August 2012

Short-Term Energy Outlook

Highlights

- EIA projects that the Brent crude oil spot price will average about \$103 per barrel during the second half of 2012, about \$3.50 per barrel higher than in last month's *Outlook*. The forecast Brent crude oil spot price falls to an average of \$100 per barrel in 2013. The projected West Texas Intermediate (WTI) crude oil spot price discount to Brent crude oil narrows from about \$14 in the third quarter of 2012 to \$9 by late 2013. These price forecasts assume that world oil-consumption-weighted real gross domestic product (GDP), which increased by 3.0 percent in 2011, grows by 2.8 percent in 2012 and 2.9 percent in 2013.
- With higher crude oil prices, EIA has increased the average regular gasoline retail price forecast for the third quarter of 2012 to \$3.49 per gallon from \$3.39 per gallon in last month's *Outlook*. EIA expects regular gasoline retail prices, which averaged \$3.53 per gallon in 2011, to average \$3.53 per gallon in 2012 and \$3.33 per gallon in 2013.
- EIA expects U.S. total crude oil production to average 6.3 million barrels per day (bbl/d) in 2012, an increase of 0.6 million bbl/d from last year, and the highest level of production since 1997. Projected U.S. domestic crude oil production increases to 6.7 million bbl/d in 2013.
- As a result of drought conditions affecting corn harvests and prices throughout the
 Midwest, ethanol production fell from 920 thousand bbl/d for the week ending June 8,
 2012 to 809 thousand bbl/d for the week ending July 27, 2012. EIA has reduced its 2012
 ethanol production forecast from 900 thousand bbl/d (13.8 billion gallons) in last
 month's Outlook to 870 thousand bbl/d (13.3 billion gallons). EIA expects ethanol
 production to recover in the second half of 2013, averaging about 880 thousand bbl/d
 for the year.
- Natural gas working inventories ended July 2012 at an estimated 3.2 trillion cubic feet (Tcf), about 17 percent above the same time last year. EIA expects the Henry Hub natural gas spot price, which averaged \$4.00 per million British thermal units (MMBtu) in 2011, to average \$2.67 per MMBtu in 2012 and \$3.34 per MMBtu in 2013.

Global Crude Oil and Liquid Fuels

Global Crude Oil and Liquid Fuels Overview. EIA expects global liquid fuels consumption growth of about 0.8 million bbl/d in 2012 and 0.9 million bbl/d in 2013. Despite downside risks to global oil demand, the spot price for Brent crude climbed back above \$100 per barrel in July after prices sank below \$90 per barrel in June. Markets have rallied around expectations that policymakers in the European Union (EU), China, and the United States will provide more economic stimulus to counteract slowing growth. Additionally, Iran's threats to block oil from transiting through the Strait of Hormuz have triggered market anxiety and prompted upward price pressure. Although angst over global growth and supply disruptions may continue to contribute to price volatility, EIA believes that Brent crude oil, a benchmark for the global oil price, will average \$104 per barrel for the third quarter of 2012. EIA estimates that world liquids consumption will outpace production by 0.9 million bb/d in the third quarter, as world demand reaches its seasonal peak. EIA expects that the significant stock builds that occurred in the first half of 2012 will help relieve global oil markets in the second half of 2012.

Several upside and downside risks could move prices higher or lower than projected. The possibility that the economic situation in EU countries could deteriorate further poses a downside risk to global oil demand and prices, though oil prices will likely rise and fall as perceptions about the likelihood of a deeper crisis evolve. In the current *Outlook*, consumption in Europe is expected to fall year-over-year by 0.4 million bbl/d in 2012 and by a further 0.2 million bbl/d in 2013. The possibility of slower growth in China, which has been a key driver of increased oil demand in recent years, could also curb demand. China's weakening exports, particularly to Europe, and slower industrial and domestic growth experienced in the first half of 2012 could place downward pressure on oil prices, while prospects for more economic stimulus could swing the pendulum towards higher prices. EIA currently projects annual increases in consumption in China of around 0.4 million bbl/d in both 2012 and 2013. On the supply side, oil prices could be higher than projected in this *Outlook* if recoveries from supply disruptions are slower than forecast, additional disruptions occur, or supply growth is lower than expected.

Global Crude Oil and Liquid Fuels Consumption. World liquid fuels consumption grew by an estimated 0.8 million bbl/d in 2011. EIA expects consumption growth of 0.8 million bbl/d in 2012 and 0.9 million bb/d in 2013, with China, the Middle East, Central and South America, and other countries outside of the Organization for Economic Cooperation and Development (OECD) accounting for essentially all consumption growth. Projected OECD liquid fuels consumption declines by 0.4 million bbl/d in 2012 and by a lesser 0.1 million bbd/d in 2013, buoyed by growth in liquid fuels consumption in the United States.

In the third quarter of 2012, world demand will reach its seasonal peak, reflecting both the U.S. driving season and increased oil use for electricity generation in the Middle East. Projected consumption exceeds production by 0.9 million bbl/d, leading to global stock draws. Given overall lower demand expectations, the impact of seasonality on the tightness of global oil markets is expected to be less than in 2010 or 2011, when third-quarter consumption outpaced production by 1.1 million bbl/d and 1.7 million bbl/d, respectively.

Non-OPEC Supply. EIA expects liquid fuels production by non-Organization of the Petroleum Exporting Countries (OPEC) to rise by 0.6 million bbl/d in 2012, and by a further 1.3 million bbl/d in 2013. The largest area of non-OPEC growth is North America, where production increases by 940 thousand bbl/d and 440 thousand bbl/d in 2012 and 2013, respectively, resulting from continued production growth from U.S. onshore shale and other tight oil formations and from Canadian oil sands. EIA expects that Kazakhstan, which will commence commercial production in the Kashagan field next year, will increase its total production by 200 thousand bbl/d in 2013. In Brazil, output is projected to rise by 140 thousand bbl/d in 2013, with increased output from its offshore, pre-salt oil fields. Forecast production also rises in China, Russia, and Colombia over the next two years, while production declines in Mexico and the North Sea.

EIA revised Brazil's historical and projected liquid fuels production estimates to reflect the seasonality of ethanol production. Brazil's ethanol production fluctuates considerably over the course of the year because, unlike the corn used for ethanol production in the United States, Brazil's sugarcane feedstock must be processed into ethanol almost immediately after it is harvested. Accordingly, ethanol production typically ramps up in the second quarter and peaks in the third quarter of any given year, when the greatest amount of sugarcane in the leading ethanol-producing region of south-central Brazil is harvested, and reaