by 1.3 million b/d in 2016. Growth in global consumption for 2016 was revised downward by almost 0.2 million b/d, compared with last month's forecast, as China and other Asian economies continue to show signs of weakness. World real gross domestic product (GDP) weighted for oil consumption increased by 2.8% in 2014, and is projected to grow by 2.3% in 2015 and by 2.9% in 2016.

Consumption of petroleum and other liquids in countries outside of the Organization for Economic Cooperation and Development (OECD) grew by 1.4 million b/d in 2014 and is projected to grow by 0.7 million b/d in 2015 and by 1.1 million b/d in 2016. Despite signs of slowing economic growth, China continues to be a driver of non-OECD oil consumption growth. China's growth in oil consumption is expected to average slightly less than 0.3 million b/d in 2015 and 2016, below the 0.4 million b/d growth in 2014. Also, Iran is expected to experience an uptick in economic activity and petroleum consumption in 2016, assuming implementation of the Joint Comprehensive Plan of Action (JCPOA) between Iran and the P5+1 that was announced on July 14.

After falling by 0.3 million b/d in 2014, OECD petroleum and other liquids consumption is expected to rise by 0.4 million b/d in 2015 and by 0.3 million b/d in 2016, reaching an average of 46.4 million b/d, the highest annual average level of OECD consumption since 2010. U.S. consumption is expected to grow by an average of 0.3 million b/d in 2015 and by 0.1 million b/d in 2016. Several European countries saw economic conditions improve as they emerged from recessions, which, combined with colder-than-normal weather early in 2015 across Europe, contributes to a projected 0.1 million b/d increase in consumption in OECD Europe in 2015.

Non-OPEC Petroleum and Other Liquids Supply. EIA estimates that petroleum and other liquids production in countries outside of the Organization of the Petroleum Exporting Countries (OPEC) grew by 2.4 million b/d in 2014, which mainly reflects production growth in the United States. EIA expects non-OPEC liquids production to grow by 1.4 million b/d in 2015, but to remain roughly flat in 2016, as declining U.S. production is offset by modest growth in other non-OPEC producers.

Non-OPEC production growth in 2015 is largely attributable to investments made when oil prices were higher. For example, the decisions to invest in the Golden Eagle, Peregrine, and Kinnoull fields in the United Kingdom's sector of the North Sea were made in the second half of

2011 when Brent crude prices were more than \$100/b. The three fields started producing at the end of 2014 and the beginning of 2015. Redirection of investment is also helping to maintain or raise production levels in non-OPEC countries. Some companies have cut back on investments in exploring for new fields, and some are directing a greater share of investments toward currently producing fields to maintain production levels and positive cash flow in the short term. However, this redirection of investment could contribute to lower production beyond the forecast period.

Production growth in Canada is expected to average 0.3 million b/d in both 2015 and 2016, driven by continued expansion in oil sands projects. Although some previously announced oil sands projects have been put on hold, the vast majority continue as planned, including Imperial Oil and Cenovus oil sands projects scheduled to come online by the end of 2016.

Unplanned supply disruptions among non-OPEC producers averaged 0.7 million b/d in August, slightly less than in the previous month.

OPEC Petroleum and Other Liquids Supply. EIA estimates that OPEC crude oil production averaged 30.1 million b/d in 2014, unchanged from 2013. Crude oil production declines in Libya, Angola, Algeria, and Kuwait offset production growth in Iraq and Iran. EIA forecasts OPEC crude oil production to increase by 0.8 million b/d in 2015 and remain relatively flat in 2016. Iraq is expected to be the largest contributor to OPEC production growth in 2015. In 2016, additional OPEC crude oil supply is expected to come from Iran, which is forecast to boost production if international sanctions targeting its oil sector are suspended.

On July 14, the P5+1 and Iran announced an agreement that could result in relief from United States and European Union nuclear-related sanctions (which include some oil-related sanctions). Sanctions relief is contingent on verification by the International Atomic Energy Agency that Iran has complied with key nuclear-related steps. The sanctions relief would put additional Iranian oil supplies on a global market that has already seen oil inventories increase significantly over the past year.

The JCPOA is currently undergoing a congressional review. As of the time of this writing, Congress had not voted on the agreement, but for the purposes of this STEO, EIA assumes sanctions relief could occur in mid-2016. If sanctions relief occurs, EIA forecasts Iranian crude oil supplies will increase by about 0.3 million b/d on average in 2016, with most of the growth occurring in the second half of the year. Much uncertainty remains as to the timing of sanctions relief. Iran produced 3.6 million b/d of crude oil in late 2011, before the recent round of sanctions was enacted. The sanctions forced Iran to shut in a substantial portion of its production, with production currently averaging about 2.8 million b/d. Iran's ability to bring online previously shut-in volumes and increase exports depends on several factors, including the current condition of oil fields and infrastructure that were shut in and the pace of sanctions relief.

Saudi Arabia and other OPEC member countries are not expected to reduce production to accommodate additional Iranian volumes, although some producers will see production declines

in the near term. For example, Saudi Arabia's production is expected to decline as seasonal power demand abates, reducing the use of crude oil to generate electricity. Also, there is considerable uncertainty regarding Iraq's ability to sustain its higher production and export levels, particularly in light of increased outages on the pipeline through Turkey to the port of Ceyhan that is connected to the Kurdistan Regional Government's independent pipeline.

OPEC noncrude liquids production, which averaged 6.3 million b/d in 2014, is expected to increase by 0.2 million b/d in 2015 and by 0.3 million b/d in 2016, led by production increases in Iran, Qatar, and Kuwait.

In August, unplanned crude oil supply disruptions among OPEC producers averaged 2.8 million b/d, nearly the same level as in the previous month. Kuwait and Saudi Arabia continue to have a total of 0.5 million b/d disrupted at the Wafra and Khafji fields in the Neutral Zone that straddles the two countries.

EIA expects OPEC surplus crude oil production capacity, which is concentrated in Saudi Arabia, to average 1.5 million b/d in 2015 and then increase to 2.0 million b/d in 2016, after averaging 2.0 million b/d in 2014. Surplus capacity is typically an indicator of market conditions, and surplus capacity lower than 2.5 million b/d indicates a relatively tight oil market, but the current and forecast levels of global inventory builds make the projected low surplus capacity level in 2015 less significant. EIA does not expect any Iranian spare capacity to be available throughout the forecast period despite increases in effective capacity, as Iran is expected to produce crude oil at the maximum available level through the end of 2016 if and when sanctions are lifted.

OECD Petroleum Inventories. EIA estimates that OECD commercial crude oil and other liquids inventories totaled 2.70 billion barrels at the end of 2014, equivalent to roughly 59 days of consumption. Forecast OECD inventories rise to 2.99 billion barrels at the end of 2015 and then to 3.11 billion barrels at the end of 2016.

Crude Oil Prices. Brent crude oil spot prices decreased by \$10/b in August to a monthly average of \$47/b, driven by continued growth in global liquids inventories and expectations of weakening global economic activity. Along with increasing volatility in global equity prices and exchange rates, crude oil price volatility increased significantly in August, reflecting uncertainty about potential lower economic and oil demand growth in emerging market countries. Volatility remained heightened at the end of August and into September, with Brent spot prices increasing from \$42/b on August 26 to \$52/b on August 31, before falling below \$50/b again on September 1. During this period, Brent prices showed daily changes of more than 5% for four consecutive trading days, the longest stretch of such high volatility since December 2008.

Continuing increases in global liquids inventories have put significant downward pressure on prices. Inventories rose by an estimated 2.4 million b/d through the first eight months of 2015, compared with an average build of 0.6 million b/d over the same period in 2014. Inventory builds are projected to moderate somewhat in the coming months, but are expected to remain high compared with previous years.

The monthly average WTI crude oil spot price fell to an average of \$43/b in August, down \$8/b from July. Crude oil inventories at Cushing, Oklahoma, despite being 4.9 million barrels lower than the record high of 62.2 million barrels on April 17, remain about 37 million barrels higher than at the same time last year. U.S. crude oil inventories remain elevated compared with historical levels, despite strong U.S. refinery runs, which in recent weeks reached new highs of more than 17 million b/d.

EIA projects the Brent crude oil price will average \$54/b in 2015 and \$59/b in 2016, unchanged from August's STEO. WTI prices in both 2015 and 2016 are expected to average \$5/b less than the Brent crude oil price. EIA's updated projection remains subject to significant uncertainties as the oil market moves toward balance. During this period of price discovery, oil prices could continue to experience periods of heightened volatility. The oil market faces many uncertainties heading into 2016, including the pace and volume at which Iranian oil reenters the market, the strength of oil consumption growth, and the responsiveness of non-OPEC production to low oil prices. In the more immediate future, there is potential downward price pressure heading into the fourth quarter of 2015 if refinery runs drop by more than expected during the fall maintenance season.

The current values of futures and options contracts continue to suggest high uncertainty in the price outlook (*Market Prices and Uncertainty Report*). WTI futures contracts for December 2015 delivery, traded during the five-day period ending September 3, averaged \$48/b, while implied volatility averaged 47%. These levels established the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in December 2015 at \$32/b and \$73/b, respectively. The 95% confidence interval for market expectations widens over time, with lower and upper limits of \$26/b and \$108/b for prices in December 2016. Last year at this time, WTI for December 2014 delivery averaged \$93/b, and implied volatility averaged 16%. The corresponding lower and upper limits of the 95% confidence interval were \$81/b and \$107/b.

U.S. Petroleum and Other Liquids

The most recent data from the U.S. Federal Highway Administration show Americans drove a record 1.54 trillion miles during the first half of 2015, compared with the previous high of 1.50 trillion miles driven in the first half of 2007, contributing to higher demand for gasoline in the United States.

Monthly data show gasoline consumption in the United States increased by 3% during the first half of 2015 compared with the first half of 2014. This growing domestic consumption and strong demand from abroad have contributed to high refinery wholesale gasoline margins (the difference between the wholesale price of gasoline and the price of Brent crude oil). U.S. average wholesale gasoline margins averaged 65 cents/gal in August, 31 cents/gal higher than in August 2014 and 34 cents/gal higher than the five-year average (2010-14) for August.

Refinery outages in the Midwest and on the West Coast have contributed to gasoline prices in those regions rising by more than the U.S. average over the past few months, and have resulted

in significant price volatility. In Petroleum Administration for Defense District (PADD) 2 (Midwest), retail regular gasoline prices rose by 32 cents/gal during the week of August 17 to an average of \$2.79/gal, 7 cents/gal higher than the U.S. average, following a temporary unplanned refinery outage at BP's Whiting, Indiana, refinery. The outage at Whiting has since ended and PADD 2 retail gasoline prices fell to \$2.47/gal on August 31, 4 cents/gal below the U.S. average. After reaching a 2015 peak of \$3.60/gal on July 20, regular gasoline prices in PADD 5 (West Coast) have since fallen to \$3.16/gal as of August 31 but remain 65 cents/gal above the U.S. average as a result of tight gasoline supplies that reflect ongoing refinery outages in California.

In August, monthly average regional gasoline retail prices ranged from a low of \$2.31/gal in PADD 3 (Gulf Coast) to a high of \$3.33/gal in PADD 5. EIA expects gasoline prices to fall from their current levels, with the U.S. regular gasoline price averaging \$2.11/gal in the fourth quarter of 2015.

Liquid Fuels Consumption. Total U.S. liquid fuels consumption rose by an estimated 140,000 b/d (0.8%) in 2014. Total liquid fuels consumption is forecast to grow by 330,000 b/d (1.7%) in 2015 and by 130,000 b/d (0.7%) in 2016.

Motor gasoline consumption, which rose by 80,000 b/d in 2014, increases by a projected 210,000 b/d (2.3%) in 2015 as the effects of employment growth and lower gasoline prices outweigh increases in vehicle fleet efficiency. Gasoline consumption is forecast to remain flat in 2016, as a long-term trend toward vehicles that are more fuel efficient offsets the effect of continued economic growth on highway travel.

Consumption of distillate fuel, which includes diesel fuel and heating oil, is forecast to be relatively unchanged in 2015 and then increase by 60,000 b/d (1.5%) in 2016. The 2016 growth is driven by increasing manufacturing output, foreign trade, and marine fuel use.

Hydrocarbon gas liquids (HGL) consumption, which fell by 50,000 b/d (1.9%) in 2014, is projected to increase by 60,000 b/d in 2015 and by 80,000 b/d in 2016, as new petrochemical plant capacity increases the use of HGL as a feedstock. In addition, new HGL export terminal capacity contributes to an increase in HGL net exports from an average of 560,000 b/d in 2014 to 1.1 million b/d in 2016.

Liquid Fuels Supply. U.S. crude oil production is projected to increase from an average of 8.7 million b/d in 2014 to 9.2 million b/d in 2015 and then decrease to 8.8 million b/d in 2016. For both 2015 and 2016, the forecast is about 0.1 million b/d lower than in the August STEO. The decrease in the crude oil production forecast mostly reflects downward revisions to U.S. oil production estimates for the first half of 2015.

In late August, EIA released data from its first survey-based reporting of monthly crude oil production, which represents more than 90% of U.S. oil production. Based on these data, monthly national production estimates for January through May 2015 were revised downward by 40,000 b/d to 130,000 b/d. The largest revisions include decreases of crude oil production in Texas (ranging from about 100,000 b/d to 150,000 b/d) and increases in the federal Gulf of

Mexico (ranging from about 10,000 b/d to 50,000 b/d). EIA estimates U.S. crude oil production in June 2015 was 9.3 b/d, a decrease of 0.1 million b/d from the revised May 2015 figure.

Based on the revised data, U.S. crude oil production averaged 9.4 million b/d in the first half of 2015. This level is 0.2 million b/d higher than the average production during the fourth quarter of 2014, despite an almost 60% decline in the total U.S. oil-directed rig count since October 2014. Lower 48 onshore production began falling in April, but the decline was offset by production gains in the Gulf of Mexico that kept total production growth positive until May. Total U.S. production began declining in May, falling more than 0.2 million b/d from the April level.

EIA expects U.S. crude oil production declines to continue through August 2016, when total production is forecast to average 8.6 million b/d. Forecast production begins rising in late 2016, returning to an average of 9.0 million b/d in the fourth quarter. A total of 12 projects are scheduled to come online in the Gulf of Mexico in 2015 and 2016, pushing up production from an average of 1.4 million b/d in the fourth quarter of 2014 to more than 1.6 million b/d in the same period of 2016.

Expected crude oil production declines from May 2015 through mid-2016 are largely attributable to unattractive economic returns in some areas of both emerging and mature onshore oil production regions, as well as seasonal factors such as anticipated hurricane-related production disruptions in the Gulf of Mexico. Reductions in 2015 cash flows and capital expenditures have prompted companies to defer or redirect investment away from marginal exploration and research drilling to focus on core areas of major tight oil plays. Reduced investment has resulted in the lowest count of oil-directed rigs in nearly five years and in well completions that are significantly behind 2014 levels.

Oil prices, particularly in the second quarter of 2015, remained high enough to support continued development drilling in the core areas of the Bakken, Eagle Ford, Niobrara, and Permian basins, with July showing the first month-to-month increase in the oil-directed rig count since October 2014. However, WTI prices below \$60/b through the forecast period are anticipated to slow the rate of recovery in onshore drilling and well completion totals, despite continued increases in rig and well productivity and falling drilling and completion costs. The forecast remains sensitive to actual wellhead prices and rapidly changing drilling economics that vary across regions and operators.

While projected oil production in the Gulf of Mexico rises during the forecast period, Alaska oil production falls. Production in these areas is less sensitive to short-term price movements than onshore production in the Lower 48 states and reflects anticipated growth from new projects and declines from legacy fields.

HGL production at natural gas processing plants reached a record high of 3.31 million b/d in April 2015, and it is projected to average 3.27 million b/d in 2015 and 3.53 million b/d in 2016. EIA expects higher ethane recovery rates in 2016 following planned increases in petrochemical

plant feedstock demand. Export terminal expansions will allow for higher quantities of domestically produced ethane, propane, and butanes to reach the international market.

U.S. petroleum product gross exports continue to grow, up almost 0.5 million b/d (13%) in the first half of 2015 compared with the same period in 2014. More than half of the growth in liquid fuel exports came from HGL. The increase in refined product exports, combined with the growth in domestic liquid fuels consumption, contributed to U.S. refinery utilization averaging 90.6% during the first half of the year, up from 88.5% last year, and the highest rate for this period since 2005. Gross inputs to U.S. refineries exceeded 17 million b/d for six consecutive weeks in July and August, a level not previously reached or exceeded in any week since EIA began publishing the data in 1990.

Petroleum Product Prices. Rising crude oil prices, strong gasoline demand, and several refinery outages on the West Coast contributed to an increase in U.S. regular gasoline retail prices from a monthly average of \$2.47/gal in April to \$2.80/gal in June. Falling crude oil prices and narrowing wholesale gasoline margins have since contributed to prices declining in August to an average of \$2.64/gal. EIA expects monthly average prices to decline in the coming months as refineries continue to produce high levels of gasoline, as demand begins to decrease following the peak in the summer driving season, and as the market transitions to lower-cost winter-grade gasoline. EIA projects regular gasoline retail prices to average \$2.11/gal in the fourth quarter of 2015.

The U.S. regular gasoline retail price, which averaged \$3.36/gal in 2014, is projected to average \$2.41/gal in 2015 and \$2.38/gal in 2016. The 2015 forecast is unchanged from the August STEO, and the 2016 forecast is 2 cents/gal lower.

The diesel fuel retail price, which averaged \$3.83/gal in 2014, is projected to fall to an average of \$2.73/gal in 2015 and then rise to \$2.77/gal in 2016, which is 4 cents/gal lower than in the August's STEO.

Natural Gas

Total weekly natural gas storage injections from the beginning of the injection season through August 28 were 1,732 billion cubic feet (Bcf), compared with the five-year (2010-14) average of 1,420 for the same time period. However, 2015 injections have been 8% lower than last year's record injections of 1,887 for the same weeks. The largest injections occurred earlier in the injection season, with injections in recent weeks closer to the five-year average. Production growth has been the main driver of strong inventory builds this year.

Natural Gas Consumption. EIA's forecast of U.S. total natural gas consumption averages 76.5 Bcf/d in 2015 and 76.6 Bcf/d in 2016, compared with 73.5 Bcf/d in 2014. EIA projects natural gas consumption in the power sector to increase by 14.4% in 2015 and then decrease by 3.3% in 2016. Natural gas prices, which are expected to remain below \$3 per million British thermal units (MMBtu) through November, support increased use of natural gas for electricity generation in 2015. Industrial sector consumption increases by 0.9% in 2015 and by 6.4% in

2016, as new industrial projects, particularly in the fertilizer and chemicals sectors, come online late this year and next year, and as industrial consumers continue to take advantage of low natural gas prices. Natural gas consumption in the residential and commercial sectors is projected to decline in both 2015 and 2016.

Natural Gas Production and Trade. EIA expects that marketed natural gas production will increase by 4.2 Bcf/d (5.7%) and by 1.7 Bcf/d (2.2%) in 2015 and 2016, respectively. EIA expects moderate production growth through 2016, with increases in the Lower 48 states expected to more than offset continuing production declines in the Gulf of Mexico. Increases in drilling efficiency will continue to support growing natural gas production in the forecast despite relatively low natural gas prices. Most of the growth is expected to come from the Marcellus Shale as the backlog of uncompleted wells is reduced and as new pipelines come online to deliver Marcellus natural gas to markets in the Northeast.

Increases in domestic natural gas production are expected to reduce demand for natural gas imports from Canada and to support growth in exports to Mexico. Earlier this year, natural gas net imports fell to the lowest monthly level since 1987, averaging 2.3 Bcf/d in both May and June. EIA expects natural gas exports to Mexico, particularly from the Eagle Ford Shale in South Texas, to increase because of growing demand from Mexico's electric power sector coupled with flat natural gas production in Mexico.

EIA projects liquefied natural gas (LNG) gross exports will increase to an average of 0.79 Bcf/d in 2016, with the startup of a major LNG liquefaction plant in the Lower 48 states.

Natural Gas Inventories. On August 28, natural gas working inventories totaled 3,193 Bcf, 495 Bcf (18%) above the level at the same time in 2014 and 122 Bcf (4%) above the five-year average for that week. EIA projects end-of-October 2015 inventories will total 3,840 Bcf, which would be 43 Bcf above the five-year average.

Natural Gas Prices. The Henry Hub natural gas spot price averaged \$2.77/MMBtu in August, a decrease of 7 cents/MMBtu from the July price. The current STEO lowers the projection for prices slightly from last month's forecast; monthly average spot prices remain lower than \$3/MMBtu through November, and lower than \$4/MMBtu through the remainder of the forecast. The projected Henry Hub natural gas price averages \$2.84/MMBtu in 2015 and \$3.11/MMBtu in 2016.

Natural gas futures contracts for December 2015 delivery traded during the five-day period ending September 3 averaged \$2.91/MMBtu. Current options and futures prices imply that market participants place the lower and upper bounds for the 95% confidence interval for December 2015 contracts at \$2.08/MMBtu and \$4.06/MMBtu, respectively. At this time in 2014, the natural gas futures contract for December 2014 delivery averaged \$4.07 /MMBtu, and the corresponding lower and upper limits of the 95% confidence interval were \$3.09/MMBtu and \$5.35/MMBtu, respectively.

Coal

Coal Trade. Slower growth in world coal demand, lower international coal prices, and higher coal output in other coal-exporting countries have all led to a decline in U.S. coal exports. Lower mining costs, cheaper transportation costs, and favorable exchange rates will continue to provide an advantage to mines in other major coal-exporting countries compared with U.S. producers. Coal exports for the first half of 2015 are down 20% compared with the same period in 2014, and U.S. steam coal exports fell by 21%, or 4.1 million short tons (MMst). The 5.8 MMst of coal exports for June 2015 was the lowest monthly volume for coal exports since February 2010. EIA projects coal exports will fall by 18 MMst, to 80 MMst, in 2015, and then decrease by another 7 MMst (9%) in 2016. U.S. coal imports, which increased by more than 2 MMst in 2014 to 11 MMst, are expected to average near that level in 2015 and 2016.

Coal Consumption. EIA expects a 7% decrease in total coal consumption in 2015, with electric power sector consumption also falling by 7%. Lower natural gas prices are the key factor driving the decrease in coal consumption. Projected low natural gas prices (power sector natural gas prices are 27% lower in 2015 compared with 2014) make it more economical to run natural gasfired generating units at higher utilization rates. The retirements of coal-fired power plants in response to the implementation of the Mercury and Air Toxics Standards (MATS) also reduces coal-fired capacity in the power sector in 2015, but because the retirements are occurring throughout 2015, the full effect will not be evident until 2016.

Projected rising electricity demand and higher natural gas prices next year are expected to contribute to higher utilization rates among the remaining coal-fired power plants. Even with continued implementation of MATS, which the U.S. Supreme Court recently sent back to the U.S. Court of Appeals for the D.C. Circuit for further review, coal consumption in the electric power sector is forecast to increase by 1.5% in 2016. Expected growth in renewable-based generation is one barrier to a larger rebound in coal-fired generation in 2016. Nonhydropower renewable-based electricity generation is expected to grow by 12% in 2016, with the largest growth occurring in the South (21%).

Coal Supply. Lower domestic coal consumption and exports, combined with a slight increase in coal imports, are projected to contribute to an 86 MMst (9%) decline in production in 2015. Coal production is expected to decrease in all coal-producing regions in 2015, with the largest decline (on a percentage basis) occurring in the Appalachian region. U.S. production is expected to decrease slightly (3 MMst) in 2016.

Electric power sector stockpiles were 168 MMst in June (the most recent month for which data are available), a 4% decrease from the level in May. This decrease in coal stockpiles from May to June follows the normal seasonal pattern, where coal stockpiles begin to decrease as the U.S. enters the summer months. Coal inventories in June 2015 were 35 MMst higher than in June 2014 when inventories were still recovering from the effects of colder-than-normal temperatures during the 2013-14 winter season.

Coal Prices. The annual average coal price to the electric power sector increased from \$2.34/MMBtu in 2013 to \$2.36/MMBtu in 2014. EIA expects the delivered coal price to average \$2.27/MMBtu in both 2015 and 2016.

Electricity

The electricity industry retired nearly 9,800 megawatts (MW) of conventional steam coal-fired generating capacity during the first six months of this year. These retirements represent 3.3% of the amount of operating steam coal capacity existing at the end of 2014. The states with the largest amount of retired coal capacity include Ohio (2,659 MW), Georgia (1,861 MW), and Kentucky (1,409 MW). The industry plans to retire an additional 3,133 MW of coal capacity this year and nearly 6,000 MW during 2016.

Electricity Consumption. Retail sales of electricity to the residential sector during the first six months of 2015 were 1.7% lower than residential sales during the first half of 2014, as winter and spring temperatures this year were milder than last year. EIA expects residential sales during the second half of 2015 will be 2.1% higher than the same period in 2014 because of comparatively warmer summer temperatures. Forecast residential sales of electricity decline by 0.6% in 2016. Projected retail sales of electricity to the commercial sector grow by 0.7% in 2015, while industrial sector electricity sales fall by 0.2%. EIA expects commercial and industrial sales in 2016 to grow by 1.3% and 1.2%, respectively.

Electricity Generation. While the retirement of some coal-fired capacity has contributed to the decline in coal-fired electricity generation over the past year, the relatively low cost of natural gas has been a more significant driver in coal's declining generation fuel share and the increase in the share generated by natural gas. During the first half of 2015, coal accounted for 34% of total generation compared with 40% during the same period last year, while natural gas accounted for 30%, up from 25% during the first half of 2014. For all of 2015, EIA expects the annual amount of coal generation will be 8.2% lower than in 2014, and the annual level of natural gas generation will rise by 14.5%. The forecast for coal generation increases slightly (1.4%) in 2016, and natural gas generation falls (3.0%) in response to projected higher natural gas fuel costs.

Electricity Retail Prices. The U.S. retail price of electricity to the residential sector is projected to average 12.7 cents per kilowatthour in 2015, which is 1.3% higher than the average price last year. The largest price increases are projected to be in New England, where residential electricity prices are forecast to increase by 10.8% in 2015, as electricity distribution companies recover higher generation and power purchase costs incurred during 2014. Wholesale power prices in New England have been relatively low this year, and EIA expects retail New England prices during the second half of 2015 will be lower than during the first half.

Renewables and Carbon Dioxide Emissions

Electricity and Heat Generation from Renewables. EIA expects total renewables used in the electric power sector will decrease by 3.5% in 2015. Conventional hydropower generation is

forecast to decrease by 10.4%, and nonhydropower renewable power generation is forecast to increase by 3.2%. The 2015 decrease in hydropower generation reflects the effects of the California drought. Forecast generation from hydropower in the electric power sector increases by 9.2% in 2016.

EIA expects continued growth in utility-scale solar power generation, which is projected to average 89 gigawatthours per day (GWh/d) in 2016. Because the growth is from a small base, utility-scale solar power averages 0.8% of total U.S. electricity generation in 2016. Although solar growth has historically been concentrated in customer-sited distributed generation installations (rooftop panels), EIA expects utility-scale solar capacity will increase by more than 100% (11 GW) between the end of 2014 and the end of 2016, with 4.1 GW of new capacity being built in California. Other leading states in utility-scale solar capacity include North Carolina and Nevada, which, combined with California, account for almost 70% of the projected utility-scale capacity additions for 2015 and 2016.

Power plant developers have notified EIA of plans to construct 13 solar projects in Georgia (totaling 607 MW) with expected 2015 or 2016 in-service dates. Five of these new projects (166 MW) will be built on U.S. military bases. Georgia currently has 66 MW of utility-scale solar capacity. According to current law, projects coming online after the end of 2016 will see a federal investment tax credit of 10%, lower than the 30% investment tax credit available for projects that come online before the end of 2016. This impending decline in the tax credit provides a strong incentive for projects to enter service before the end of 2016.

Wind capacity, which grew by 8% in 2014, is forecast to increase by 12% in 2015 and by 13% in 2016. Because wind is starting from a much larger base than solar, even though the growth rate is lower, the absolute increase in wind capacity is twice that of solar: 18 GW of wind compared with 11 GW of utility-scale solar between 2014 and 2016.

Liquid Biofuels. On May 29, the U.S. Environmental Protection Agency (EPA) proposed a rule setting Renewable Fuel Standard (RFS) volumes for 2014 through 2016. Although these volumes could be modified before the final rule is issued, they are used in developing the current STEO. Ethanol production, which averaged 934,000 b/d in 2014, is forecast to average more than 950,000 b/d in both 2015 and 2016. Ethanol consumption, which averaged 877,000 b/d in 2014, is forecast to average slightly more than 900,000 b/d in both 2015 and 2016, resulting in an average 9.9% ethanol share of the total gasoline pool. EIA does not expect significant increases in E15 or E85 consumption over the forecast period. The proposed RFS targets could encourage imports of Brazilian sugarcane ethanol, which were 3,000 b/d in 2014.

EIA expects the largest effect of the proposed RFS targets will be on biodiesel consumption, which contributes to meeting the biomass-based diesel, advanced biofuel, and total renewable fuel RFS targets. Biodiesel production averaged an estimated 81,000 b/d in 2014 and is forecast to average 92,000 b/d in 2015 and 98,000 b/d in 2016. Net imports of biomass-based diesel are also expected to increase from 15,000 b/d in 2014 to 23,000 b/d in 2015, and to 35,000 b/d in 2016. EIA expects that a combination of higher biomass-based diesel consumption, higher

consumption of domestic and imported ethanol, and banked Renewable Identification Numbers (RINs) will help meet the newly proposed RFS volumes through 2016.

Energy-Related Carbon Dioxide Emissions. EIA estimates that emissions grew by 1.0% in 2014. Emissions are projected to fall by 0.4% in 2015 and then rise by 0.6% in 2016. These forecasts are sensitive to both weather and economic assumptions. Monthly carbon dioxide emissions from the electric power sector were at a 27-year low in April, which is typically the month with the lowest generation level each year.

U.S. Economic Assumptions

Recent Economic Indicators. The Bureau of Economic Analysis reported that U.S. real GDP increased at an annual rate of 3.7% in the second quarter of 2015, higher than the initial estimate of 2.3% The increase in real GDP in the second quarter reflected positive contributions from personal consumption expenditures, exports, state and local government spending, nonresidential fixed investment, residential fixed investment, and private inventory investment.

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

Production, Income, and Employment. Forecast real GDP growth reaches 2.1% in 2015 and rises to 2.5% in 2016. The GDP growth forecast is slightly below the forecast in the August STEO. Real disposable income grows by 3.5% in 2015, unchanged from the forecast last month, and by 2.7% in 2016. Total industrial production grows at 1.5% in 2015 and 1.6% in 2016. Projected growth in nonfarm employment averages 2.1% in 2015 and 1.4% in 2016.

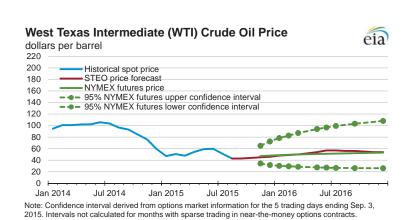
Expenditures. Forecast growth in private real fixed investment averages 3.8% and 6.3% in 2015 and 2016, respectively, led by equipment in 2015 and 2016 and by equipment and structures in 2016. Real consumption expenditures grow faster than real GDP in 2015, at 3.0%, and 2016, at 2.8%. Durable goods expenditures drive consumption spending in both years. Export growth is 1.9% and 4.2% and import growth is 5.7% and 4.4% in 2015 and 2016, respectively. Total government expenditures rise 0.5% in 2015 and 0.7% in 2016.

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

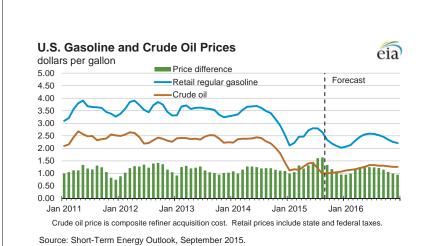


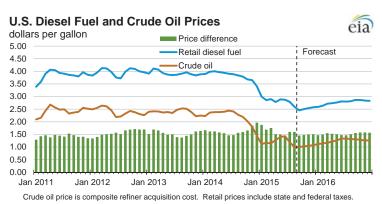
Short-Term Energy Outlook

Chart Gallery for September 2015

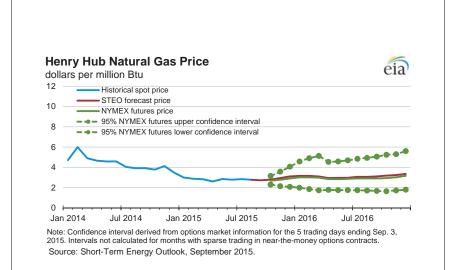


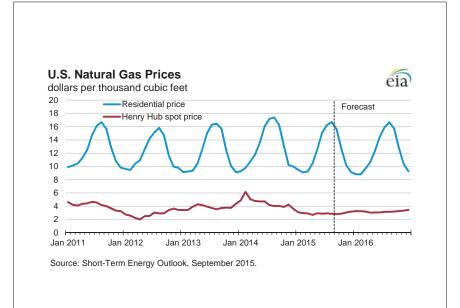
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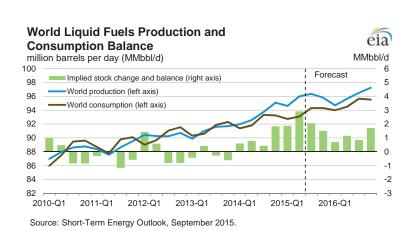


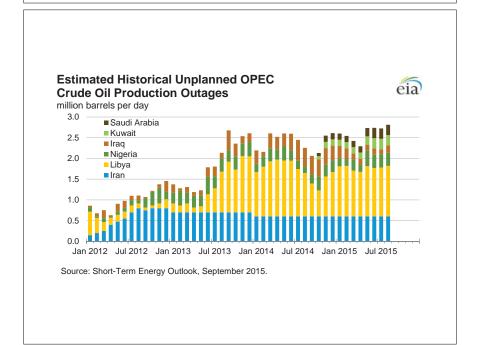


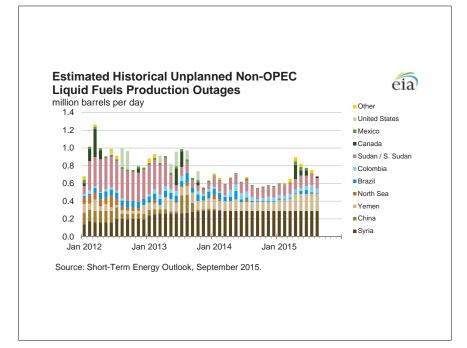
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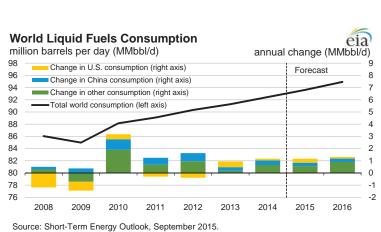




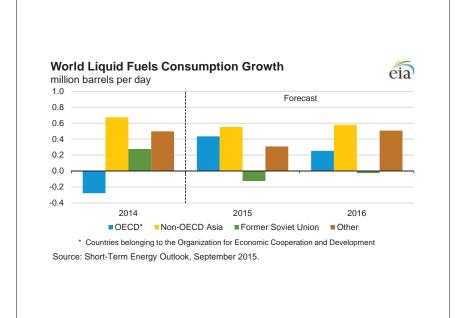


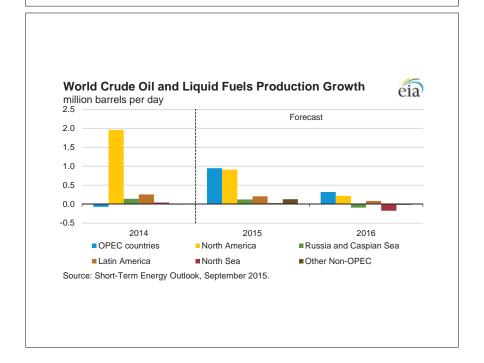


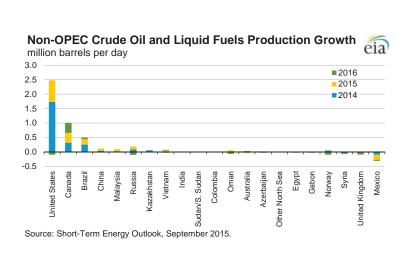


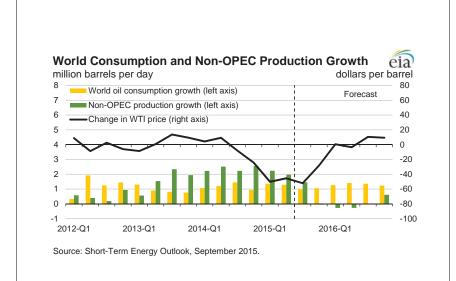


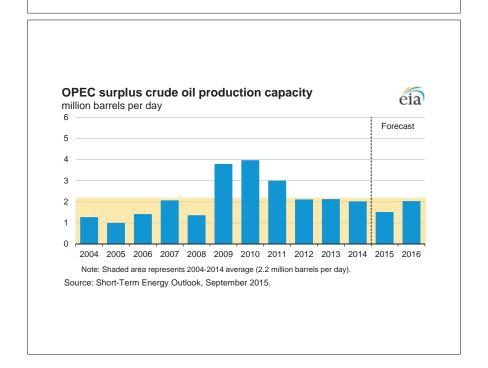
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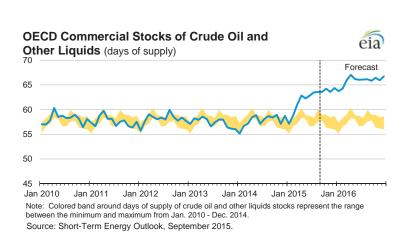


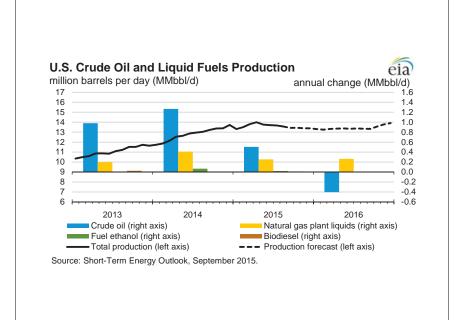


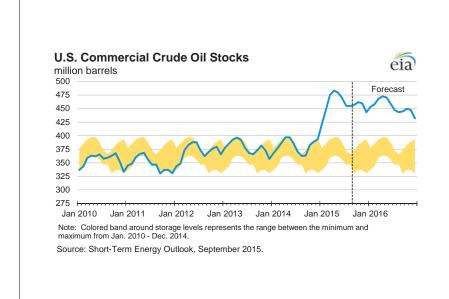


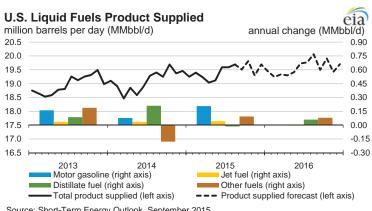


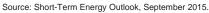


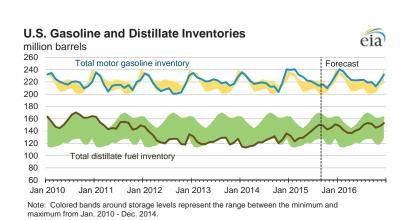




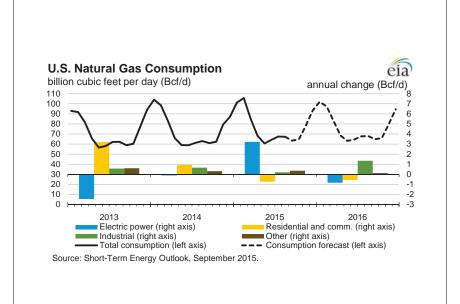


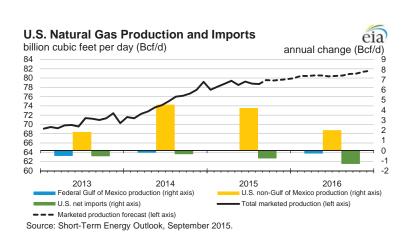


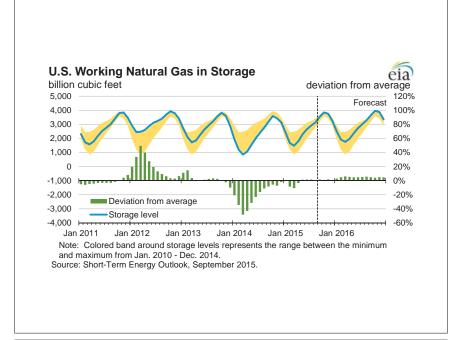


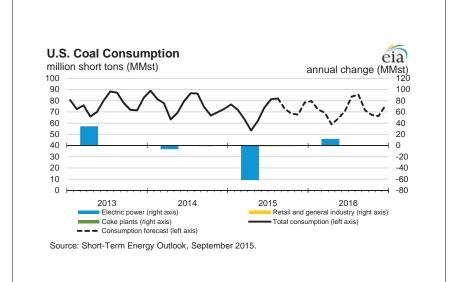


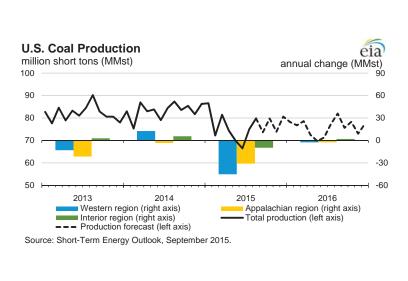
Source: Short-Term Energy Outlook, September 2015.

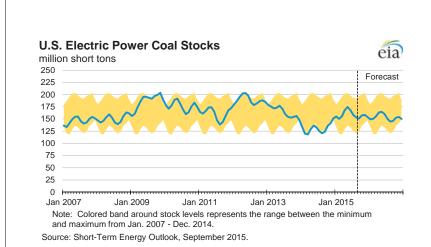


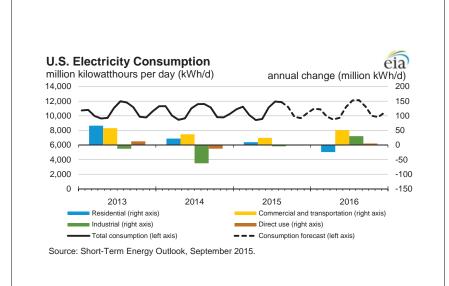


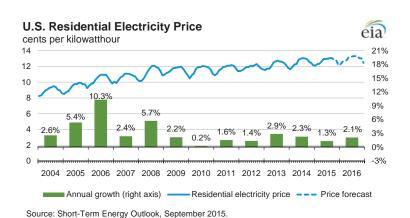






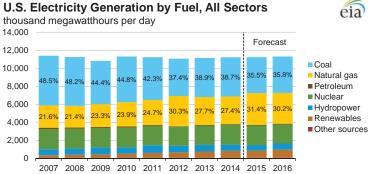










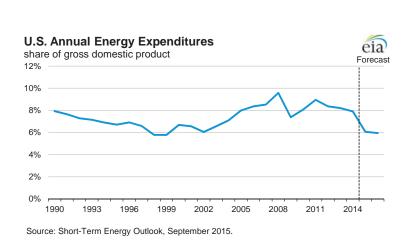


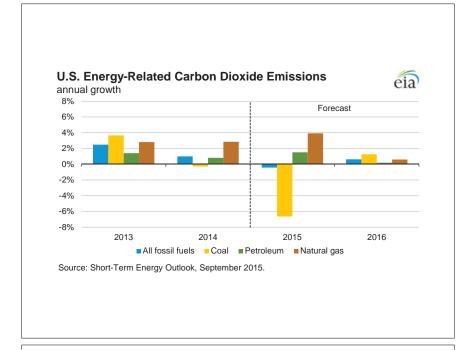
Note: Labels show percentage share of total generation provided by coal and natural gas.

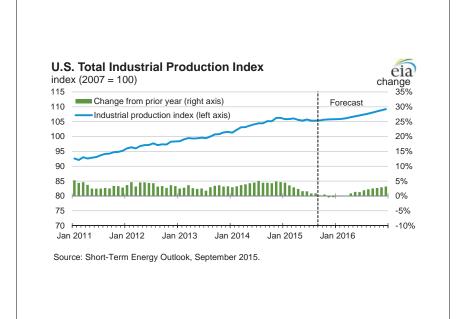
Source: Short-Term Energy Outlook, September 2015.

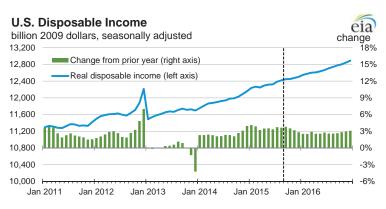
Source: Short-Term Energy Outlook, September 2015.

U.S. Renewable Energy Supply eia quadrillion British thermal units (Btu) Forecast 10 ■ Solar 8 Geothermal ■ Other biomass 6 ■ Wind power ■ Liquid biofuels ■ Wood biomass Hydropower 2 0 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

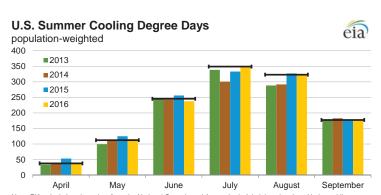






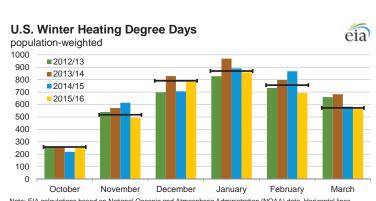


Source: Short-Term Energy Outlook, September 2015.



Note: EIA calculations based on from the National Oceanic and Atmospheric Administration data. Horizontal lines indicate each month's prior 10-year average (2005-2014). Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, September 2015.



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

U.S. Census Regions and Divisions



Source: Short-Term Energy Outlook, September 2015.

Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy Information Administration		2014	Outlook - 5	<u> </u>	2015		Year-o	ver-year (Ū
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) ^a	2.46	2.33	2.39	1.38	1.09	1.23	-44.0	-53.3	-48.6
Brent Crude oil Price (Spot)	2.61	2.43	2.52	1.47	1.21	1.34	-43.8	-50.1	-46.9
U.S. Refiner Average Crude Oil Cost	2.41	2.30	2.35	1.37	1.06	1.21	-43.2	-53.7	-48.4
Wholesale Gasoline Price ^b	2.98	2.76	2.87	2.01	1.80	1.90	-32.4	-35.0	-33.6
Wholesale Diesel Fuel Price ^b	3.00	2.88	2.94	1.89	1.54	1.71	-37.0	-46.5	-41.7
Regular Gasoline Retail Price ^c	3.68	3.50	3.59	2.67	2.60	2.63	-27.5	-25.9	-26.7
Diesel Fuel Retail Price ^c	3.94	3.84	3.89	2.85	2.61	2.73	-27.7	-32.0	-29.8
Gasoline Consumption/Supply (million	day)								
Total Consumption	9.006	9.130	9.069	9.260	9.339	9.300	2.8	2.3	2.5
Total Refinery and Blender Output ^d	7.879	8.036	7.958	8.022	8.259	8.141	1.8	2.8	2.3
Fuel Ethanol Blending	0.886	0.889	0.887	0.919	0.918	0.918	3.7	3.2	3.5
Total Stock Withdrawal ^e	0.026	0.074	0.050	0.115	0.058	0.086			
Net Imports ^e	0.215	0.131	0.173	0.204	0.105	0.154	-4.9	-20.2	-10.7
Refinery Utilization (percent)	90.4	93.4	91.9	92.8	93.9	93.4			
Gasoline Stocks, Including Blending C	omponents	s (million b	arrels)						
Beginning	221.6	219.3	221.6	231.5	221.0	231.5			
Ending	219.3	212.5	212.5	221.0	215.7	215.7			
Economic Indicators (annualized billion	2000 dollai	rs)							
Real GDP	16,010	16,206	16,108	16,381	16,458	16,419	2.3	1.6	1.9
Real Income	11,900	11,970	11,935	12,312	12,417	12,365	3.5	3.7	3.6

^a Spot Price of West Texas Intermediate (WTI) crude oil.

GDP = gross domestic product.

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

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

^b Price product sold by refiners to resellers.

^c Average pump price including taxes.

^d Refinery and blender net production plus finished motor gasoline adjustment.

^e Total stock withdrawal and net imports includes both finished gasoline and gasoline blend components.

Table SF02 Average Summer Residential Electricity Usage, Prices and Expenditures

	2010	2011	2012	2013	2014	Forecast 2015	Change from 2014
United States							
Usage (kWh)	3,471	3,444	3,354	3,126	3,019	3,122	3.4%
Price (cents/kWh)	12.00	12.06	12.09	12.67	13.02	13.00	-0.2%
Expenditures	\$416	\$415	\$405	\$396	\$393	\$406	3.2%
New England							
Usage (kWh)	2,227	2,122	2,188	2,173	1,927	1,977	2.6%
Price (cents/kWh)	16.14	15.85	15.50	16.16	17.61	19.66	11.6%
Expenditures	\$359	\$336	\$339	\$351	\$339	\$389	14.5%
Mid-Atlantic							
Usage (kWh)	2,644	2,531	2,548	2,447	2,208	2,346	6.2%
Price (cents/kWh)	16.66	16.39	15.63	16.51	16.85	16.48	-2.2%
Expenditures	\$440	\$415	\$398	\$404	\$372	\$387	3.9%
East North Central							
Usage (kWh)	3,073	2,975	3,048	2,618	2,494	2,478	-0.7%
Price (cents/kWh)	11.94	12.17	12.08	12.67	13.07	13.12	0.4%
Expenditures	\$367	\$362	\$368	\$332	\$326	\$325	-0.3%
West North Central							
Usage (kWh)	3,558	3,517	3,547	3,098	3,004	3,058	1.8%
Price (cents/kWh)	10.74	11.16	11.50	12.35	12.45	12.75	2.4%
Expenditures	\$382	\$393	\$408	\$383	\$374	\$390	4.2%
South Atlantic							
Usage (kWh)	4,411	4,277	4,001	3,771	3,760	3,988	6.1%
Price (cents/kWh)	11.39	11.48	11.65	11.84	12.11	12.02	-0.7%
Expenditures	\$502	\$491	\$466	\$447	\$455	\$479	5.3%
East South Central							
Usage (kWh)	4,902	4,750	4,467	4,078	4,020	4,316	7.4%
Price (cents/kWh)	9.90	10.28	10.36	10.80	11.09	10.93	-1.4%
Expenditures	\$485	\$488	\$463	\$440	\$446	\$472	5.8%
West South Central							
Usage (kWh)	4,830	5,231	4,781	4,507	4,242	4,407	3.9%
Price (cents/kWh)	10.86	10.64	10.27	11.03	11.41	11.17	-2.1%
Expenditures	\$525	\$557	\$491	\$497	\$484	\$492	1.7%
Mountain							
Usage (kWh)	3,340	3,322	3,440	3,381	3,215	3,231	0.5%
Price (cents/kWh)	11.25	11.29	11.55	12.06	12.37	12.51	1.1%
Expenditures	\$376	\$375	\$397	\$408	\$398	\$404	1.7%
Pacific							
Usage (kWh)	2,006	2,022	2,079	2,026	2,071	2,021	-2.4%
Price (cents/kWh)	12.95	13.22	13.78	14.59	15.20	15.44	1.6%
Expenditures	\$260	\$267	\$286	\$295	\$315	\$312	-0.8%

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

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

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administr															
	1st	20 ²	14 3rd	4th	1st	20 ⁻ 2nd	15 3rd	4th	1st	20 2nd	16 3rd	4th	2014	Year 2015	2016
Energy Supply	151	ZIIU	Siu	4111	151	ZIIU	Siu	4111	150	ZIIU	Siu	4111	2014	2015	2010
Crude Oil Production (a) (million barrels per day)	8.15	8.62	8.85	9.25	9.40	9.44	9.11	8.96	8.84	8.78	8.68	8.98	8.72	9.22	8.82
Dry Natural Gas Production (billion cubic feet per day)	67.84	69.33	71.30	73.31	73.68	74.34	74.32	74.88	75.52	75.72	75.83	76.47	70.46	74.31	75.89
Coal Production (million short tons)	245	246	255	253	240	211	228	234	233	213	235	229	1,000	914	910
Energy Consumption															
Liquid Fuels (million barrels per day)	18.82	18.77	19.31	19.51	19.29	19.25	19.60	19.60	19.34	19.48	19.78	19.68	19.11	19.44	19.57
Natural Gas (billion cubic feet per day)	95.10	61.23	61.75	76.19	97.05	64.30	66.07	78.99	94.07	65.43	66.86	80.11	73.48	76.52	76.60
Coal (b) (million short tons)	248	212	247	209	212	189	236	215	221	194	241	209	917	853	865
Electricity (billion kilowatt hours per day)	10.87	10.04	11.46	9.95	10.73	10.04	11.68	9.97	10.58	10.14	11.85	10.10	10.58	10.61	10.67
Renewables (c) (quadrillion Btu)	2.37	2.57	2.28	2.39	2.42	2.44	2.23	2.27	2.39	2.62	2.44	2.46	9.61	9.37	9.91
Total Energy Consumption (d) (quadrillion Btu)	26.59	23.01	24.07	24.79	26.39	22.92	24.12	24.65	26.05	23.17	24.49	24.88	98.46	98.09	98.59
Energy Prices															
Crude Oil (e) (dollars per barrel)	97.60	101.08	96.45	73.48	47.98	57.42	44.66	44.02	48.00	53.36	55.34	53.33	92.05	48.54	52.59
Natural Gas Henry Hub Spot (dollars per million Btu)	5.21	4.61	3.96	3.80	2.90	2.75	2.78	2.95	3.14	2.96	3.08	3.26	4.39	2.84	3.11
Coal (dollars per million Btu)	2.33	2.39	2.37	2.37	2.26	2.25	2.28	2.27	2.26	2.29	2.29	2.26	2.36	2.27	2.27
Macroeconomic															
Real Gross Domestic Product (billion chained 2009 dollars - SAAR) Percent change from prior year	15,832 1.9	16,010 2.6	16,206 2.7	16,295 2.4	16,288 2.9	16,381 2.3	16,458 1.6	16,568 1.7	16,667 2.3	16,774 2.4	16,890 2.6	17,028 2.8	16,086 2.4	16,424 2.1	16,840 2.5
GDP Implicit Price Deflator (Index, 2009=100) Percent change from prior year	107.7 1.4	108.3 1.7	108.6 1.6	108.7 1.2	108.7 0.9	109.2 0.9	109.7 1.0	110.1 1.3	110.7 1.9	111.3 1.9	111.7 1.9	112.2 1.9	108.3 1.5	109.4 1.0	111.5 1.9
Real Disposable Personal Income (billion chained 2009 dollars - SAAR) Percent change from prior year	11,810 2.4	11,900 2.2	11,970 2.3	12,093 3.3	12,251 3.7	12,312 3.5	12,417 3.7	12,477 3.2	12,576 2.7	12,637 2.6	12,742 2.6	12,846 3.0	11,943 2.5	12,364 3.5	12,700 2.7
Manufacturing Production Index (Index, 2007=100)	99.4	101.2	102.4	103.5	103.3	103.6	103.7	104.3	104.4	105.3	106.4	107.6	101.6	103.7	105.9
Percent change from prior year	2.4	3.8	4.6	4.5	3.9	2.4	1.3	0.8	1.1	1.6	2.6	3.2	3.8	2.1	2.1
Weather															
U.S. Heating Degree-Days	2,449 35	480 394	81 775	1,541 96	2,342 47	443 434	76 835	1,528 92	2,114 38	477 391	76 846	1,529 94	4,551 1,299	4,389 1,408	4,196 1,369

^{- =} 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.

⁽a) Includes lease condensate.

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

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

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

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

⁽e) Refers to the refiner average acquisition cost (RAC) of crude oil.

Weather projections from National Oceanic and Atmospheric Administration.

Table 2. Energy Prices

· · · · · · · · · · · · · · · · · · ·			201	5			20	16			Year				
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	98.68	103.35	97.87	73.21	48.48	57.85	45.75	45.00	49.05	54.38	56.31	54.33	93.17	49.23	53.57
Brent Spot Average	108.14	109.70	101.90	76.43	53.91	61.65	50.89	50.00	54.05	59.38	61.31	59.33	98.89	54.07	58.57
U.S. Imported Average	94.18	98.64	93.85	71.43	46.40	56.05	42.07	41.50	45.51	50.82	52.83	50.84	89.63	46.45	50.12
U.S. Refiner Average Acquisition Cost	97.60	101.08	96.45	73.48	47.98	57.42	44.66	44.02	48.00	53.36	55.34	53.33	92.05	48.54	52.59
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	272	298	276	203	159	201	180	136	149	184	181	155	262	169	167
Diesel Fuel	303	300	288	240	176	189	154	162	171	181	189	188	282	170	182
Heating Oil	303	289	276	228	178	180	145	159	166	166	174	183	274	166	172
Refiner Prices to End Users															
Jet Fuel	297	295	289	234	172	186	148	156	167	176	182	182	278	165	177
No. 6 Residual Fuel Oil (a)	249	244	243	194	137	154	125	115	119	128	137	133	231	132	129
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	340	368	350	288	227	267	260	211	217	253	252	227	336	241	238
Gasoline All Grades (b)	348	375	358	296	236	275	268	219	226	262	261	236	344	250	246
On-highway Diesel Fuel	396	394	384	358	292	285	261	254	265	277	283	285	383	273	277
Heating Oil	397	382	369	330	288	276	247	254	262	260	261	272	372	273	265
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	5.36	4.75	4.08	3.91	2.99	2.83	2.86	3.04	3.24	3.05	3.17	3.36	4.52	2.93	3.20
Henry Hub Spot (dollars per million Btu)	5.21	4.61	3.96	3.80	2.90	2.75	2.78	2.95	3.14	2.96	3.08	3.26	4.39	2.84	3.11
U.S. End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	6.17	5.62	5.06	5.16	4.56	3.69	3.78	4.08	4.44	3.93	4.07	4.44	5.53	4.05	4.23
Commercial Sector	8.66	9.64	9.69	8.51	7.95	8.13	8.72	7.98	8.05	8.44	9.00	8.26	8.87	8.06	8.27
Residential Sector	9.82	13.11	16.92	10.52	9.29	12.01	16.17	10.04	9.03	11.88	16.07	10.16	10.94	10.33	10.25
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.33	2.39	2.37	2.37	2.26	2.25	2.28	2.27	2.26	2.29	2.29	2.26	2.36	2.27	2.27
Natural Gas	6.82	4.93	4.25	4.30	4.09	3.12	3.57	3.94	4.09	3.68	3.81	4.20	4.98	3.65	3.93
Residual Fuel Oil (c)	19.97	20.44	19.75	14.72	10.82	11.51	11.23	10.14	10.22	11.50	11.85	11.64	19.18	10.88	11.29
Distillate Fuel Oil	23.40	22.77	21.88	18.72	15.39	15.02	12.83	13.70	14.25	14.56	15.04	15.84	22.34	14.52	14.87
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.99	6.92	7.36	6.76	6.76	6.73	7.50	6.87	6.90	6.88	7.59	6.93	7.01	6.97	7.08
Commercial Sector	10.55	10.68	11.11	10.59	10.50	10.56	11.36	10.80	10.76	10.82	11.59	11.01	10.75	10.83	11.06
Residential Sector	11.91	12.73	13.01	12.38	12.24	12.85	13.03	12.54	12.51	13.08	13.31	12.81	12.50	12.67	12.94

^{- =} no data available

Prices are not adjusted for inflation.

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

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

Prices exclude taxes unless otherwise noted.

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

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

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.

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

U.S. Ellergy information Adminis		201	14 2015						201	6			Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million barrels per day) (a)					•										
OECD	25.11	25.51	25.80	26.72	26.59	26.80	26.64	26.63	26.54	26.54	26.62	27.16	25.79	26.67	26.72
U.S. (50 States)	13.16	13.97	14.37	14.82	14.72	15.04	14.86	14.70	14.55	14.66	14.68	15.07	14.09	14.83	14.74
Canada	4.42	4.27	4.33	4.55	4.68	4.65	4.70	4.90	4.94	5.02	5.12	5.24	4.39	4.73	5.08
Mexico	2.89	2.86	2.79	2.74	2.68	2.59	2.66	2.65	2.63	2.62	2.60	2.59	2.82	2.65	2.61
North Sea (b)	3.07	2.81	2.71	3.02	3.02	3.05	2.83	2.82	2.88	2.72	2.68	2.73	2.90	2.93	2.75
Other OECD	1.57	1.59	1.60	1.58	1.49	1.47	1.58	1.55	1.52	1.52	1.55	1.53	1.59	1.53	1.53
Non-OECD	66.86	67.08	67.95	68.37	68.02	69.20	69.72	69.18	68.17	69.10	69.89	70.09	67.57	69.04	69.32
OPEC	36.26	35.94	36.52	36.66	36.66	37.38	37.68	37.45	37.02	37.30	37.84	38.28	36.35	37.29	37.61
Crude Oil Portion	30.01	29.70	30.28	30.34	30.29	30.97	31.19	30.89	30.38	30.58	31.05	31.40	30.08	30.84	30.86
Other Liquids	6.25	6.24	6.24	6.32	6.36	6.41	6.49	6.56	6.64	6.72	6.79	6.87	6.26	6.46	6.76
Eurasia	13.90	13.84	13.85	13.99	14.10	14.03	14.03	13.93	13.89	13.91	13.93	13.96	13.90	14.02	13.92
China	4.60	4.61	4.53	4.68	4.66	4.73	4.66	4.67	4.64	4.67	4.68	4.68	4.61	4.68	4.67
Other Non-OECD	12.11	12.69	13.04	13.02	12.61	13.06	13.35	13.13	12.62	13.22	13.45	13.18	12.72	13.04	13.12
Total World Supply	91.98	92.59	93.75	95.09	94.61	96.00	96.37	95.81	94.71	95.65	96.52	97.25	93.36	95.70	96.03
Non-OPEC Supply	55.72	56.65	57.23	58.43	57.96	58.62	58.69	58.37	57.68	58.34	58.68	58.98	57.02	58.41	58.42
Consumption (million barrels per day) (c)														
OECD	45.75	44.84	45.97	46.44	46.53	45.30	46.18	46.74	46.75	45.63	46.46	46.91	45.75	46.19	46.44
U.S. (50 States)	18.82	18.77	19.31	19.51	19.29	19.25	19.60	19.60	19.34	19.48	19.78	19.68	19.11	19.44	19.57
U.S. Territories	0.35	0.35	0.35	0.35	0.37	0.37	0.37	0.37	0.40	0.40	0.40	0.40	0.35	0.37	0.40
Canada	2.43	2.34	2.46	2.42	2.36	2.32	2.43	2.41	2.38	2.32	2.43	2.41	2.41	2.38	2.38
Europe	12.98	13.38	13.86	13.52	13.55	13.30	13.75	13.71	13.62	13.34	13.79	13.74	13.44	13.58	13.62
Japan	5.02	3.88	3.88	4.43	4.74	3.85	3.88	4.25	4.55	3.82	3.85	4.22	4.30	4.18	4.11
Other OECD	6.14	6.11	6.11	6.21	6.21	6.20	6.15	6.39	6.47	6.27	6.22	6.46	6.14	6.24	6.35
Non-OECD	45.63	46.96	47.35	46.81	46.21	47.79	48.13	47.57	47.25	48.87	49.20	48.63	46.69	47.43	48.49
Eurasia	4.82	4.76	4.98	4.96	4.66	4.60	4.87	4.85	4.63	4.56	4.83	4.81	4.88	4.75	4.71
Europe	0.70	0.71	0.73	0.73	0.71	0.72	0.74	0.74	0.72	0.73	0.75	0.75	0.72	0.73	0.73
China	10.45	11.03	10.98	10.94	10.72	11.31	11.27	11.22	10.99	11.60	11.55	11.50	10.85	11.13	11.41
Other Asia	11.80	12.01	11.56	11.88	12.07	12.29	11.82	12.15	12.38	12.60	12.11	12.45	11.81	12.09	12.39
Other Non-OECD	17.86	18.46	19.10	18.31	18.04	18.87	19.43	18.61	18.53	19.38	19.96	19.12	18.43	18.74	19.25
Total World Consumption	91.38	91.80	93.32	93.25	92.74	93.09	94.31	94.30	94.00	94.49	95.67	95.54	92.45	93.62	94.93
Total Crude Oil and Other Liquids Inv	entory Net	Withdrawa	als (millio	n barrels	per day)										
U.S. (50 States)	0.03	-0.66	-0.22	-0.22	-0.54	-0.69	-0.21	0.57	0.07	-0.24	-0.06	0.57	-0.27	-0.21	0.08
Other OECD	-0.31	-0.02	-0.50	0.33	-0.19	-0.78	-0.66	-0.76	-0.29	-0.32	-0.28	-0.82	-0.12	-0.60	-0.42
Other Stock Draws and Balance	-0.31	-0.11	0.30	-1.96	-1.15	-1.44	-1.19	-1.33	-0.49	-0.59	-0.51	-1.46	-0.52	-1.28	-0.77
Total Stock Draw	-0.59	-0.79	-0.43	-1.84	-1.87	-2.92	-2.06	-1.51	-0.70	-1.15	-0.85	-1.71	-0.92	-2.09	-1.11
End-of-period Commercial Crude Oil	and Other	Liquids Inv	entories/												
U.S. Commercial Inventory	1,063	1,128	1,149	1,169	1,217	1,277	1,295	1,242	1,236	1,258	1,264	1,211	1,169	1,242	1,211
OECD Commercial Inventory	2,575	2,642	2,711	2,698	2,763	2,894	2,973	2,989	3,009	3,060	3,091	3,114	2,698	2,989	3,114

^{- =} 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.

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

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

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

⁽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	311011-1	201		1008 - 36	eptember	2013	15			201	6			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
		•			•	•	•		•	•	•			•	
North America	20.47	21.11	21.49	22.12	22.08	22.28	22.23	22.26	22.13	22.30	22.39	22.89	21.30	22.21	22.43
Canada	4.42	4.27	4.33	4.55	4.68	4.65	4.70	4.90	4.94	5.02	5.12	5.24	4.39	4.73	5.08
Mexico	2.89	2.86	2.79	2.74	2.68	2.59	2.66	2.65	2.63	2.62	2.60	2.59	2.82	2.65	2.61
United States	13.16	13.97	14.37	14.82	14.72	15.04	14.86	14.70	14.55	14.66	14.68	15.07	14.09	14.83	14.74
Central and South America	4.55	5.17	5.56	5.39	4.95	5.44	5.67	5.43	4.98	5.56	5.77	5.51	5.17	5.38	5.46
Argentina	0.70	0.71	0.73	0.73	0.70	0.72	0.75	0.75	0.70	0.74	0.76	0.76	0.72	0.73	0.74
Brazil	2.34	2.98	3.32	3.15	2.73	3.22	3.43	3.16	2.74	3.29	3.50	3.23	2.95	3.14	3.19
Colombia	1.03	0.99	1.02	1.03	1.06	1.05	1.01	1.03	1.05	1.04	1.01	1.02	1.02	1.04	1.03
Other Central and S. America	0.48	0.49	0.48	0.48	0.47	0.45	0.48	0.49	0.48	0.49	0.50	0.49	0.48	0.47	0.49
Europe	4.06	3.80	3.70	4.02	4.00	4.02	3.80	3.78	3.84	3.68	3.64	3.69	3.89	3.90	3.71
Norway	1.97	1.80	1.86	1.97	1.94	1.94	1.89	1.87	1.86	1.76	1.82	1.83	1.90	1.91	1.82
United Kingdom (offshore)	0.93	0.85	0.66	0.84	0.88	0.93	0.78	0.77	0.84	0.79	0.68	0.72	0.82	0.84	0.76
Other North Sea	0.18	0.16	0.19	0.21	0.20	0.18	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.18	0.18
Eurasia	13.91	13.85	13.87	14.01	14.11	14.05	14.04	13.95	13.90	13.92	13.95	13.97	13.91	14.04	13.94
Azerbaijan	0.85	0.86	0.88	0.84	0.86	0.87	0.88	0.88	0.88	0.88	0.87	0.87	0.86	0.87	0.87
Kazakhstan	1.73	1.66	1.71	1.78	1.76	1.71	1.70	1.69	1.70	1.71	1.71	1.74	1.72	1.72	1.72
Russia	10.86	10.83	10.79	10.93	10.99	10.98	10.96	10.88	10.83	10.84	10.87	10.87	10.85	10.95	10.85
Turkmenistan	0.27	0.28	0.28	0.25	0.29	0.27	0.28	0.27	0.28	0.29	0.29	0.28	0.27	0.28	0.28
Other Eurasia	0.20	0.21	0.22	0.21	0.20	0.21	0.22	0.21	0.21	0.21	0.21	0.20	0.21	0.21	0.21
Middle East	1.19	1.17	1.20	1.16	1.19	1.15	1.17	1.15	1.12	1.10	1.10	1.10	1.18	1.16	1.11
Oman	0.96	0.95	0.96	0.94	0.97	0.99	1.03	1.02	0.94	0.94	0.94	0.94	0.95	1.00	0.94
Syria	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.01	0.01	0.01	0.00	0.03	0.04	0.01
Yemen	0.13	0.13	0.13	0.12	0.11	0.05	0.03	0.02	0.10	0.08	0.09	0.08	0.13	0.05	0.09
Asia and Oceania	9.23	9.24	9.11	9.39	9.34	9.42	9.52	9.55	9.48	9.56	9.59	9.56	9.24	9.46	9.55
Australia	0.46	0.48	0.49	0.46	0.39	0.38	0.48	0.46	0.43	0.43	0.45	0.43	0.47	0.43	0.44
China	4.60	4.61	4.53	4.68	4.66	4.73	4.66	4.67	4.64	4.67	4.68	4.68	4.61	4.68	4.67
India	1.02	1.01	0.99	1.02	1.01	1.00	1.01	1.03	1.03	1.03	1.03	1.03	1.01	1.01	1.03
Indonesia	0.91	0.91	0.91	0.90	0.88	0.93	0.97	1.00	0.99	1.02	1.02	0.98	0.91	0.94	1.00
Malaysia	0.69	0.69	0.66	0.75	0.80	0.77	0.75	0.76	0.75	0.75	0.77	0.77	0.70	0.77	0.76
Vietnam	0.32	0.31	0.30	0.33	0.35	0.34	0.38	0.39	0.38	0.39	0.39	0.40	0.32	0.36	0.39
Africa	2.32	2.31	2.31	2.33	2.29	2.27	2.25	2.25	2.22	2.23	2.23	2.25	2.32	2.27	2.23
Egypt	0.70	0.70	0.70	0.72	0.71	0.71	0.70	0.70	0.69	0.68	0.68	0.67	0.71	0.71	0.68
Equatorial Guinea	0.29	0.29	0.29	0.29	0.27	0.27	0.27	0.27	0.25	0.25	0.25	0.25	0.29	0.27	0.25
Gabon	0.22	0.22	0.22	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.21	0.21
Sudan	0.26	0.26	0.26	0.26	0.26	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Total non-OPEC liquids	55.72	56.65	57.23	58.43	57.96	58.62	58.69	58.37	57.68	58.34	58.68	58.98	57.02	58.41	58.42
OPEC non-crude liquids	6.25	6.24	6.24	6.32	6.36	6.41	6.49	6.56	6.64	6.72	6.79	6.87	6.26	6.46	6.76
Non-OPEC + OPEC non-crude	61.97	62.89	63.47	64.75	64.32	65.03	65.17	64.93	64.32	65.06	65.47	65.85	63.28	64.87	65.18
Unplanned non-OPEC Production Outages	0.66	0.67	0.60	0.57	0.62	0.83	n/a	n/a	n/a	n/a	n/a	n/a	0.62	n/a	n/a

^{- =} 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)

0.3. Energy information Administration	1 0	20	14				015			20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Crude Oil															
Algeria	1.15	1.15	1.15	1.15	1.10	1.10	-	-	-	-	-	-	1.15	-	-
Angola	1.63	1.63	1.72	1.73	1.75	1.77	-	-	-	-	-	-	1.68	-	-
Ecudaor	0.55	0.56	0.56	0.56	0.55	0.54	-	-	-	-	-	-	0.56	-	-
Iran	2.80	2.80	2.80	2.80	2.80	2.82	-	-	-	-	-	-	2.80	-	-
Iraq	3.26	3.29	3.28	3.53	3.57	4.03	-	-	-	-	-	-	3.34	-	-
Kuwait	2.60	2.60	2.60	2.48	2.57	2.53	-	-	-	-	-	-	2.57	-	-
Libya	0.38	0.23	0.58	0.69	0.40	0.45	-	-	-	-	-	-	0.47	-	-
Nigeria	2.00	1.97	2.07	1.98	2.03	1.88	-	-	-	-	-	-	2.00	-	-
Qatar	0.74	0.73	0.72	0.68	0.68	0.68	-	-	-	-	-	-	0.72	-	-
Saudi Arabia	9.80	9.65	9.70	9.63	9.73	10.07	-	-	-	-	-	-	9.70	-	-
United Arab Emirates	2.70	2.70	2.70	2.70	2.70	2.70	-	-	-	-	-	-	2.70	-	-
Venezuela	2.40	2.40	2.40	2.40	2.40	2.40	-	-	-	-	-	-	2.40	-	-
OPEC Total	30.01	29.70	30.28	30.34	30.29	30.97	31.19	30.89	30.38	30.58	31.05	31.40	30.08	30.84	30.86
Other Liquids	6.25	6.24	6.24	6.32	6.36	6.41	6.49	6.56	6.64	6.72	6.79	6.87	6.26	6.46	6.76
Total OPEC Supply	36.26	35.94	36.52	36.66	36.66	37.38	37.68	37.45	37.02	37.30	37.84	38.28	36.35	37.29	37.61
Crude Oil Production Capacity															
Africa	5.15	4.97	5.51	5.54	5.29	5.18	5.08	5.18	5.20	5.32	5.43	5.44	5.29	5.18	5.35
South America	2.95	2.95	2.95	2.95	2.95	2.93	2.96	2.96	2.86	2.85	2.87	2.88	2.95	2.95	2.87
Middle East	23.93	23.88	23.86	23.79	23.90	24.21	24.39	24.38	24.36	24.46	24.77	25.11	23.86	24.22	24.68
OPEC Total	32.02	31.80	32.32	32.28	32.14	32.32	32.43	32.52	32.42	32.63	33.08	33.43	32.10	32.35	32.89
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	2.01	2.09	2.04	1.93	1.83	1.34	1.23	1.64	2.03	2.05	2.03	2.03	2.02	1.51	2.03
OPEC Total	2.01	2.09	2.04	1.93	1.85	1.35	1.23	1.64	2.03	2.05	2.03	2.03	2.02	1.51	2.03
Unplanned OPEC Production Outages	2.32	2.57	2.26	2.43	2.52	2.59	n/a	n/a	n/a	n/a	n/a	n/a	2.40	n/a	n/a

^{- -} no data available

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

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

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

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

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

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

U.S. Energy Information Administration S	Short-Ter		,,	ok - Sepi	tember 2										
		20				20				20					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2014	2015	2016
North America	. 23.21	23.09	23.74	23.92	23.53	23.52	23.96	23.95	23.66	23.76	24.14	24.03	23.49	23.74	23.90
Canada		23.09	23.74	23.92	23.33	23.32	23.90	23.93	2.38	2.32	2.43	2.41	23.49	23.74	23.90
Mexico		1.97	1.96	1.98	1.87	1.95	1.92	1.93	1.93	1.95	1.92	1.93	1.97	1.92	1.93
United States		18.77	19.31	19.51	19.29	19.25	19.60	19.60	19.34	19.48	19.78	19.68	19.11	19.44	19.57
Central and South America	. 7.05	7.30	7.33	7.31	7.05	7.37	7.41	7.38	7.17	7.44	7.47	7.45	7.25	7.30	7.38
Brazil	3.03	3.14	3.21	3.20	3.03	3.14	3.21	3.20	3.06	3.18	3.24	3.23	3.15	3.15	3.18
Europe	13.68	14.09	14.59	14.25	14.26	14.02	14.49	14.45	14.34	14.06	14.53	14.49	14.16	14.31	14.36
Eurasia	4.85	4.79	5.01	4.99	4.69	4.63	4.90	4.88	4.66	4.59	4.86	4.85	4.91	4.78	4.74
Russia		3.45	3.65	3.63	3.34	3.30	3.49	3.48	3.25	3.20	3.39	3.38	3.56	3.40	3.31
Middle East	7.97	8.33	8.98	8.17	8.01	8.64	9.22	8.37	8.36	8.96	9.56	8.68	8.36	8.56	8.89
Asia and Oceania	30.88	30.48	29.99	30.91	31.30	31.03	30.50	31.41	31.77	31.65	31.10	32.03	30.56	31.06	31.64
China	10.45	11.03	10.98	10.94	10.72	11.31	11.27	11.22	10.99	11.60	11.55	11.50	10.85	11.13	11.41
Japan	. 5.02	3.88	3.88	4.43	4.74	3.85	3.88	4.25	4.55	3.82	3.85	4.22	4.30	4.18	4.11
India	3.88	3.86	3.54	3.83	4.08	4.06	3.72	4.02	4.25	4.23	3.88	4.19	3.78	3.97	4.14
Africa	3.73	3.73	3.68	3.70	3.89	3.88	3.84	3.86	4.04	4.03	3.99	4.01	3.71	3.86	4.02
Total OECD Liquid Fuels Consumption	45.75	44.84	45.97	46.44	46.53	45.30	46.18	46.74	46.75	45.63	46.46	46.91	45.75	46.19	46.44
Total non-OECD Liquid Fuels Consumption	45.63	46.96	47.35	46.81	46.21	47.79	48.13	47.57	47.25	48.87	49.20	48.63	46.69	47.43	48.49
Total World Liquid Fuels Consumption	91.38	91.80	93.32	93.25	92.74	93.09	94.31	94.30	94.00	94.49	95.67	95.54	92.45	93.62	94.93
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2010 Q1 = 100	. 113.4	114.3	115.2	116.0	116.5	116.9	117.7	118.5	119.4	120.3	121.3	122.3	114.7	117.4	120.8
Percent change from prior year	. 2.8	2.8	2.7	2.6	2.7	2.3	2.2	2.2	2.5	2.9	3.1	3.2	2.8	2.3	2.9
OECD Index, 2010 Q1 = 100	. 110.0	110.6	111.3	111.9	112.2	112.7	113.2	113.9	114.5	115.1	115.8	116.6	110.9	113.0	115.5
Percent change from prior year	. 1.9	1.9	1.8	1.8	2.0	1.9	1.7	1.7	2.0	2.2	2.3	2.5	1.9	1.8	2.2
Non-OECD Index, 2010 Q1 = 100	117.7	118.9	120.0	121.0	121.7	122.2	123.2	124.4	125.6	126.7	128.1	129.4	119.4	122.9	127.4
Percent change from prior year	. 4.0	3.9	3.8	3.6	3.5	2.8	2.7	2.8	3.2	3.7	3.9	4.1	3.8	2.9	3.7
Real U.S. Dollar Exchange Rate (a)															
Index, January 2010 = 100	. 108.07	107.84	109.02	113.60	119.25	119.48	122.35	123.90	124.18	124.15	123.92	123.92	109.63	121.25	124.04
Percent change from prior year	. 3.8	2.0	1.9	6.7	10.3	10.8	12.2	9.1	4.1	3.9	1.3	0.0	3.6	10.6	2.3

^{- =} no data available

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

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

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

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

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

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

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

⁽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-Term	Energy	Outlook	- Septe	mber 20	15									
		201				201				201				Year	
-	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)		8.62	8.85	9.25	9.40	9.44	9.11	8.96	8.84	8.78	8.68	8.98	8.72	9.22	8.82
Alaska		0.52	0.43	0.51	0.50	0.49	0.42	0.49	0.48	0.48	0.42	0.47	0.50	0.48	0.46
Federal Gulf of Mexico (b)		1.42	1.43	1.42	1.46	1.47	1.49	1.56	1.61	1.63	1.53	1.63	1.40	1.50	1.60
Lower 48 States (excl GOM)		6.68	6.99	7.32	7.43	7.48	7.19	6.91	6.74	6.68	6.74	6.87	6.83	7.25	6.76
Crude Oil Net Imports (c)		6.93	7.15	6.78	6.84	6.74	7.05	6.61	6.70	7.29	7.58	6.73	6.99	6.81	7.07
SPR Net Withdrawals		0.05	0.00	0.00	0.00	-0.03	-0.01	0.00	0.00	0.00	0.00	0.00	0.01	-0.01	0.00
Commercial Inventory Net Withdrawals		0.01	0.25	-0.33	-0.91	0.06	0.14	0.15	-0.27	0.10	0.15	0.14	-0.10	-0.14	0.03
Crude Oil Adjustment (d)		0.27	0.12	0.25	0.20	0.28	0.31	0.15	0.19	0.19	0.21	0.15	0.22	0.23	0.19
Total Crude Oil Input to Refineries	15.19	15.88	16.36	15.96	15.53	16.48	16.60	15.87	15.46	16.36	16.62	16.00	15.85	16.12	16.11
Other Supply															
Refinery Processing Gain		1.07	1.10	1.10	0.99	1.02	1.09	1.08	1.05	1.08	1.11	1.09	1.08	1.05	1.08
Natural Gas Plant Liquids Production		3.00	3.15	3.16	3.09	3.27	3.35	3.35	3.36	3.49	3.58	3.69	3.01	3.27	3.53
Renewables and Oxygenate Production (e)		1.06	1.06	1.08	1.05	1.10	1.09	1.09	1.09	1.08	1.09	1.07	1.05	1.08	1.08
Fuel Ethanol Production		0.94	0.93	0.96	0.96	0.96	0.95	0.95	0.97	0.95	0.95	0.94	0.93	0.95	0.95
Petroleum Products Adjustment (f)		0.23	0.22	0.24	0.20	0.21	0.22	0.22	0.21	0.23	0.23	0.23	0.22	0.21	0.22
Product Net Imports (c)		-1.74	-2.11	-2.13	-1.89	-2.12	-2.43	-2.44	-2.18	-2.41	-2.62	-2.84	-1.93	-2.22	-2.52
Hydrocarbon Gas Liquids		-0.57	-0.66	-0.64	-0.68	-0.80	-0.93	-0.99	-0.96	-1.06	-1.15	-1.29	-0.56	-0.85	-1.12
Unfinished Oils		0.43	0.34	0.37	0.26	0.28	0.38	0.37	0.38	0.44	0.44	0.38	0.37	0.32	0.41
Other HC/Oxygenates		-0.09	-0.08	-0.09	-0.08	-0.09	-0.07	-0.06	-0.09	-0.07	-0.05	-0.04	-0.09	-0.07	-0.06
Motor Gasoline Blend Comp.		0.58	0.46	0.39	0.41	0.52	0.45	0.43	0.42	0.61	0.44	0.40	0.44	0.45	0.47
Finished Motor Gasoline		-0.37	-0.33	-0.47	-0.44	-0.32	-0.35	-0.45	-0.37	-0.48	-0.38	-0.45	-0.39	-0.39	-0.42
Jet Fuel		-0.02	-0.09	-0.09	-0.06	0.01	-0.02	-0.03	-0.05	-0.06	-0.01	-0.04	-0.07	-0.03	-0.04
Distillate Fuel Oil		-1.00	-1.07	-0.89	-0.67	-1.05	-1.09	-0.96	-0.73	-0.97	-1.08	-1.04	-0.91	-0.94	-0.96
Residual Fuel Oil		-0.18	-0.17	-0.18	-0.13	-0.21	-0.23	-0.22	-0.24	-0.26	-0.26	-0.22	-0.19	-0.20	-0.24
Other Oils (g)		-0.52	-0.50	-0.53	-0.50	-0.46	-0.57	-0.53	-0.55	-0.56	-0.57	-0.55	-0.53	-0.51	-0.56
Product Inventory Net Withdrawals		-0.72	-0.47	0.11	0.36	-0.72	-0.33	0.43	0.35	-0.35	-0.22	0.43	-0.18	-0.07	0.05
Total Supply	18.82	18.77	19.31	19.51	19.32	19.25	19.60	19.60	19.34	19.48	19.78	19.68	19.11	19.44	19.57
Consumentian (million bounds now day)															
Consumption (million barrels per day)	. 2.70	2.12	2.32	2.66	2.72	2.27	2.36	2.67	2.77	2.20	0.45	2.74	2.45	2.50	2.50
Hydrocarbon Gas Liquids		-0.03	-0.03	-0.02	-0.05	0.05	0.02	2.67 0.04	0.00	2.38 0.00	2.45 0.01	2.74 0.02	-0.04	0.02	2.59 0.01
Unfinished Oils		9.01	9.13		-0.03 8.81	9.26	9.34					9.09			
Motor Gasoline Fuel Ethanol blended into Motor Gasoline		0.89	0.89	9.00 0.90	0.87	0.92		9.09 0.90	8.88 0.87	9.23	9.30 0.92		8.92 0.88	9.13	9.13 0.90
Jet Fuel		1.47	1.52	1.50	1.45	1.54	0.92 1.57	1.48	1.43	0.91 1.52	1.58	0.90 1.50	1.47	0.90 1.51	1.51
Distillate Fuel Oil		3.95	3.89	4.12	4.27	3.88	3.85	4.10	4.18	4.04	3.99	4.12	4.04	4.02	4.08
Residual Fuel Oil		0.25	0.25	0.28	0.24	0.19	0.21	0.22	0.22	0.19	0.19	0.20	0.26	0.22	0.20
Other Oils (g)		2.01	2.24	1.96	1.85	2.06	2.24	2.00	1.87	2.10	2.26	2.01	2.01	2.04	2.06
Total Consumption		18.77	19.31	19.51	19.29	19.25	19.60	19.60	19.34	19.48	19.78	19.68	19.11	19.44	19.57
Total Consumption	. 10.02	10.77	10.01	10.01	10.20	10.20	10.00	10.00	10.01	10.10	10.10	10.00	10.11	10.11	10.01
Total Petroleum and Other Liquids Net Imports	5.38	5.20	5.04	4.65	4.95	4.61	4.63	4.18	4.52	4.88	4.95	3.89	5.07	4.59	4.56
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	386.7	386.0	363.3	393.3	474.8	469.5	457.0	443.3	468.2	458.8	444.9	432.1	393.3	443.3	432.1
Hydrocarbon Gas Liquids	. 99.5	166.1	211.7	175.4	138.8	196.3	227.8	182.3	146.9	184.3	208.1	161.9	175.4	182.3	161.9
Unfinished Oils	. 91.9	87.6	84.3	78.3	84.7	86.0	90.1	83.2	92.8	89.6	87.3	82.0	78.3	83.2	82.0
Other HC/Oxygenates	22.7	23.3	22.4	23.3	26.7	25.0	24.6	24.9	27.0	25.8	25.0	25.3	23.3	24.9	25.3
Total Motor Gasoline	. 221.6	219.3	212.5	240.4	231.5	221.0	215.7	230.0	228.9	223.0	219.8	232.0	240.4	230.0	232.0
Finished Motor Gasoline	34.4	28.8	28.4	31.2	26.9	25.7	26.8	28.7	26.6	26.3	25.7	27.1	31.2	28.7	27.1
Motor Gasoline Blend Comp	. 187.2	190.5	184.1	209.1	204.6	195.4	189.0	201.3	202.3	196.7	194.1	204.8	209.1	201.3	204.8
Jet Fuel	. 36.4	37.1	39.8	38.3	37.2	43.7	44.2	40.8	40.4	40.9	43.3	39.7	38.3	40.8	39.7
Distillate Fuel Oil	115.2	121.6	131.4	136.3	128.3	139.4	148.7	150.9	137.2	143.2	151.7	153.0	136.3	150.9	153.0
Residual Fuel Oil	. 36.0	36.6	36.6	33.7	38.1	41.8	39.3	38.1	38.2	38.3	36.8	37.1	33.7	38.1	37.1
Other Oils (g)	. 52.9	50.6	46.7	49.6	57.3	54.6	47.8	49.0	56.3	54.0	47.1	48.5	49.6	49.0	48.5
Total Commercial Inventory		1,128	1,149	1,169	1,217	1,277	1,295	1,242	1,236	1,258	1,264	1,211	1,169	1,242	1,211
Crude Oil in SPR	. 696	691	691	691	691	694	695	695	695	695	695	695	691	695	695

^{- =} no data available

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

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

⁽a) Includes lease condensate.

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

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

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

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

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

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

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

Natural Gaschine Perfusion Perfusion	U.S. Energy Information Administration	stration Short-Term Energy Outlook - September 2015								204	16			Veer		
Mountain Mountain		1et			4th	1et			4th	1et			4th	2014	Year 2015	2016
Patrice 1.6 1.1 1.1 1.0 1.0 1.0 1.1 1.1 1.0 1.0 1.0 1.1 1.1 1.0 1.0 1.0 1.1 1.1 1.0 1.0 1.0 1.1 1.1 1.0 1.0 1.0 1.1 1.1 1.0 1.1 1.1 1.0 1.1 1.1 1.0 1.1	HGI Production	130	Ziiu	Jiu	701	131	Ziiu	Jiu	701	130	Ziiu	Jiu	701	2014	2013	2010
Email													I			
Propose	-	1.05	1.11	1.11	1.09	1.05	1.10	1 17	120	1 25	1.31	1.34	1 45	1.09	1 13	1.34
Butines																1.15
Natural Cascaline (Pentanes Plus) 0.34 0.39 0.43 0.45 0.46 0.47 0.46 0.45 0.46 0.45 0.46 0.46 0.45 0.46																0.62
Refinery and Blender Net Production																0.43
Ethanoc Entylene	` ,	0.0 .	0.00	00	V	0.00	•	0	0	00	0.70	0.70	0.70	0.00	0	0.70
PropamePropylene		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
Buttane@Butylene																0.59
Natural Gaschine (Pentanes Plus)																0.06
Natural Gasoline (Pentanes Pius) -0.02 -			V	··	00	0.00	V	0.70	0.70	0.00	0.20	0.70	0.70	0.00	0.00	0.00
Ethano-			-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
Ethano-																
PropanePropylene	·															
Butines@Butylenes -0.04 -0.06 -0.09 -0.15 -0.17 -0.10 -0.11 -0.10 -0.11 -0.10 -0.11 -0.10 -0.15 -0.17 -0.19 -0.15 -0.17 -0.18 -0.17 -0.18																-0.17
Matural Gasoline (Pentanes Plus) 0.13 0.16 0.16 0.15 0.17 0.15 0.18 0.18 0.18 0.18 0.17 0.19 0.19 0.15 0.17 0.17 0.18																-0.63
Butanes@Buylenes 0.37 0.28 0.30 0.48 0.40 0.27 0.31 0.44 0.37 0.29 0.30 0.42 0.35 0.	•															-0.14
ButanesButylenes — 0.37 0.28 0.30 0.48 0.40 0.27 0.31 0.44 0.37 0.29 0.30 0.42 0.36 0.35 0.5 0.5 0.5 0.14 0.17 0.18 0.17 0.18 0.18 0.18 0.15 0.16 0.16 0.15 0.14 0.17 0.18 0.17 0.18 0.18 0.18 0.15 0.16 0.15 0.16 0.15 0.18 0.17 0.18 0.18 0.18 0.15 0.16 0.15 0.16 0.15 0.18 0.17 0.18 0.18 0.18 0.18 0.15 0.16 0.15 0.18 0.18 0.17 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18	Natural Gasoline (Pentanes Plus)	-0.13	-0.16	-0.16	-0.15	-0.17	-0.15	-0.18	-0.18	-0.18	-0.17	-0.19	-0.19	-0.15	-0.17	-0.18
ButanesButylenes — 0.37 0.28 0.30 0.48 0.40 0.27 0.31 0.44 0.37 0.29 0.30 0.42 0.36 0.35 0.5 0.5 0.5 0.14 0.17 0.18 0.17 0.18 0.18 0.18 0.15 0.16 0.16 0.15 0.14 0.17 0.18 0.17 0.18 0.18 0.18 0.15 0.16 0.15 0.16 0.15 0.18 0.17 0.18 0.18 0.18 0.15 0.16 0.15 0.16 0.15 0.18 0.17 0.18 0.18 0.18 0.18 0.15 0.16 0.15 0.18 0.18 0.17 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18	HGL Refinery and Blender Net Inputs															
Natural Gasoline (Pentanes Plus) 0.14 0.16 0.16 0.16 0.15 0.14 0.17 0.18 0.17 0.18 0.18 0.18 0.18 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18		0.37	0.28	0.30	0.48	0.40	0.27	0.31	0.44	0.37	0.29	0.30	0.42	0.36	0.35	0.35
Ethane/Ethylene 1.04 0.99 1.10 1.06 1.03 1.02 1.12 1.14 1.13 1.14 1.20 1.21 1.05 1.08 1.15 1.15 1.15 1.15 1.15 1.15 1.15 1.1	•	0.14	0.16	0.16	0.16	0.15	0.14	0.17	0.18		0.18		0.18	0.15		0.18
Ethane/Ethylene 1.04 0.99 1.10 1.06 1.03 1.02 1.12 1.14 1.13 1.14 1.20 1.21 1.05 1.08 1.15 1.15 1.15 1.15 1.15 1.15 1.15 1.1	1101 0															
Propane Propylene		4.04	0.00	4 40	4.00	4.02	4.00	1 10	1 1 1	1 10	1 11	1 20	1 21	4.05	1.00	1 17
Butanes/Butylenes	•															
Natural Gasoline (Pentanes Plus) 0.05 0.04 0.04 0.08 0.10 0.09 0.06 0.04 0.04 0.04 0.04 0.05 0.04 0.05 0.07 0.05																
Holimorphic Million barrels Ethane/Ethylene																
Ethane/Ethylene	Natural Gasoline (Pentanes Plus)	0.05	0.04	0.04	0.06	0.10	0.09	0.06	0.04	0.04	0.04	0.05	0.04	0.05	0.07	0.04
Propanel/Fropylene 28.81 57.90 81.41 77.95 58.10 84.20 99.11 82.32 55.35 69.30 80.04 62.89 77.95 82.22 62.8	HGL Inventories (million barrels)															
Butanes/Butylenes 26.31 52.35 72.40 41.95 32.46 59.42 76.65 49.60 39.75 58.98 72.38 45.80 41.95 49.60 45.80 Natural Gasoline (Pentanes Plus) 13.99 15.77 20.39 20.61 17.16 20.51 21.42 21.23 19.99 21.05 21.95 21.33 20.61 21.23 21.3 21.3 20.61 21.23 21.3 21.3 20.61 21.23 21.3 21.3 21.3 21.3 21.3 21.3 21	Ethane/Ethylene	30.03	37.15	38.95	36.45	31.38	31.65	31.06	30.21	30.43	34.46	33.92	33.04	35.67	31.07	32.96
Natural Gasoline (Pentanes Plus) 13.99 15.77 20.39 20.61 17.16 20.51 21.42 21.23 19.99 21.05 21.95 21.33 20.61 21.23 21.35 2	Propane/Propylene	28.81	57.90	81.41	77.95	58.10	84.20	99.11	82.32	55.35	69.30	80.04	62.89	77.95	82.32	62.89
Refinery and Blender Net Inputs Crude OII	Butanes/Butylenes	26.31	52.35	72.40	41.95	32.46	59.42	76.65	49.60	39.75	58.98	72.38	45.80	41.95	49.60	45.80
Crude OII	Natural Gasoline (Pentanes Plus)	13.99	15.77	20.39	20.61	17.16	20.51	21.42	21.23	19.99	21.05	21.95	21.33	20.61	21.23	21.33
Crude OII	Polinory and Blander Not Innuts															
Hydrocarbon Gas Liquids	•	15 10	15 99	16 36	15.06	15 53	16.49	16.60	15.97	15.46	16 26	16.62	16.00	15.95	16 12	16 11
Other Hydrocarbons/Oxygenates 1.09 1.16 1.16 1.14 1.12 1.18 1.20 1.21 1.16 1.21 1.24 1.22 1.14 1.18 1.20 Unfinished Oils 0.26 0.51 0.41 0.45 0.24 0.22 0.31 0.41 0.28 0.47 0.45 0.42 0.41 0.29 0.4 Motor Gasoline Blend Components 0.55 1.00 0.80 0.33 0.72 0.91 0.68 0.46 0.60 0.85 0.63 0.45 0.67 0.69 0.60 Aviation Gasoline Blend Components 0.00 0.00 0.00 0.00 0.00 0.00 0.0																
Unfinished Oils																0.53
Motor Gasoline Blend Components 0.55 1.00 0.80 0.33 0.72 0.91 0.68 0.46 0.60 0.85 0.63 0.45 0.67 0.69 0.66 Aviation Gasoline Blend Components 0.00	, , , ,		1.16	1.16	1.14	1.12	1.18	1.20	1.21	1.16	1.21	1.24	1.22	1.14	1.18	1.21
Aviation Gasoline Blend Components	Unfinished Oils	. 0.26	0.51	0.41	0.45	0.24	0.22	0.31	0.41	0.28	0.47	0.45	0.42	0.41	0.29	0.40
Total Refinery and Blender Net Inputs	Motor Gasoline Blend Components	. 0.55	1.00	0.80	0.33	0.72	0.91	0.68	0.46	0.60	0.85	0.63	0.45	0.67	0.69	0.63
Refinery Processing Gain	Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refinery and Blender Net Production Hydrocarbon Gas Liquids	Total Refinery and Blender Net Inputs	. 17.60	18.98	19.18	18.51	18.14	19.18	19.27	18.56	18.04	19.36	19.43	18.69	18.57	18.79	18.88
Hydrocarbon Gas Liquids 0.53 0.87 0.80 0.41 0.47 0.86 0.78 0.45 0.65 0.65 0.64 0.65 Finished Motor Gasoline 9.11 9.77 9.71 9.69 9.48 9.83 9.84 9.71 9.40 9.88 9.84 9.71 9.57 9.72 9.7 Jet Fuel 1.45 1.50 1.64 1.57 1.50 1.61 1.60 1.48 1.47 1.59 1.62 1.50 1.54 1.55 1.5 Distillate Fuel 4.69 4.97 5.00 5.00 4.82 4.99 5.00 5.04 4.72 5.03 5.12 5.12 4.92 4.96 5.0 Residual Fuel 0.46 0.44 0.42 0.43 0.43 0.44 0.42 0.45 0.46 0.44 0.42 0.4 Other Oils (a) 2.42 2.50 2.70 2.52 2.44 2.48 2.73 2.54 2.50 2.63	Refinery Processing Gain	. 1.05	1.07	1.10	1.10	0.99	1.02	1.09	1.08	1.05	1.08	1.11	1.09	1.08	1.05	1.08
Hydrocarbon Gas Liquids 0.53 0.87 0.80 0.41 0.47 0.86 0.78 0.45 0.65 0.65 0.64 0.65 Finished Motor Gasoline 9.11 9.77 9.71 9.69 9.48 9.83 9.84 9.71 9.40 9.88 9.84 9.71 9.57 9.72 9.7 Jet Fuel 1.45 1.50 1.64 1.57 1.50 1.61 1.60 1.48 1.47 1.59 1.62 1.50 1.54 1.55 1.5 Distillate Fuel 4.69 4.97 5.00 5.00 4.82 4.99 5.00 5.04 4.72 5.03 5.12 5.12 4.92 4.96 5.0 Residual Fuel 0.46 0.44 0.42 0.43 0.43 0.44 0.42 0.45 0.46 0.44 0.42 0.4 Other Oils (a) 2.42 2.50 2.70 2.52 2.44 2.48 2.73 2.54 2.50 2.63	B.C IBI . I. N. IB															
Finished Motor Gasoline 9.11 9.77 9.71 9.69 9.48 9.83 9.84 9.71 9.40 9.88 9.84 9.71 9.57 9.72 9.7 Jet Fuel 1.45 1.50 1.64 1.57 1.50 1.61 1.60 1.48 1.47 1.59 1.62 1.50 1.54 1.55 1.55 Distillate Fuel 4.69 4.97 5.00 5.00 4.82 4.99 5.00 5.04 4.72 5.03 5.12 5.12 4.92 4.96 5.00 Residual Fuel 4.64 0.44 0.42 0.43 0.43 0.44 0.42 0.42 0.45 0.46 0.44 0.42 0.44 0.42 0.44 Other Oils (a) 2.42 2.50 2.70 2.52 2.44 2.48 2.73 2.54 2.50 2.63 2.75 2.57 2.54 2.55 2.67 Total Refinery and Blender Net Production 18.65 20.05 20.28 19.62 19.13 20.20 20.36 19.65 19.10 20.44 20.54 19.78 19.65 19.84 19.85 Refinery Distillation Inputs 15.52 16.18 16.65 16.26 15.78 16.69 16.88 16.19 15.79 16.60 16.90 16.31 16.16 16.39 16.48 Refinery Operable Distillation Capacity 17.93 17.91 17.83 17.82 17.88 17.98 17.98 18.02 18.05 18.05 18.05 18.21 18.29 17.87 17.96 18.15	•	0.50	0.07	0.00	0.44	0.47	0.00	0.70	0.45	0.55	0.00	0.70	0.45	0.05	0.04	0.00
Jet Fuel 1.45 1.50 1.64 1.57 1.50 1.61 1.60 1.48 1.47 1.59 1.62 1.50 1.54 1.55 1.5 Distillate Fuel 4.69 4.97 5.00 5.00 4.82 4.99 5.00 5.04 4.72 5.03 5.12 5.12 4.92 4.96 5.0 Residual Fuel 0.46 0.44 0.42 0.43 0.43 0.44 0.42 0.45 0.46 0.44 0.42 0.4 Other Oils (a) 2.42 2.50 2.70 2.52 2.44 2.48 2.73 2.54 2.50 2.63 2.75 2.57 2.54 2.55 2.6 Total Refinery and Blender Net Production 18.65 20.05 20.28 19.62 19.13 20.20 20.36 19.65 19.10 20.44 20.54 19.78 19.65 19.84 19.5 Refinery Distillation Inputs 15.52 16.18 16.65 16.26 15.78 16.69 16.88 16.19 15.79 16.60 16.90 16.31 16.	•															0.66
Distillate Fuel							9.83	9.84	9.71							9.71
Residual Fuel 0.46 0.44 0.42 0.43 0.43 0.44 0.42 0.42 0.45 0.46 0.44 0.42 0.42 0.42 Other Oils (a) 2.42 2.50 2.70 2.52 2.44 2.48 2.73 2.54 2.50 2.63 2.75 2.57 2.54 2.55 2.6 Total Refinery and Blender Net Production 18.65 20.05 20.28 19.62 19.13 20.20 20.36 19.65 19.10 20.44 20.54 19.78 19.65 19.84 19.8 Refinery Distillation Inputs 15.52 16.18 16.65 16.26 15.78 16.69 16.88 16.19 15.79 16.60 16.90 16.31 16.16 16.39 16.4 Refinery Operable Distillation Capacity 17.93 17.91 17.83 17.82 17.88 17.98 17.98 18.02 18.05 18.21 18.29 17.87 17.96 18.1	Jet Fuel	1.45	1.50	1.64	1.57	1.50	1.61	1.60	1.48	1.47	1.59	1.62	1.50	1.54	1.55	1.54
Residual Fuel 0.46 0.44 0.42 0.43 0.43 0.44 0.42 0.42 0.45 0.46 0.44 0.42 0.42 0.42 0.45 0.46 0.44 0.42 0.42 0.45 0.46 0.44 0.42 0.42 0.42 0.45 0.46 0.44 0.42 0.42 0.42 0.45 0.46 0.44 0.42 0.42 0.42 0.43 0.42 0.42 0.42 0.45 0.46 0.44 0.42 0.42 0.42 0.42 0.42 0.42 0.42 0.42 0.43 0.42 </td <td>Distillate Fuel</td> <td>. 4.69</td> <td>4.97</td> <td>5.00</td> <td>5.00</td> <td>4.82</td> <td>4.99</td> <td>5.00</td> <td>5.04</td> <td>4.72</td> <td>5.03</td> <td>5.12</td> <td>5.12</td> <td>4.92</td> <td>4.96</td> <td>5.00</td>	Distillate Fuel	. 4.69	4.97	5.00	5.00	4.82	4.99	5.00	5.04	4.72	5.03	5.12	5.12	4.92	4.96	5.00
Other Oils (a) 2.42 2.50 2.70 2.52 2.44 2.48 2.73 2.54 2.50 2.63 2.75 2.57 2.54 2.55 2.6 Total Refinery and Blender Net Production 18.65 20.05 20.28 19.62 19.13 20.20 20.36 19.65 19.10 20.44 20.54 19.78 19.65 19.84 19.5 Refinery Distillation Inputs 15.52 16.18 16.65 16.26 15.78 16.69 16.88 16.19 15.79 16.60 16.90 16.31 16.16 16.39 16.4 Refinery Operable Distillation Capacity 17.93 17.91 17.83 17.82 17.88 17.98 17.98 18.05 18.05 18.21 18.29 17.87 17.96 18.1	Residual Fuel	. 0.46	0.44	0.42	0.43	0.43	0.44	0.42	0.42	0.45	0.46	0.44	0.42	0.44	0.42	0.44
Total Refinery and Blender Net Production																2.61
Refinery Operable Distillation Capacity																19.97
Refinery Operable Distillation Capacity																
	Refinery Distillation Inputs	15.52	16.18	16.65	16.26	15.78	16.69	16.88	16.19	15.79	16.60	16.90	16.31	16.16	16.39	16.40
Polinery Distillation Litilization Factor 0.97 0.00 0.03 0.04 0.09 0.03 0.04 0.00 0.07 0.09 0.09 0.04 0.0	Refinery Operable Distillation Capacity	17.93	17.91	17.83	17.82	17.88	17.98	17.98	18.02	18.05	18.05	18.21	18.29	17.87	17.96	18.15
Nomery Distination Officeation Editor	Refinery Distillation Utilization Factor	0.87	0.90	0.93	0.91	0.88	0.93	0.94	0.90	0.87	0.92	0.93	0.89	0.90	0.91	0.90

^{- =} 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.

⁽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

O.O. Energy mormation Administrati	1.0 0.	201		y Calloo	. Эори	20				20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Prices (cents per gallon)		•	•	•	•	•	•	•	•	•	•				
Refiner Wholesale Price	272	298	276	203	159	201	180	136	149	184	181	155	262	169	167
Gasoline Regular Grade Retail Prices Ir	ncluding T	axes													
PADD 1	344	365	348	292	228	259	247	211	220	251	250	231	337	236	238
PADD 2	337	365	343	279	216	256	252	202	212	252	249	220	331	232	234
PADD 3	318	345	329	265	204	240	229	187	197	232	230	204	314	215	216
PADD 4	326	351	363	297	207	261	271	211	201	242	252	225	335	238	230
PADD 5	362	401	386	315	271	328	326	247	243	282	282	256	366	294	266
U.S. Average	340	368	350	288	227	267	260	211	217	253	252	227	336	241	238
Gasoline All Grades Including Taxes	348	375	358	296	236	275	268	219	226	262	261	236	344	250	246
End-of-period Inventories (million barrels	s)														
Total Gasoline Inventories															
PADD 1	57.7	63.1	55.7	62.1	64.5	61.3	56.4	59.4	60.6	62.0	57.8	60.1	62.1	59.4	60.1
PADD 2	49.1	49.7	47.1	52.4	52.9	50.4	48.9	50.4	51.2	48.8	49.2	50.6	52.4	50.4	50.6
PADD 3	78.5	73.2	74.9	84.2	78.4	74.6	76.2	81.0	79.7	77.5	78.0	82.0	84.2	81.0	82.0
PADD 4	6.4	6.1	7.4	7.9	6.5	6.8	6.9	7.7	7.2	6.9	6.9	7.7	7.9	7.7	7.7
PADD 5	29.9	27.1	27.3	33.7	29.2	28.0	27.4	31.5	30.2	27.9	27.9	31.6	33.7	31.5	31.6
U.S. Total	221.6	219.3	212.5	240.4	231.5	221.0	215.7	230.0	228.9	223.0	219.8	232.0	240.4	230.0	232.0
Finished Gasoline Inventories															
U.S. Total	34.4	28.8	28.4	31.2	26.9	25.7	26.8	28.7	26.6	26.3	25.7	27.1	31.2	28.7	27.1
Gasoline Blending Components Inventor	ories														
U.S. Total	187.2	190.5	184.1	209.1	204.6	195.4	189.0	201.3	202.3	196.7	194.1	204.8	209.1	201.3	204.8

^{- =} no data available

Prices are not adjusted for inflation.

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

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

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

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

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

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

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

		201	14			201	5			201	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (billion cubic feet per day)	•	•	•			•			•						
Total Marketed Production	71.74	73.55	75.72	77.77	78.12	79.05	79.02	79.61	80.29	80.50	80.62	81.30	74.72	78.95	80.68
Alaska	0.99	0.93	0.85	0.98	0.99	0.93	0.78	0.93	0.98	0.84	0.75	0.91	0.94	0.91	0.87
Federal GOM (a)	3.29	3.42	3.41	3.38	3.37	3.72	3.34	3.20	3.25	3.20	3.03	2.99	3.37	3.41	3.12
Lower 48 States (excl GOM)	67.47	69.21	71.46	73.41	73.76	74.40	74.90	75.48	76.06	76.45	76.84	77.39	70.41	74.64	76.69
Total Dry Gas Production	67.84	69.33	71.30	73.31	73.68	74.34	74.32	74.88	75.52	75.72	75.83	76.47	70.46	74.31	75.89
LNG Gross Imports	0.17	0.17	0.15	0.16	0.43	0.08	0.18	0.17	0.14	0.16	0.17	0.15	0.16	0.21	0.15
LNG Gross Exports	0.03	0.02	0.09	0.03	0.06	0.06	0.00	0.56	0.68	0.69	0.72	1.07	0.04	0.17	0.79
Pipeline Gross Imports	8.44	6.52	6.47	7.47	8.36	6.68	6.35	6.86	7.26	6.22	6.54	6.72	7.22	7.05	6.68
Pipeline Gross Exports	4.67	3.89	3.85	4.02	4.86	4.37	4.51	4.81	4.89	4.73	4.92	5.09	4.10	4.63	4.91
Supplemental Gaseous Fuels	0.17	0.16	0.13	0.16	0.16	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.15	0.16	0.16
Net Inventory Withdrawals	22.75	-12.71	-12.96	0.55	18.44	-12.87	-9.62	3.14	16.34	-10.75	-9.90	3.14	-0.69	-0.30	-0.31
Total Supply	94.67	59.56	61.15	77.59	96.15	63.95	66.87	79.83	93.84	66.09	67.16	80.48	73.16	76.63	76.88
Balancing Item (b)	0.43	1.67	0.59	-1.40	0.91	0.35	-0.80	-0.84	0.22	-0.66	-0.30	-0.37	0.32	-0.10	-0.28
Total Primary Supply	95.10	61.23	61.75	76.19	97.05	64.30	66.07	78.99	94.07	65.43	66.86	80.11	73.48	76.52	76.60
Consumption (billion cubic feet per	day)														
Residential	28.70	7.50	3.68	15.97	27.49	6.86	3.65	16.26	25.73	7.00	3.67	16.43	13.90	13.51	13.19
Commercial	16.46	6.25	4.59	10.74	15.98	5.81	4.39	10.50	14.65	5.91	4.44	10.65	9.48	9.14	8.90
Industrial	22.92	20.03	19.66	21.32	22.71	19.67	19.79	22.53	23.87	21.44	21.35	23.42	20.97	21.17	22.52
Electric Power (c)	19.68	21.12	27.34	21.09	23.10	25.20	31.42	22.39	21.94	24.21	30.48	22.16	22.33	25.54	24.71
Lease and Plant Fuel	4.12	4.22	4.35	4.47	4.49	4.54	4.54	4.57	4.61	4.62	4.63	4.67	4.29	4.53	4.63
Pipeline and Distribution Use	3.14	2.02	2.04	2.51	3.20	2.12	2.18	2.64	3.18	2.16	2.21	2.68	2.42	2.53	2.55
Vehicle Use	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.09	0.09	0.10
Total Consumption	95.10	61.23	61.75	76.19	97.05	64.30	66.07	78.99	94.07	65.43	66.86	80.11	73.48	76.52	76.60
End-of-period Inventories (billion co	ubic feet)														
Working Gas Inventory	857	2,005	3,187	3,141	1,482	2,647	3,532	3,244	1,757	2,735	3,645	3,356	3,141	3,244	3,356
Producing Region (d)	358	691	952	1,070	604	1,037	1,243	1,196	781	1,058	1,228	1,207	1,070	1,196	1,207
East Consuming Region (d)	316	952	1,753	1,607	501	1,144	1,784	1,578	659	1,220	1,872	1,640	1,607	1,578	1,640
West Consuming Region (d)	184	362	482	464	377	466	505	470	316	456	546	509	464	470	509

^{- =} 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.

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

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

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

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

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

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

LNG: liquefied natural gas.

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

O.S. Energy information	2014			iorgy oc	201	5 5	0. 2010		201	16			Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Wholesale/Spot						1			1						
Henry Hub Spot Price	5.36	4.75	4.08	3.91	2.99	2.83	2.86	3.04	3.24	3.05	3.17	3.36	4.52	2.93	3.20
Residential															
New England	13.65	15.98	18.01	14.41	13.08	13.32	16.34	12.98	12.44	14.08	16.77	13.28	14.52	13.31	13.23
Middle Atlantic	10.71	13.04	17.25	11.15	9.50	11.18	17.01	11.78	10.55	12.99	17.42	12.03	11.58	10.75	11.76
E. N. Central	8.67	12.96	16.85	8.96	7.79	10.56	16.68	8.54	7.67	11.04	16.64	8.57	9.70	8.85	8.87
W. N. Central	9.10	11.75	18.16	9.83	8.65	11.90	17.11	8.81	7.81	10.67	17.08	9.10	10.10	9.53	9.07
S. Atlantic	11.34	16.37	22.98	12.85	10.68	16.65	22.22	12.55	11.11	16.14	22.25	12.81	13.03	12.50	12.89
E. S. Central	9.63	14.08	19.70	11.14	9.34	14.34	18.66	10.64	9.03	13.19	18.38	10.99	11.02	10.67	10.57
W. S. Central	8.53	14.22	20.25	11.62	8.42	13.92	18.26	9.86	7.44	12.51	18.25	10.35	10.83	10.14	9.61
Mountain	9.07	11.22	15.15	9.86	9.58	10.86	14.95	9.64	8.79	9.75	13.53	8.80	10.13	10.21	9.29
Pacific	10.97	11.66	12.41	11.25	11.47	11.46	11.15	9.54	9.56	10.22	10.81	9.79	11.37	10.79	9.90
U.S. Average	9.82	13.11	16.92	10.52	9.29	12.01	16.17	10.04	9.03	11.88	16.07	10.16	10.94	10.33	10.25
Commercial															
New England	11.35	12.82	11.77	11.36	10.70	10.06	9.58	9.96	10.46	10.24	10.25	10.44	11.64	10.32	10.40
Middle Atlantic	9.30	9.06	8.04	8.05	7.90	7.43	7.65	8.31	8.61	8.24	8.08	8.72	8.78	7.89	8.52
E. N. Central	8.02	9.96	10.18	7.71	6.96	7.55	8.85	7.16	7.24	8.38	9.22	7.42	8.33	7.23	7.60
W. N. Central	8.35	9.10	10.19	8.22	7.65	8.00	8.86	7.22	7.39	7.69	8.81	7.41	8.54	7.65	7.54
S. Atlantic	9.23	10.56	10.90	9.47	8.44	9.19	10.06	9.01	9.02	9.70	10.37	9.44	9.69	8.91	9.42
E. S. Central	8.90	10.71	11.17	9.58	8.58	9.66	9.85	8.76	8.28	9.17	9.87	9.05	9.57	8.90	8.81
W. S. Central	7.49	9.24	9.26	8.25	7.14	7.20	7.64	6.99	6.93	7.59	8.14	7.40	8.23	7.18	7.33
Mountain	7.81	8.74	9.90	8.47	8.29	8.37	9.38	8.06	7.67	7.86	9.04	7.96	8.40	8.35	7.93
Pacific	9.29	9.26	9.56	9.28	9.21	8.52	8.66	8.58	8.74	8.58	8.92	8.69	9.32	8.78	8.72
U.S. Average	8.66	9.64	9.69	8.51	7.95	8.13	8.72	7.98	8.05	8.44	9.00	8.26	8.87	8.06	8.27
Industrial															
New England	10.03	9.97	8.04	9.09	9.04	7.60	7.24	8.38	8.81	8.19	8.01	9.00	9.45	8.32	8.61
Middle Atlantic	9.28	8.78	8.15	7.98	7.87	7.21	7.45	7.92	8.04	7.30	7.62	8.25	8.77	7.72	7.91
E. N. Central	8.03	8.87	7.89	6.94	6.49	5.70	5.88	5.89	6.45	6.08	6.21	6.27	7.84	6.13	6.31
W. N. Central	7.34	6.28	5.91	6.38	5.90	4.63	4.76	5.21	5.46	4.74	4.75	5.20	6.57	5.19	5.08
S. Atlantic	6.91	6.42	5.92	5.99	5.50	4.56	4.78	5.09	5.32	5.05	5.19	5.50	6.34	5.01	5.28
E. S. Central	6.37	6.14	5.31	5.50	5.13	4.24	4.45	4.72	5.12	4.69	4.83	5.14	5.86	4.67	4.96
W. S. Central	5.15	4.91	4.52	4.26	3.21	2.93	3.11	3.17	3.32	3.20	3.46	3.54	4.71	3.11	3.38
Mountain	6.55	6.68	6.95	6.65	6.55	6.19	6.29	6.05	5.57	5.24	5.83	5.87	6.69	6.28	5.64
Pacific	7.84	7.63	7.70	7.54	7.36	6.89	7.08	6.42	6.16	5.94	6.43	6.56	7.68	6.94	6.28
U.S. Average	6.17	5.62	5.06	5.16	4.56	3.69	3.78	4.08	4.44	3.93	4.07	4.44	5.53	4.05	4.23

^{- =} 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-To	erm Ene	ergy Out	look - Se	eptembe	r 2015								
		201				201				201			_	Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Supply (million short tons)															
Production	245.2	245.8	255.3	253.3	240.2	210.7	228.4	234.3	233.5	213.5	234.9	228.7	999.7	913.6	910.4
Appalachia	67.5	69.7	67.5	63.5	62.3	57.7	58.6	58.5	62.8	58.6	57.0	56.2	268.2	237.1	234.6
Interior	46.3	44.8	49.3	48.3	45.2	39.7	46.3	47.7	45.0	43.5	47.0	45.3	188.7	178.9	180.9
Western	131.4	131.4	138.5	141.5	132.7	113.2	123.6	128.1	125.7	111.3	130.9	127.2	542.8	497.5	495.0
Primary Inventory Withdrawals	-0.5	0.6	2.4	-1.5	-0.7	0.3	3.1	-1.6	-1.0	0.7	2.9	-1.6	0.9	1.1	1.0
Imports	2.4	3.5	3.2	2.1	3.0	2.6	3.2	2.9	2.2	2.4	3.3	2.9	11.3	11.7	10.8
Exports	27.7	24.6	22.7	22.3	22.0	19.8	17.9	19.8	16.3	19.6	17.4	19.1	97.3	79.5	72.3
Metallurgical Coal	16.9	15.8	15.2	15.2	13.5	12.7	10.9	11.4	11.4	11.6	9.9	11.4	63.0	48.6	44.3
Steam Coal	10.9	8.8	7.5	7.1	8.5	7.0	7.0	8.4	4.9	7.9	7.4	7.7	34.3	31.0	28.0
Total Primary Supply	219.4	225.4	238.2	231.6	220.5	193.9	216.8	215.7	218.4	197.0	223.6	210.8	914.5	846.9	849.9
Secondary Inventory Withdrawals	30.6	-14.8	8.4	-28.0	-3.3	-13.2	16.6	-3.8	-0.1	-5.9	14.2	-4.6	-3.8	-3.6	3.6
Waste Coal (a)	3.2	2.8	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	11.2	10.8	11.1
Total Supply	253.2	213.3	249.2	206.2	219.9	183.4	236.1	214.6	221.1	193.9	240.6	209.0	921.9	854.1	864.6
Consumption (million short tons)															
Coke Plants	4.8	5.1	5.2	5.2	4.4	4.4	5.3	5.3	4.4	4.3	5.1	5.0	20.4	19.4	18.8
Electric Power Sector (b)	231.3	196.0	231.2	193.0	196.5	174.6	220.5	198.2	205.1	178.8	224.9	192.8	851.4	789.7	801.6
Retail and Other Industry	12.0	10.9	11.0	11.1	11.4	10.4	10.6	11.2	11.6	10.8	10.7	11.2	45.0	43.5	44.2
Residential and Commercial	0.7	0.4	0.4	0.7	0.8	0.6	0.6	0.7	0.8	0.5	0.5	0.7	2.2	2.7	2.5
Other Industrial	11.3	10.5	10.6	10.4	10.6	9.8	10.0	10.4	10.8	10.2	10.2	10.5	42.8	40.9	41.7
Total Consumption	248.2	212.0	247.4	209.3	212.3	189.4	236.4	214.6	221.1	193.9	240.6	209.0	916.9	852.6	864.6
Discrepancy (c)	5.0	1.3	1.9	-3.1	7.7	-6.0	-0.2	0.0	0.0	0.0	0.0	0.0	5.1	1.5	0.0
End-of-period Inventories (million short	tons)														
Primary Inventories (d)	46.2	45.6	43.2	44.7	45.5	45.2	42.1	43.7	44.7	44.0	41.1	42.7	44.7	43.7	42.7
Secondary Inventories	124.0	138.9	130.5	158.4	161.7	174.9	158.2	162.0	162.1	168.0	153.8	158.4	158.4	162.0	158.4
Electric Power Sector	118.3	132.9	123.8	151.4	155.6	168.0	150.8	154.2	155.3	160.5	145.8	150.1	151.4	154.2	150.1
Retail and General Industry	3.5	3.6	4.4	4.8	4.1	4.5	5.1	5.5	4.8	5.0	5.6	5.9	4.8	5.5	5.9
Coke Plants	1.8	1.9	1.8	1.9	1.6	1.9	1.9	1.9	1.6	2.0	1.9	1.9	1.9	1.9	1.9
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.47	5.47	5.47	5.47	5.61	5.61	5.61	5.61	5.46	5.46	5.46	5.46	5.47	5.61	5.46
Total Raw Steel Production															
(Million short tons per day)	0.262	0.263	0.271	0.262	0.247	0.242	0.249	0.238	0.242	0.252	0.237	0.222	0.264	0.244	0.238
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.33	2.39	2.37	2.37	2.26	2.25	2.28	2.27	2.26	2.29	2.29	2.26	2.36	2.27	2.27

^{- =} no data available

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

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

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

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

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

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

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

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

Table 7a. U.S. Electricity Industry Overview

U.S. Energy information Admini	Suauon			lergy Ot	JUOOK - S			1				ı			
	4-4 1	201	-	441.	4-1	201		441-	4-1	201		411	2011	Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Electricity Supply (billion kilowatthou		,	40.00	40.54	44.00	40 = 4	40.07	40.50	44.00	40.00	10.10	40.70		44.00	44.00
Electricity Generation	11.49	10.77	12.06	10.54	11.33	10.74	12.27	10.58	11.06	10.93	12.49	10.73	11.21	11.23	11.30
Electric Power Sector (a)	11.04	10.36	11.62	10.11	10.91	10.33	11.82	10.15	10.64	10.52	12.03	10.28	10.78	10.80	10.87
Comm. and Indus. Sectors (b)	0.44	0.41	0.44	0.42	0.42	0.41	0.45	0.43	0.42	0.41	0.46	0.44	0.43	0.43	0.43
Net Imports	0.11	0.12	0.16	0.14	0.17	0.20	0.18	0.11	0.11	0.11	0.14	0.09	0.13	0.17	0.11
Total Supply	11.59	10.89	12.22	10.68	11.50	10.94	12.45	10.69	11.17	11.05	12.63	10.82	11.35	11.40	11.42
Losses and Unaccounted for (c)	0.72	0.86	0.76	0.73	0.77	0.90	0.77	0.72	0.59	0.91	0.78	0.72	0.77	0.79	0.75
Electricity Consumption (billion kilow	atthours p	er day un	less note	ed)											
Retail Sales	10.48	9.67	11.07	9.58	10.36	9.68	11.29	9.60	10.21	9.78	11.45	9.71	10.20	10.23	10.29
Residential Sector	4.31	3.36	4.26	3.45	4.19	3.35	4.43	3.44	4.00	3.37	4.47	3.48	3.84	3.85	3.83
Commercial Sector	3.62	3.65	4.06	3.54	3.61	3.67	4.12	3.57	3.63	3.72	4.20	3.63	3.72	3.74	3.79
Industrial Sector	2.52	2.65	2.73	2.57	2.53	2.64	2.72	2.56	2.56	2.67	2.76	2.59	2.62	2.61	2.64
Transportation Sector	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Direct Use (d)	0.39	0.36	0.39	0.37	0.37	0.36	0.39	0.38	0.37	0.36	0.40	0.39	0.38	0.37	0.38
Total Consumption	10.87	10.04	11.46	9.95	10.73	10.04	11.68	9.97	10.58	10.14	11.85	10.10	10.58	10.61	10.67
Average residential electricity															
usage per customer (kWh)	3,022	2,371	3,038	2,454	2,914	2,347	3,131	2,428	2,780	2,340	3,124	2,425	10,885	10,820	10,669
Prices															
Power Generation Fuel Costs (dolla	rs per mill	ion Btu)													
Coal	2.33	2.39	2.37	2.37	2.26	2.25	2.28	2.27	2.26	2.29	2.29	2.26	2.36	2.27	2.27
Natural Gas	6.82	4.93	4.25	4.30	4.09	3.12	3.57	3.94	4.09	3.68	3.81	4.20	4.98	3.65	3.93
Residual Fuel Oil	19.97	20.44	19.75	14.72	10.82	11.51	11.23	10.14	10.22	11.50	11.85	11.64	19.18	10.88	11.29
Distillate Fuel Oil	23.40	22.77	21.88	18.72	15.39	15.02	12.83	13.70	14.25	14.56	15.04	15.84	22.34	14.52	14.87
End-Use Prices (cents per kilowatth	our)														
Residential Sector	•	12.73	13.01	12.38	12.24	12.85	13.03	12.54	12.51	13.08	13.31	12.81	12.50	12.67	12.94
Commercial Sector	10.55	10.68	11.11	10.59	10.50	10.56	11.36	10.80	10.76	10.82	11.59	11.01	10.75	10.83	11.06
Industrial Sector	6.99	6.92	7.36	6.76	6.76	6.73	7.50	6.87	6.90	6.88	7.59	6.93	7.01	6.97	7.08

^{- =} 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.

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

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

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

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

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

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

O.O. Energy informati		201		1-161111	Lileigy	201	septem	DC1 201		20	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Residential Sector	l L	L.	1			L.	l-		l. II		l-			L	
New England	153	111	136	118	152	111	137	121	143	113	138	122	129	130	129
Middle Atlantic		315	383	323	423	321	404	326	392	318	412	327	361	369	362
E. N. Central	616	446	513	479	588	428	523	477	553	435	551	482	513	504	506
W. N. Central	352	246	293	265	325	232	302	263	319	240	310	267	289	280	284
S. Atlantic	1,080	858	1,088	861	1,072	889	1,159	861	994	863	1,157	864	971	995	970
E. S. Central	404	278	363	288	390	276	388	282	356	280	384	281	333	334	325
W. S. Central	617	501	731	498	602	503	761	497	576	531	747	505	587	591	590
Mountain	238	242	321	226	234	240	328	231	245	245	345	238	257	258	269
Pacific contiguous	419	347	422	378	394	336	416	373	405	336	409	377	391	380	382
AK and HI	. 14	11	12	13	13	11	12	13	13	12	12	13	13	12	13
Total	4,315	3,355	4,260	3,449	4,194	3,348	4,429	3,443	3,997	3,374	4,465	3,476	3,844	3,853	3,829
Commercial Sector															
New England	148	138	154	139	148	139	156	138	145	140	157	138	145	145	145
Middle Atlantic	442	413	461	409	444	416	466	410	440	415	473	412	431	434	435
E. N. Central	511	490	526	480	510	490	530	484	511	500	553	495	502	504	515
W. N. Central	287	273	298	272	281	269	301	274	285	279	313	280	282	281	289
S. Atlantic	803	842	920	793	805	859	940	805	810	857	957	822	840	853	862
E. S. Central	239	237	271	226	235	239	278	227	235	240	281	230	243	245	247
W. S. Central	494	521	610	504	496	529	624	508	501	541	635	519	532	540	549
Mountain	239	259	287	243	239	256	288	247	246	261	296	253	257	257	264
Pacific contiguous	442	463	514	461	434	458	518	463	438	467	518	466	470	468	472
AK and HI	. 17	16	17	17	16	16	17	17	16	16	17	17	16	16	16
Total	3,621	3,652	4,056	3,544	3,609	3,671	4,118	3,573	3,627	3,715	4,200	3,631	3,719	3,744	3,794
Industrial Sector															
New England	49	50	52	50	49	51	52	50	49	50	53	49	50	51	50
Middle Atlantic	201	198	205	194	198	196	206	197	203	203	209	198	199	199	203
E. N. Central	525	532	544	519	520	525	533	505	515	523	533	505	530	521	519
W. N. Central	231	240	253	238	237	242	258	244	242	252	267	249	241	245	252
S. Atlantic	372	397	404	383	376	407	397	377	374	401	406	382	389	389	391
E. S. Central	279	287	296	283	279	287	289	277	295	291	289	284	286	283	289
W. S. Central	431	465	471	444	428	457	477	449	438	468	486	451	453	453	461
Mountain	210	235	250	220	217	235	252	225	220	242	260	230	229	232	238
Pacific contiguous	213	228	244	223	216	226	241	222	213	226	242	223	227	226	226
AK and HI	. 13	14	14	14	13	13	14	14	13	13	14	14	14	14	14
Total	2,522	2,646	2,734	2,567	2,531	2,641	2,720	2,560	2,561	2,669	2,758	2,585	2,618	2,613	2,643
Total All Sectors (a)															
New England	352	300	344	308	350	304	347	310	339	304	350	310	326	328	326
Middle Atlantic	1,078	936	1,059	936	1,077	944	1,087	945	1,047	946	1,106	948	1,002	1,013	1,012
E. N. Central	1,654	1,469	1,584	1,480	1,620	1,445	1,587	1,467	1,581	1,460	1,638	1,483	1,547	1,529	1,541
W. N. Central	870	760	843	776	843	744	861	781	846	771	890	796	812	807	826
S. Atlantic	2,259	2,100	2,415	2,041	2,256	2,159	2,501	2,046	2,181	2,124	2,524	2,072	2,204	2,241	2,226
E. S. Central	922	803	931	797	904	802	955	786	886	811	954	794	863	862	861
W. S. Central	1,542	1,487	1,812	1,446	1,527	1,489	1,862	1,455	1,516	1,540	1,868	1,476	1,572	1,584	1,600
Mountain		737	858	689	690	731	868	702	711	748	901	722	743	748	771
Pacific contiguous	1,076	1,040	1,182	1,064	1,046	1,022	1,177	1,060	1,057	1,032	1,171	1,069	1,091	1,077	1,083
AK and HI		41	43	43	42	41	43	44	43	41	43	44	43	42	43
Total	10,481	9,674	11,072	9,581	10,356	9,681	11,289	9,597	10,208	9,779	11,446	9,714	10,202	10,231	10,288

^{- =} no data available

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

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

U.S. Energy Informa	AUDIT AUTI	201		71 - 1 - 1111	Energy	20		11061 20	10	201	16			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Residential Sector		1								•	· · · · · · · · · · · · · · · · · · ·				
New England	17.53	18.03	17.60	18.24	20.42	20.31	19.49	18.69	18.83	19.02	19.18	19.20	17.82	19.75	19.05
Middle Atlantic		16.58	16.66	16.02	15.76	16.07	16.42	16.09	16.14	16.47	16.78	16.49	16.38	16.08	16.47
E. N. Central	11.56	12.96	12.98	12.73	12.22	13.19	13.04	12.86	12.52	13.43	13.26	13.10	12.50	12.79	13.05
W. N. Central	10.04	11.80	12.31	10.65	10.25	12.16	12.58	10.90	10.55	12.41	12.87	11.15	11.14	11.43	11.72
S. Atlantic	11.31	11.98	12.13	11.61	11.39	11.91	12.09	11.71	11.76	12.27	12.38	11.97	11.75	11.78	12.10
E. S. Central	10.30	11.21	10.97	10.66	10.34	11.16	10.87	10.76	10.74	11.46	11.19	11.05	10.75	10.75	11.09
W. S. Central	10.40	11.43	11.39	11.06	10.67	11.36	11.20	10.92	10.82	11.48	11.36	10.97	11.07	11.04	11.17
Mountain	10.93	12.02	12.33	11.31	11.31	12.21	12.51	11.53	11.60	12.56	12.85	11.83	11.71	11.95	12.27
Pacific	12.93	12.78	15.53	13.15	13.68	13.46	15.94	13.76	14.23	13.77	16.43	14.24	13.65	14.28	14.73
U.S. Average	11.91	12.73	13.01	12.38	12.24	12.85	13.03	12.54	12.51	13.08	13.31	12.81	12.50	12.67	12.94
Commercial Sector															
New England	15.62	14.32	14.43	14.33	16.93	15.17	15.37	15.20	18.02	16.37	16.40	16.23	14.68	15.67	16.75
Middle Atlantic	14.29	13.32	13.94	12.94	13.18	12.98	14.73	13.48	13.42	13.33	14.95	13.67	13.64	13.62	13.88
E. N. Central	9.69	9.96	10.00	9.88	9.75	9.94	10.02	9.90	9.87	10.04	10.09	9.94	9.88	9.90	9.99
W. N. Central	8.60	9.39	9.86	8.69	8.57	9.51	10.27	8.92	8.79	9.77	10.53	9.16	9.15	9.34	9.59
S. Atlantic	9.83	9.68	9.70	9.65	9.68	9.44	9.76	9.81	9.85	9.65	9.95	9.98	9.72	9.67	9.86
E. S. Central	10.26	10.51	10.40	10.22	10.22	10.35	10.45	10.54	10.52	10.58	10.62	10.70	10.35	10.39	10.61
W. S. Central	8.13	8.34	8.30	8.15	8.05	7.90	8.36	8.14	8.24	8.13	8.51	8.21	8.24	8.13	8.28
Mountain	9.12	9.89	10.19	9.42	9.39	9.95	10.38	9.63	9.63	10.23	10.65	9.88	9.69	9.87	10.13
Pacific	11.73	13.21	15.67	13.79	12.30	13.40	16.20	14.03	12.84	13.67	16.67	14.49	13.68	14.09	14.51
U.S. Average	10.55	10.68	11.11	10.59	10.50	10.56	11.36	10.80	10.76	10.82	11.59	11.01	10.75	10.83	11.06
Industrial Sector															
New England	12.97	11.47	11.43	11.18	13.18	11.72	12.97	12.41	14.36	12.50	13.66	12.98	11.74	12.56	13.38
Middle Atlantic	8.74	7.36	7.28	7.07	7.87	7.19	7.95	7.35	7.92	7.29	7.97	7.40	7.61	7.59	7.65
E. N. Central	7.01	6.84	7.01	6.85	6.87	6.78	7.18	7.03	7.05	6.96	7.32	7.14	6.93	6.97	7.12
W. N. Central	6.52	6.68	7.32	6.32	6.49	6.88	7.78	6.60	6.70	7.04	7.94	6.72	6.72	6.96	7.12
S. Atlantic	6.80	6.68	6.96	6.49	6.56	6.38	7.02	6.51	6.69	6.57	7.05	6.51	6.73	6.62	6.71
E. S. Central	6.16	6.23	6.76	5.68	5.78	5.95	6.66	5.76	5.79	6.02	6.68	5.74	6.22	6.05	6.06
W. S. Central	5.87	6.04	6.34	5.92	5.65	5.50	6.07	5.61	5.65	5.60	6.09	5.61	6.05	5.72	5.75
Mountain	6.15	6.73	7.38	6.25	6.18	6.65	7.49	6.37	6.36	6.83	7.67	6.51	6.66	6.70	6.87
Pacific	7.70	8.11	9.59	8.63	7.83	8.28	9.86	8.94	8.12	8.41	9.99	9.03	8.54	8.76	8.92
U.S. Average	6.99	6.92	7.36	6.76	6.76	6.73	7.50	6.87	6.90	6.88	7.59	6.93	7.01	6.97	7.08
All Sectors (a)															
New England	16.05	15.19	15.20	15.29	17.90	16.46	16.61	16.08	17.79	16.68	17.05	16.85	15.45	16.79	17.11
Middle Atlantic	14.00	13.15	13.63	12.78	13.20	12.82	14.05	13.08	13.35	13.07	14.28	13.31	13.42	13.31	13.53
E. N. Central		9.73	9.93	9.74	9.72	9.75	10.06	9.87	9.87	9.94	10.25	10.01	9.73	9.85	10.02
W. N. Central	8.63	9.31	9.95	8.64	8.64	9.49	10.34	8.86	8.86	9.70	10.57	9.07	9.14	9.34	9.57
S. Atlantic	10.04	10.05	10.34	9.88	9.97	9.88	10.40	10.00	10.18	10.13	10.60	10.17	10.09	10.08	10.28
E. S. Central		9.22	9.47	8.77	8.90	9.05	9.47	8.93	9.03	9.25	9.66	9.05	9.13	9.10	9.26
W. S. Central	8.41	8.66	9.04	8.47	8.41	8.33	8.94	8.31	8.47	8.52	9.02	8.36	8.66	8.52	8.62
Mountain		9.58	10.17	9.03	9.03	9.63	10.35	9.21	9.30	9.89	10.64	9. 4 5	9.46	9.61	9.87
Pacific	11.39	11.93	14.35	12.47	11.89	12.28	14.79	12.86	12.41	12.53	15.19	13.25	12.59	13.02	13.41
U.S. Average	10.25	10.36	10.92	10.21	10.29	10.31	11.09	10.38	10.47	10.52	11.29	10.57	10.45	10.54	10.74

^{- =} no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

0.5. Energy information Admir		20			Juliook -	201		<u> </u>		20	16			Year	
ŀ	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
United States	-	-	-	-	-	•	•	-	-	-	•		•		
Coal	4,864	4,029	4,624	3,869	4,094	3,516	4,389	3,944	4,195	3,640	4,493	3,838	4,344	3,986	4,042
Natural Gas	2,715	2,898	3,725	2,948	3,236	3,452	4,228	3,159	3,086	3,305	4,123	3,143	3,074	3,521	3,415
Petroleum (a)	148	64	66	58	124	61	69	69	83	71	77	68	84	80	75
Other Gases	28	29	35	34	34	33	35	35	34	34	36	36	32	34	35
Nuclear	2,201	2,060	2,289	2,184	2,248	2,133	2,239	2,016	2,115	2,078	2,226	2,065	2,184	2,159	2,121
Renewable Energy Sources:															
Conventional Hydropower	703	849	652	633	797	688	557	507	644	808	685	635	709	636	693
Wind	553	549	367	525	506	531	414	555	603	646	473	610	498	501	583
Wood Biomass	119	114	121	118	117	109	123	116	117	111	128	121	118	116	119
Waste Biomass	56	59	60	59	55	57	61	60	58	59	62	60	58	58	60
Geothermal	45	45	45	46	47	46	48	49	49	48	48	49	46	47	48
Solar	35	61	61	44	56	88	82	49	53	108	116	78	50	69	89
Pumped Storage Hydropower	-13	-18	-21	-16	-14	-10	-15	-14	-13	-11	-15	-13	-17	-13	-13
Other Nonrenewable Fuels (b)	32	34	36	35	33	36	36	35	34	37	37	36	34	35	36
Total Generation	11,486	10,773	12,060	10,536	11,333	10,739	12,265	10,580	11,058	10,934	12,490	10,726	11,214	11,230	11,304
Northeast Census Region															
Coal	353	244	210	207	293	177	172	247	304	169	191	208	253	222	218
Natural Gas	413	485	632	493	479	533	690	538	500	567	704	546	506	561	580
Petroleum (a)	55	2	3	3	47	2	5	6	10	4	6	5	16	15	6
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	542	471	539	531	545	499	529	469	493	482	513	476	521	510	491
Hydropower (c)	94	100	84	91	91	97	86	73	93	107	93	92	92	87	97
Other Renewables (d)	73	64	60	72	76	65	60	69	73	64	62	73	67	67	68
Other Nonrenewable Fuels (b)	11	12	13	12	11	12	12	12	12	12	12	12	12	12	12
Total Generation	1,542	1,381	1,543	1,411	1,543	1,387	1,556	1,415	1,485	1,408	1,583	1,414	1,469	1,475	1,473
South Census Region	,-	,	,	,	,	,	,	, -	,	,	,	,	,	, -	, -
Coal	2,122	1,849	2,100	1,614	1,713	1,539	1,965	1,556	1,708	1,590	1,964	1,534	1,920	1,694	1,699
Natural Gas	1,544	1,729	2,088	1,637	1,976	2,060	2,381	1,778	1,777	1,997	2,352	1,761	1,751	2,049	1,972
Petroleum (a)	53	28	26	24	42	25	26	26	34	29	31	25	33	30	30
Other Gases	11	11	14	14	13	12	13	14	13	13	14	15	13	13	14
Nuclear	966	882	994	977	974	956	989	893	942	930	1,006	933	955	953	953
Hydropower (c)	150	107	80	107	127	113	75	82	130	124	83	103	111	99	110
Other Renewables (d)	241	257	204	240	228	262	232	282	300	324	272	322	235	251	305
Other Nonrenewable Fuels (b)	13	13	14	14	14	15	14	14	14	16	14	14	13	14	15
Total Generation	5,100	4,875	5,520	4,627	5,089	4,981	5.695	4.645	4,918	5,022	5,737	4,706	5,031	5,103	5,096
Midwest Census Region	0,.00	.,0.0	0,020	.,	0,000	.,	0,000	.,0.10	1,010	0,022	0,. 0.	.,. 00	0,00	0, .00	0,000
Coal	1,801	1,439	1,682	1,492	1,581	1,305	1,596	1,498	1,590	1,375	1,721	1,514	1,603	1,495	1,550
Natural Gas	194	184	203	189	295	254	330	217	254	229	289	212	193	274	246
Petroleum (a)	14	13	12	9	12	11	13	11	12	11	13	11	12	12	12
Other Gases	11	12	14	12	13	13	15	12	13	13	15	13	12	13	13
Nuclear	533	543	586	525	553	529	555	503	521	509	542	503		535	519
Hydropower (c)	33	45	44	41	42	46	43	31	42	49	45	39	41	40	44
Other Renewables (d)	253	214	148	244	250	217	161	246	259	247	178	265	214	218	237
Other Nonrenewable Fuels (b)	4	5	5	4	4	5	5	5	4	5	5	5	4	5	5
Total Generation	2,843	2,454	2,693	2,516	2,749	2,379	2,717	2,523	2,695	2,439	2,807	2,561	2,626	2,592	2,626
West Census Region	2,043	2,434	2,033	2,310	2,143	2,373	2,717	2,020	2,030	2,403	2,007	2,001	2,020	2,032	2,020
-	500	497	622	556	506	496	655	642	502	507	617	592	568	576	574
Coal Natural Gas	588 564	500	632 802	628	486	605	655 827	643 627	592 555	507 512	777	582 62 <i>4</i>	624	576 637	618
Petroleum (a)	25	21	24	23	23	23		627 27	27	27	28	28	23	637 24	27
` '	25 5	5	6	23 6	23 6	23 6	25 6		7	6			23 5		
Other Gases								6 151			6 166	6 154		6 161	6 150
Nuclear	160	164	170	150	176	149	167	151	159	156	166	154	161	161	159
Hydropower (c)	414	579	423	378	522	422	337	306	366	516	448	387	448	396	430
Other Renewables (d)	240	293	243	236	228	287	275	232	248	337	315	259	253	256	290
Other Nonrenewable Fuels (b)	5	5	5	4 000	4	4	5	4	4	5	5	5	5	4	5
Total Generation	2,001	2,063	2,304	1,982	1,953	1,992	2,297	1,997	1,960	2,066	2,362	2,044	2,088	2,060	2,109

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

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

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

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

⁽c) Conventional hydroelectric and pumped storage generation.

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

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

		201	14			20	15			20 ⁻	16		·	Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Fuel Consumption for Electricity Ge	neration,	All Secto	rs	•	•	•	•			•	•		•		
United States															
Coal (thousand st/d)	2,579	2,161	2,522	2,105	2,190	1,927	2,404	2,161	2,259	1,971	2,452	2,103	2,341	2,171	2,197
Natural Gas (million cf/d)	20,666	22,042	28,356	22,049	23,991	26,114	32,413	23,387	22,865	25,127	31,506	23,214	23,296	26,491	25,687
Petroleum (thousand b/d)	262	111	115	103	216	108	119	123	148	125	135	122	147	141	133
Residual Fuel Oil	86	24	29	24	77	26	29	30	35	30	33	29	41	41	32
Distillate Fuel Oil	87	24	24	25	66	26	28	30	37	28	29	29	40	37	31
Petroleum Coke (a)	69	60	59	50	59	52	58	58	68	62	68	59	59	57	64
Other Petroleum Liquids (b)	20	3	3	4	13	4	5	5	8	5	6	5	7	7	6
Northeast Census Region															
Coal (thousand st/d)	161	113	102	96	132	82	81	114	137	77	88	95	118	102	99
Natural Gas (million cf/d)	3,191	3,701	4,921	3,729	3,614	4,077	5,363	4,034	3,752	4,298	5,428	4,059	3,890	4,276	4,386
Petroleum (thousand b/d)	92	4	6	5	76	4	10	10	17	8	10	9	26	25	11
South Census Region															
Coal (thousand st/d)	1,084	963	1,116	855	889	820	1,047	834	894	841	1,046	822	1,004	898	901
Natural Gas (million cf/d)	11,736	13,138	15,819	12,131	14,453	15,565	18,126	13,064	13,067	15,123	17,866	12,918	13,214	15,306	14,747
Petroleum (thousand b/d)	101	51	49	45	79	45	48	49	64	53	58	47	61	55	56
Midwest Census Region															
Coal (thousand st/d)	1,005	811	952	842	884	745	904	844	891	770	970	853	902	844	871
Natural Gas (million cf/d)	1,574	1,436	1,638	1,513	2,275	1,977	2,708	1,671	1,954	1,809	2,360	1,628	1,540	2,158	1,938
Petroleum (thousand b/d)	28	23	22	17	23	22	22	22	22	20	22	22	23	22	22
West Census Region															
Coal (thousand st/d)	329	274	351	313	286	280	372	369	336	283	348	332	317	327	325
Natural Gas (million cf/d)	4,165	3,767	5,979	4,675	3,649	4,494	6,217	4,618	4,092	3,897	5,851	4,609	4,651	4,751	4,616
Petroleum (thousand b/d)	41	33	38	36	38	36	39	43	44	43	45	45	37	39	44
End-of-period U.S. Fuel Inventories	Held by E	lectric Po	ower Sect	or											
Coal (million short tons)	118.3	132.9	123.8	151.4	155.6	168.0	150.8	154.2	155.3	160.5	145.8	150.1	151.4	154.2	150.1
Residual Fuel Oil (mmb)	10.5	10.6	10.4	12.7	10.2	10.5	10.9	11.5	11.5	11.4	11.2	11.4	12.7	11.5	11.4
Distillate Fuel Oil (mmb)	15.5	15.5	15.5	16.9	15.8	15.9	15.9	16.2	16.2	16.1	16.0	16.2	16.9	16.2	16.2
Petroleum Coke (mmb)	1.7	2.0	1.9	4.2	4.1	5.2	5.2	5.1	5.0	4.9	4.8	4.8	4.2	5.1	4.8

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

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. Data include fuel consumed only for generation of electricity. Values do not include consumption by CHP plants for useful thermal output. The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

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

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

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

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

		201	14			201	5			201	16	_	·	Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Electric Power Sector															
Hydroelectric Power (a)	0.596	0.731	0.566	0.549	0.677	0.592	0.482	0.437	0.550	0.696	0.594	0.549	2.443	2.188	2.388
Wood Biomass (b)	0.063	0.056	0.064	0.063	0.063	0.056	0.065	0.060	0.063	0.057	0.070	0.063	0.247	0.244	0.254
Waste Biomass (c)	0.063	0.065	0.066	0.066	0.063	0.062	0.069	0.068	0.066	0.067	0.070	0.068	0.260	0.261	0.270
Wind	0.473	0.475	0.321	0.459	0.433	0.459	0.362	0.486	0.522	0.559	0.414	0.534	1.729	1.740	2.028
Geothermal	0.039	0.039	0.039	0.041	0.040	0.040	0.043	0.043	0.042	0.041	0.042	0.043	0.158	0.165	0.169
Solar	0.029	0.051	0.052	0.037	0.047	0.074	0.071	0.042	0.045	0.092	0.101	0.068	0.170	0.234	0.306
Subtotal	1.263	1.418	1.109	1.215	1.323	1.283	1.091	1.135	1.288	1.511	1.290	1.324	5.006	4.832	5.414
Industrial Sector															
Hydroelectric Power (a)	0.008	0.006	0.006	0.007	0.007	0.006	0.006	0.006	0.006	0.005	0.006	0.006	0.026	0.025	0.024
Wood Biomass (b)	0.318	0.327	0.335	0.336	0.321	0.312	0.310	0.305	0.293	0.289	0.300	0.303	1.317	1.248	1.185
Waste Biomass (c)	0.044	0.046	0.046	0.046	0.045	0.047	0.048	0.047	0.046	0.046	0.048	0.048	0.183	0.186	0.188
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004
Biofuel Losses and Co-products (f)	0.182	0.190	0.190	0.196	0.189	0.192	0.192	0.193	0.195	0.191	0.194	0.192	0.758	0.767	0.773
Subtotal	0.557	0.574	0.582	0.591	0.567	0.562	0.562	0.557	0.546	0.537	0.555	0.555	2.305	2.249	2.193
Commercial Sector												-			
Wood Biomass (b)	0.018	0.018	0.018	0.018	0.018	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.071	0.076	0.077
Waste Biomass (c)	0.012	0.011	0.011	0.012	0.012	0.011	0.012	0.012	0.011	0.011	0.012	0.012	0.046	0.047	0.047
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	0.036	0.036	0.036	0.036	0.037	0.037	0.037	0.037	0.036	0.036	0.037	0.037	0.144	0.148	0.146
Residential Sector															
Wood Biomass (b)	0.143	0.145	0.146	0.146	0.110	0.111	0.113	0.113	0.103	0.104	0.105	0.105	0.580	0.447	0.418
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.040	0.040	0.044
Solar (d)	0.062	0.063	0.063	0.063	0.069	0.070	0.071	0.071	0.077	0.077	0.078	0.078	0.252	0.281	0.311
Subtotal	0.215	0.217	0.220	0.220	0.189	0.191	0.194	0.194	0.191	0.193	0.195	0.195	0.871	0.768	0.773
Transportation Sector															
Ethanol (e)	0.255	0.274	0.278	0.280	0.266	0.286	0.286	0.282	0.270	0.282	0.289	0.282	1.087	1.118	1.123
Biodiesel (e)	0.039	0.046	0.056	0.052	0.034	0.058	0.065	0.070	0.059	0.063	0.069	0.071	0.193	0.227	0.261
Subtotal	0.295	0.320	0.334	0.332	0.300	0.341	0.350	0.352	0.329	0.345	0.358	0.353	1.280	1.343	1.384
All Sectors Total															
Hydroelectric Power (a)	0.604	0.737	0.572	0.555	0.685	0.598	0.488	0.443	0.556	0.701	0.600	0.555	2.469	2.213	2.412
Wood Biomass (b)	0.542	0.546	0.563	0.563	0.512	0.500	0.507	0.496	0.478	0.469	0.495	0.491	2.214	2.016	1.934
Waste Biomass (c)	0.119	0.121	0.124	0.124	0.120	0.121	0.128	0.126	0.123	0.124	0.130	0.128	0.488	0.495	0.504
Wind	0.473	0.475	0.321	0.459	0.433	0.459	0.362	0.486	0.522	0.559	0.414	0.534	1.729	1.740	2.028
Geothermal	0.055	0.055	0.055	0.057	0.056	0.056	0.059	0.059	0.059	0.058	0.060	0.060	0.222	0.230	0.237
Solar	0.092	0.116	0.117	0.102	0.117	0.146	0.143	0.114	0.123	0.171	0.180	0.147	0.427	0.521	0.622
Ethanol (e)	0.260	0.279	0.283	0.285	0.271	0.289	0.293	0.287	0.276	0.287	0.295	0.287	1.107	1.139	1.145
Biodiesel (e)	0.039	0.046	0.056	0.052	0.034	0.058	0.065	0.070	0.059	0.063	0.069	0.071	0.193	0.227	0.261
Biofuel Losses and Co-products (f)	0.182	0.190	0.190	0.196	0.189	0.192	0.192	0.193	0.195	0.191	0.194	0.192	0.758	0.767	0.773
Total Consumption	2.366	2.565	2.282	2.394	2.417	2.442	2.234	2.274	2.389	2.622	2.436	2.463	9.607	9.367	9.910

^{- =} no data available

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

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

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

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

⁽b) Wood and wood-derived fuels.

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

 $⁽d) \ \ \text{Includes small-scale solar thermal and photovoltaic energy used in the commercial, industrial, and electric power sectors. }$

⁽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.

⁽f) Losses and co-products from the production of fuel ethanol and biodiesel

Table 9a. U.S. Macroeconomic Indicators and CO₂ Emissions

No. Part P	C.C. Energy information Administration	i Onort	201		1001	сристыс		E			201	16			Year	
Microscinomic Microscinomi		1st			4th	1st			4th	1st			4th	2014		2016
Real Gross Demester Product (miller or miller 200 blane - SAPA) 1,630 1,630 1,630 1,230 1,13	Macroeconomic	101	Liid	ora	74.11	100	Liid	o.u	7611	101	Liiu	ora	7411	2014	20.0	
Seal Pennand Communiprior Egency (15 832	16 010	16 206	16 205	16 288	16 381	16.458	16 568	16 667	16 774	16 800	17 028	16.086	16 424	16 840
Colling Procession 1,004 1,015 1,016 1,126 1,136 1,136 1,267	,	13,032	10,010	10,200	10,233	10,200	10,501	10,400	10,000	10,007	10,114	10,030	17,020	10,000	10,727	10,040
Seal Fund Investment (Designer chained 2009 delays - SAAP) 2,595 2,643 2,673 2,671 2,671 2,772 2,872 2,872 2,873 2,875	·	10.844	10 013	11 000	11 120	11 179	11 250	11 220	11 /20	11 /00	11 572	11 654	11 727	10.060	11 200	11 612
Colling contamined 2009 dolling - SAAR) A.536 A.596 A.548 A.576 A.	•	10,044	10,913	11,000	11,120	11,170	11,239	11,336	11,420	11,400	11,573	11,004	11,737	10,909	11,299	11,013
Second		2 526	2 505	2 642	2 672	2 674	2 676	2 725	0.776	2 027	2 062	2.007	2.045	2.642	2 712	2 002
Colling Coll	•	2,536	2,595	2,043	2,073	2,071	2,070	2,725	2,770	2,027	2,003	2,097	2,945	2,012	2,712	2,003
Real Covernment Expenditures		40	400				407	0.4		0.4		40	0.0		0.4	47
Seminary	,	40	100	95	93	111	107	61	44	21	8	13	26	82	81	17
Real Exports of Cootals & Services	·	0.000	0.004	0.040	0.000	0.000	0.000	0.044	0.045	0.047	0.000	0.000	0.000	0.000	0.004	0.005
Column C	•	2,869	2,881	2,912	2,898	2,893	2,899	2,911	2,915	2,917	2,922	2,926	2,933	2,890	2,904	2,925
Real Imports of Cootes & Services (Cisconer & Services (Cisconer & Cootes & Services (Cisconer & Cootes & Services & Cisconer & Cisc	•	0.007	0.004	0.404	0.407		0.400	0.400	0.450	0.470	0.000	0.000	0.050	0.005	0.405	0.045
	,	2,027	2,081	2,104	2,127	2,095	2,123	2,130	2,153	2,178	2,203	2,228	2,253	2,085	2,125	2,215
Real Disposable Personal Income (ciliion chained 2009 collains - SARA) 11810 1,1900 12,093 12,251 12,312 12,417 12,477 12,477 12,670 12,637 12,742 12,874 12	•															
(million chained 2009 collars SAAR)	,	2,474	2,541	2,535	2,599	2,643	2,666	2,694	2,726	2,753	2,783	2,817	2,851	2,537	2,682	2,801
Non-Fame Proplement	•															
Millions 137.8 136.6 139.4 140.2 141.0 141.6 142.2 142.7 143.1 143.5 144.0 144.7 139.0 143.8 1	•	11,810	11,900	11,970	12,093	12,251	12,312	12,417	12,477	12,576	12,637	12,742	12,846	11,943	12,364	12,700
Civilian Unemployment Rate (percent) 0.6																
Control		. 137.8	138.6	139.4	140.2	141.0	141.6	142.2	142.7	143.1	143.5	144.0	144.7	139.0	141.9	143.8
Housing Starts																
millionis - SAAR) 0.93 0.98 1.03 1.06 0.98 1.14 1.14 1.10 1.20 1.20 1.26 1.31 1.37 1.00 1.10 1.10 1.20 1.00 1.11 1.20 1.00 1.11 1.20 1.00 1	(percent)	. 6.6	6.2	6.1	5.7	5.6	5.4	5.3	5.3	5.3	5.3	5.3	5.3	6.2	5.4	5.3
Industrial Production Indices (Index, 2007=100) Total Industrial Production 102.2 103.7 104.7 105.9 105.5 103.3 103.6 103.8 103.7 104.8 106.8 107.7 108.8 107.7 108.8 108.6 107.7 108.8 108.6 107.7 108.8 108.0 108.6 107.7 108.8 108.6 107.7 108.9 108.6 107.7 108.9 108.6 107.7 108.9 108.6 107.7 108.9 108.6 107.7 108.9 108.6 107.7 108.9 108.6 108.7 108.7 108.7 108.9 108.6 108.7 108.7 108.9 108.6 108.7 108.7 108.8 108.6 108.7 108.7 108.9 108.6 108.7 108.8 108.6 108.7 108.7 108.9 108.6 108.6 108.7 108.9 108.6 108.6 108.7 108.9 108.6 108.7 108.9 108.6 108.6 108.7 108.9 108.6 108.6 108.7 108.8 108.6 108.7 108.8 108.6 108.7 108.8 108.6 108.7 108.8 108.6 108.6 108.7 108.8 108.6 108.6 108.	Housing Starts															
Total Industrial Production 102 103.7 104.7 105.9 105.9 105.8 105.8 106.8 106.8 106.8 107.7 108.8 104.1 105.7 107.8 103.3 103.8 103.7 104.8 104.1 105.7 107.8 103.3 103.8 103.7 104.8 104.8 104.8 105.9 103.3 103.8 103.8 104.8 104.8 104.8 104.8 106.8 106.8 107.8 107.8 10	(millions - SAAR)	0.93	0.98	1.03	1.06	0.98	1.14	1.14	1.20	1.23	1.26	1.31	1.37	1.00	1.11	1.29
Total Industrial Production 102 103.7 104.7 105.9 105.9 105.8 105.8 106.8 106.8 106.8 107.7 108.8 104.1 105.7 107.8 103.3 103.8 103.7 104.8 104.1 105.7 107.8 103.3 103.8 103.7 104.8 104.8 104.8 105.9 103.3 103.8 103.8 104.8 104.8 104.8 104.8 106.8 106.8 107.8 107.8 10																
Manufacturing	•	•														
Food																
Paper	•															
Petroleum and Coal Products																
Chemicals 87.7 88.4 90.1 91.3 32.0 92.0 82.5 92.8 93.3 94.1 95.3 96.5 89.4 92.3 94.6 Nonmetaliic Mineral Products 75.5 77.4 79.9 80.2 80.5 80.5 80.5 80.6 81.5 82.6 84.1 85.7 87.5 89.4 78.3 81.3 86.7 87.5 89.4 78.3 81.3 86.7 87.5 89.4 78.3 81.3 86.7 89.4 89.3 89.5																
Nonnetalik Mineral Products 75.5 77.4 79.9 80.2 80.5 80.6 81.5 82.6 84.1 85.7 87.5 80.4 78.3 81.3 86.7 87.5 77.6 78.3 81.3 81.7 81.8 91.5	Petroleum and Coal Products	97.7	98.2	98.9	98.7	99.4	100.6	101.6	102.2	102.5	102.9	103.3	103.7	98.4	101.0	103.1
Primary Metals			88.4	90.1	91.3	92.0	92.0	92.5	92.8	93.3	94.1	95.3	96.5	89.4	92.3	94.8
Coal-weighted Manufacturing (a) 91.8 93.7 94.6 94.4 93.3 93.6 94.2 94.3 94.5 96.3 96.3 97.4 93.6 93.9 93.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 98.8 99.9 94.2 95.6 96.1 96.7 96.9 97.1 98.1 99.1 104.3 99.2 100.4 102.6 98.8 99.9 94.2 95.6 96.1 96.7 96.9 97.1 98.1 99.4 100.7 95.0 96.4 98.8 99.9 94.2 95.6 96.1 96.7 96.9 97.1 98.1 99.4 100.7 95.0 96.4 98.8 99.9 94.2 95.6 96.1 96.7 96.9 97.1 98.1 99.1 104.3 99.2 100.4 102.5 95.6 96.1 96.7 96.9 97.1 98.1 99.1 99.1 104.3 99.2 100.4 102.5 95.6 96.1 96.7 96.9 97.1 98.1 99.1 99.1 104.3 99.2 102.4 24.9 24			77.4	79.9	80.2	80.5	80.6	81.5	82.6	84.1	85.7	87.5	89.4	78.3	81.3	86.7
Distillatie-weighted Manufacturing (a)	Primary Metals	101.9	106.2	108.2	105.5	100.9	101.1	101.7	101.3	100.9	101.6	102.8	104.1	105.5	101.2	102.4
Electricly-weighted Manufacturing (a) 97.1 99.1 99.6 96.2 95.6 96.1 96.7 96.9 97.1 101.1 101.9 103.1 104.3 99.2 100.4 102.6 Natural Gas-weighted Manufacturing (a) 93.6 94.6 95.6 96.2 95.6 96.1 96.7 96.9 97.1 98.1 99.4 100.7 99.0 95.0 96.4 98.8 Price Indexes Consumer Price Index (all urban consumers) (index, 1982-1984-1.00) 235 2.37 2.38 2.37 2.38 2.37 2.38 2.37 2.38 2.38 2.40 2.41 2.43 2.44 2.37 2.37 2.37 2.42 Producer Price Index: All Commodities (index, 1982-1984-1.00) 2.06 2.07 2.06 2.02 1.92 1.92 1.92 1.92 1.92 1.93 1.94 1.96 1.95 2.05 1.92 1.95 Producer Price Index: Patroleum (index, 1982-190) 2.08 2.09 2.09 2.09 2.09 2.09 2.09 1.09.7 1.09	Coal-weighted Manufacturing (a)	91.8	93.7	94.6	94.4	93.3	93.6	94.2	94.3	94.5	95.3	96.3	97.4	93.6	93.9	95.9
Natural Gas-weighted Manufacturing (a) 93.6 94.6 95.6 96.2 95.6 96.1 96.7 96.9 97.1 96.9 97.1 98.1 99.4 100.7 95.0 96.4 98.8 Price Indexes Consumer Price Index (all urban consumers) (ndex, 1982-1984=1.00) 2.35 2.37 2.38 2.37 2.38 2.37 2.35 2.37 2.38 2.37 2.38 2.38 2.30 2.40 2.41 2.43 2.44 2.37 2.37 2.37 2.42 Producer Price Index, All Commodities (ndex, 1982=1.00) 2.88 2.99 2.90 2.95 1.71 1.92 1.92 1.92 1.92 1.92 1.92 1.93 1.94 1.96 1.95 1.94 1.96 1.95 2.05 1.92 1.95 1.95 1.94 1.96 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95	Distillate-weighted Manufacturing (a)	92.3	93.9	95.0	95.6	95.1	95.2	95.7	96.2	96.9	97.8	98.8	99.9	94.2	95.6	98.3
Price Index Price Index (all urban consumers) Consumer Consu	Electricity-weighted Manufacturing (a)	97.1	99.1	100.1	100.6	99.8	100.2	100.7	100.9	101.1	101.9	103.1	104.3	99.2	100.4	102.6
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	Natural Gas-weighted Manufacturing (a)	93.6	94.6	95.6	96.2	95.6	96.1	96.7	96.9	97.1	98.1	99.4	100.7	95.0	96.4	98.8
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)																
(index, 1982-1984=1.00)																
Producer Price Index: All Commodities (index, 1982=1.00)	,															
(index, 1982=1.00)	,	2.35	2.37	2.38	2.37	2.35	2.37	2.38	2.38	2.40	2.41	2.43	2.44	2.37	2.37	2.42
Producer Price Index: Petroleum (index, 1982=1.00)																
(index, 1982=1.00)	,	. 2.06	2.07	2.06	2.02	1.92	1.92	1.92	1.92	1.93	1.94	1.96	1.95	2.05	1.92	1.95
GDP Implicit Price Deflator (index, 2009=100)																
Miscellaneous Vehicle Miles Traveled (b) (million miles/day)		. 2.88	2.99	2.90	2.35	1.71	1.95	1.84	1.62	1.70	1.91	1.94	1.81	2.78	1.78	1.84
Miscellaneous Vehicle Miles Traveled (b) (million miles/day)	GDP Implicit Price Deflator															
Vehicle Miles Traveled (b) (million miles/day)	(index, 2009=100)	. 107.7	108.3	108.6	108.7	108.7	109.2	109.7	110.1	110.7	111.3	111.7	112.2	108.3	109.4	111.5
Vehicle Miles Traveled (b) (million miles/day)																
(million miles/day)																
Air Travel Capacity (Available ton-miles/day, thousands)																
(Available ton-miles/day, thousands)		7,708	8,691	8,614	8,300	7,991	8,983	8,855	8,497	8,154	8,992	8,909	8,578	8,331	8,584	8,659
Aircraft Utilization (Revenue ton-miles/day, thousands)	Air Travel Capacity															
(Revenue ton-miles/day, thousands)	(Available ton-miles/day, thousands)	503	548	561	535	517	574	581	544	506	557	583	547	537	554	548
Airline Ticket Price Index (index, 1982-1984=100)	Aircraft Utilization															
(index, 1982-1984=100)	(Revenue ton-miles/day, thousands)	310	347	353	332	322	356	371	342	312	352	376	344	336	348	346
Raw Steel Production (million short tons per day)	Airline Ticket Price Index															
Carbon Dioxide (CO2) Emissions (million metric tons) 547 556 568 577 562 568 577 576 564 569 578 577 2,249 2,287 Natural Gas 461 298 305 377 471 310 326 391 461 319 330 396 1,441 1,498 1,506 Coal 463 397 461 391 397 358 443 402 414 364 450 391 1,713 1,599 1,619		297.3	334.3	301.0	298.2	286.4	313.0	288.7	294.5	295.0	317.3	306.7	311.5	307.7	295.6	307.6
Carbon Dioxide (CO ₂) Emissions (million metric tons) Petroleum 547 556 568 577 562 568 577 576 564 569 578 577 2,249 2,283 2,287 Natural Gas 461 298 305 377 471 310 326 391 461 319 330 396 1,441 1,498 1,506 Coal 463 397 461 391 397 358 443 402 414 364 450 391 1,713 1,599 1,619	Raw Steel Production															
Petroleum 547 556 568 577 562 568 577 576 564 569 578 577 2,249 2,283 2,287 Natural Gas 461 298 305 377 471 310 326 391 461 319 330 396 1,441 1,498 1,506 Coal 463 397 461 391 397 358 443 402 414 364 450 391 1,713 1,599 1,619	(million short tons per day)	0.262	0.263	0.271	0.262	0.247	0.242	0.249	0.238	0.242	0.252	0.237	0.222	0.264	0.244	0.238
Petroleum 547 556 568 577 562 568 577 576 564 569 578 577 2,249 2,283 2,287 Natural Gas 461 298 305 377 471 310 326 391 461 319 330 396 1,441 1,498 1,506 Coal 463 397 461 391 397 358 443 402 414 364 450 391 1,713 1,599 1,619	Carbon Diavida (CO) Frainciano (milli	4via 4a \														
Natural Gas													1	_		_
Coal														•		
Total Energy (c)																
	l otal Energy (c)	. 1,475	1,254	1,337	1,348	1,432	1,239	1,349	1,372	1,442	1,255	1,360	1,367	5,414	5,391	5,425

^{- =} no data available

SAAR = Seasonally-adjusted annual rate

⁽a) Fuel share weights of individual sector indices based on EIAManufacturing Energy Consumption Survey.

⁽b) Total highway travel includes gasoline and diesel fuel vehicles.

⁽c) Includes electric power sector use of geothermal energy and non-biomass waste.

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

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

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

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information	on Admir			- i erm E	nergy O		•	per 201	5			ı			
		201				201		4.1		201				Year	
Building State Building	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016
Real Gross State Product		,	000	070	077	000	007	000	007	001	007	014	005	005	005
New England	855	861	866	878	877	883	887	892	897	901	907	914	865	885	905
Middle Atlantic	2,393	2,409	2,443	2,468	2,464	2,478	2,491	2,506	2,520	2,533	2,547	2,565	2,428	2,485	2,541
E. N. Central	2,193	2,215	2,231	2,241	2,239	2,250	2,260	2,273	2,284	2,295	2,309	2,325	2,220	2,255	2,303
W. N. Central	1,020	1,032	1,044	1,045	1,044	1,050	1,055	1,061	1,067	1,073	1,081	1,089	1,035	1,053	1,078
S. Atlantic	2,796	2,832	2,859	2,872	2,875	2,897	2,914	2,936	2,956	2,976	2,999	3,026	2,840	2,905	2,989
E. S. Central W. S. Central	726 1.040	735	738	741	741	745	748	753	757	761	766	772	735	747	764
	1,949	1,979	2,006	2,006	2,002	2,005	2,010	2,025	2,037	2,055	2,068	2,088	1,985	2,011	2,062
Mountain Pacific	1,005	1,015 2,845	1,028	1,041	1,043	1,050	1,056 2,948	1,063 2,968	1,070 2,988	1,079	1,088	1,098	1,022	1,053	1,084
	2,808	•	2,904	2,915	2,913	2,932	2,940	2,900	2,900	3,009	3,032	3,058	2,868	2,941	3,022
Industrial Output, Manufa					00.2	00.0	00.0	00.2	00.0	100.0	101.0	100.0	07.5	00.0	100.7
New England	96.1	97.3	98.0	98.7	98.3	98.9	98.8	99.3	99.3	100.2	101.2	102.2	97.5	98.8	100.7
Middle Atlantic	94.4	95.7	96.4	97.2	96.9	97.4	97.4	97.9	97.9	98.6	99.4	100.5	95.9	97.4	99.1
E. N. Central	101.5	103.4	104.7	106.2	106.5	107.3	107.5	108.1	108.0	108.8	109.8	110.9	104.0	107.3	109.4
W. N. Central	102.6	104.5	105.6	106.9 99.4	106.5 99.4	106.8	106.8	107.5	107.7	108.7	109.9	111.1	104.9	106.9	109.4
S. Atlantic	95.0	96.9	98.3			99.9	100.3	100.9	101.0	101.9	102.8	103.9	97.4	100.1	102.4
E. S. Central W. S. Central	97.5	99.3	101.0	102.1	102.1 107.8	102.1	102.3	103.0	103.1	103.9	104.8	105.8	100.0	102.4	104.4
	104.1	106.2	107.6	108.9		107.0	106.7	107.1	107.1	107.9	109.0	110.3	106.7	107.1	108.6
Mountain	101.5	103.3	104.5	105.5	106.0	106.5	106.8	107.7	108.1	109.5	111.0	112.5	103.7	106.7	110.3
Pacific	100.7	102.5	103.5	104.4	104.3	105.1	104.9	105.4	105.6	106.6	107.8	109.2	102.8	104.9	107.3
Real Personal Income (Bil New England	760	') 761	766	778	790	795	801	804	810	814	819	825	766	797	817
Middle Atlantic	2,035	2,039	2,054	2,081	2,117	2,124	2,143	2,151	2,168	2,174	2,187	2,204	2,053	2,134	2,183
E. N. Central	1,855	1,864	1,871	1,893	1,922	1,934	2,143 1,948	1,955	1,969	1,976	1,988	2,204	1,871	2,134 1,940	2,763 1,984
W. N. Central	872	881	885	894	901	907	916	921	929	931	938	945	883	911	936
S. Atlantic	2,474	2,494	2,508	2,539	2,582	2,600	2,625	2,639	2,663	2,679	2,700	2,724	2,504	2,611	2,692
E. S. Central	653	658	660	668	679	682	687	690	696	699	703	709	660	684	702
W. S. Central	1,542	1,556	1,571	1,589	1,610	1,612	1,625	1,632	1,647	1,657	1,671	1,688	1,564	1,620	1.666
Mountain	869	874	880	894	907	912	921	926	935	941	949	958	879	917	945
Pacific	2,327	2,345	2,373	2,400	2,441	2,460	2,483	2,497	2,519	2,533	2,552	2,576	2,361	2,470	2,545
Households (Thousands)	-	2,343	2,373	2,400	2,771	2,400	2,400	2,431	2,019	2,000	2,002	2,370	2,301	2,470	2,040
New England	5,764	5,765	5,762	5,767	5,771	5,771	5,771	5,776	5,779	5,782	5,786	5,791	5,767	5,776	5,791
Middle Atlantic	15,836	15,838	15,829	15,843	15,850	15,849	15,844	15,853	15,857	15,865	15,875	15,887	15,843	15,853	15,887
E. N. Central	18,576	18,587	18,582	18,596	18,598	18,593	18,586	18,598	18,606	18,617	18,629	18,644	18,596	18,598	18,644
W. N. Central	8,410	8,423	8,429	8,447	8,460	8,469	8,475	8,489	8,500	8,514	8,528	8,545	8,447	8,489	8,545
S. Atlantic	24,217	24,276	24,320	24,398	24,467	24,525	24,577	24,654	24,725	24,801	24,879	24,961	24,398	24,654	24,961
E. S. Central	7,450	7,453	7,452	7,461	7,466	7,468	7,468	7,477	7,485	7,496	7,507	7,519	7,461	7,477	7,519
W. S. Central	14,103	14,148	14,182	14,232	14,275	14,311	14,341	14,385	14,425	14,468	14,513	14,559	14,232	14,385	14,559
Mountain	8,604	8,625	8,642	8,672	8,698	8,720	8,741	8,770	8,798	8,829	8,862	8,897	8,672	8,770	8,897
Pacific	18,186	18,232	18,267	18,323	18,371	18,410	18,440	18,485	18,531	18,578	18,624	18,674	18,323	18,485	18,674
Total Non-farm Employme	-		,	,	,	,	,	,	,	,	,	,	,	,	,
New England	7.1	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.3	7.1	7.2	7.3
Middle Atlantic	18.7	18.8	18.8	18.9	18.9	19.0	19.1	19.1	19.2	19.2	19.2	19.3	18.8	19.0	19.2
E. N. Central	21.0	21.1	21.2	21.3	21.4	21.5	21.5	21.6	21.6	21.7	21.7	21.8	21.1	21.5	21.7
W. N. Central	10.3	10.3	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.6	10.6	10.6	10.3	10.5	10.6
S. Atlantic	26.1	26.2	26.4	26.6	26.7	26.9	27.1	27.2	27.3	27.4	27.5	27.7	26.3	27.0	27.5
E. S. Central	7.6	7.7	7.7	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	8.0	7.7	7.8	7.9
W. S. Central	16.1	16.2	16.4	16.5	16.6	16.6	16.7	16.7	16.8	16.8	16.9	17.0	16.3	16.6	16.9
Mountain	9.7	9.7	9.8	9.9	9.9	10.0	10.0	10.1	10.1	10.2	10.2	10.3	9.8	10.0	10.2
Pacific	21.1	21.2	21.4	21.6	21.8	21.9	22.0	22.1	22.2	22.2	22.3	22.4	21.3	21.9	22.3

^{- =} no data available

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

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

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

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

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Informat	ion Admi	on Administration Short-T			Energy (Outlook -	Septem	ber 201	15							
		201				2015				2016				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2014	2015	2016	
Heating Degree Days																
New England	3,563	885	148	2,082	3,857	820	134	2,174	3,188	862	135	2,175	6,678	6,985	6,360	
Middle Atlantic	3,439	702	100	1,966	3,584	612	96	1,977	2,917	675	88	1,981	6,208	6,269	5,661	
E. N. Central	3,935	728	168	2,365	3,694	660	147	2,244	3,086	724	128	2,248	7,196	6,746	6,186	
W. N. Central	3,864	755	178	2,513	3,376	653	167	2,427	3,174	685	154	2,429	7,309	6,622	6,442	
South Atlantic	1,714	196	14	1,041	1,675	156	16	997	1,481	210	16	997	2,964	2,844	2,705	
E. S. Central	2,266	229	17	1,410	2,146	185	25	1,338	1,875	266	23	1,338	3,923	3,693	3,502	
W. S. Central	1,481	92	4	848	1,397	69	6	872	1,301	102	5	848	2,425	2,344	2,256	
Mountain	2,116	713	151	1,762	1,900	706	144	1,855	2,202	667	142	1,840	4,741	4,605	4,852	
Pacific	1,248	466	56	986	1,076	526	57	1,044	1,308	501	88	1,080	2,757	2,702	2,977	
U.S. Average	2,449	480	81	1,541	2,342	443	76	1,528	2,114	477	76	1,529	4,551	4,389	4,196	
Heating Degree Days, Pri	ior 10-year	Average														
New England	3,152	836	134	2,167	3,166	838	134	2,147	3,213	824	140	2,143	6,289	6,286	6,320	
Middle Atlantic	2,905	660	88	1,983	2,935	666	90	1,976	2,983	651	95	1,970	5,636	5,667	5,699	
E. N. Central	3,117	690	120	2,243	3,192	694	123	2,262	3,247	689	132	2,256	6,170	6,272	6,324	
W. N. Central	3,209	686	149	2,404	3,273	691	150	2,433	3,298	693	158	2,439	6,449	6,547	6,588	
South Atlantic	1,465	194	14	1,006	1,481	196	14	1,013	1,502	185	15	1,008	2,679	2,704	2,711	
E. S. Central	1,810	236	19	1,336	1,853	236	19	1,358	1,898	225	20	1,353	3,402	3,465	3,497	
W. S. Central	1,157	85	5	827	1,189	86	5	834	1,221	83	5	840	2,075	2,113	2,149	
Mountain	2,267	728	156	1,887	2,258	730	150	1,873	2,230	725	149	1,878	5,038	5,011	4,982	
Pacific	1,554	625	96	1,236	1,533	621	92	1,205	1,493	609	86	1,196	3,511	3,452	3,384	
U.S. Average	2,161	492	77	1,569	2,182	493	77	1,567	2,199	483	79	1,562	4,298	4,319	4,323	
Cooling Degree Days																
New England	0	75	339	0	0	71	426	1	0	89	415	1	414	497	504	
Middle Atlantic	0	158	432	6	0	184	549	5	0	169	561	5	595	738	735	
E. N. Central	. 0	230	377	3	0	219	447	8	0	217	544	8	609	674	769	
W. N. Central	. 0	262	538	12	3	267	610	11	3	273	683	11	812	891	969	
South Atlantic	107	644	1,060	194	136	763	1,151	227	111	620	1,137	229	2,005	2,277	2,097	
E. S. Central	6	506	925	66	23	582	1,025	65	26	494	1,034	65	1,503	1,694	1,619	
W. S. Central	35	780	1,442	218	52	855	1,510	185	65	814	1,487	196	2,475	2,603	2,562	
Mountain	. 31	438	871	95	46	434	893	78	19	442	958	83	1,435	1,452	1,502	
Pacific	41	227	690	113	54	233	637	76	31	199	579	75	1,071	1,001	884	
U.S. Average	35	394	775	96	47	434	835	92	38	391	846	94	1,299	1,408	1,369	
Cooling Degree Days, Pr	ior 10-year	Average														
New England	0	83	417	1	0	85	419	1	0	81	413	1	500	505	495	
Middle Atlantic	0	167	558	5	0	168	557	5	0	168	542	6	730	731	715	
E. N. Central	. 3	230	546	6	3	234	545	6	3	229	523	6	785	787	760	
W. N. Central	. 7	277	678	9	7	282	683	9	7	279	669	9	972	981	964	
South Atlantic	110	636	1,154	213	110	635	1,155	210	113	660	1,143	211	2,112	2,109	2,127	
E. S. Central	35	528	1,045	57	33	526	1,053	52	32	542	1,039	53	1,666	1,664	1,666	
W. S. Central	102	882	1,506	190	94	883	1,519	184	91	890	1,512	183	2,680	2,679	2,675	
Mountain	. 18	420	922	70	17	424	930	75	21	430	928	75	1,431	1,446	1,454	
Pacific	26	166	589	58	26	170	601	65	29	181	608	67	839	863	885	
U.S. Average		393	843	83	41	396	849	83	42	404	841	84	1,361	1,369	1,371	

^{- =} 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).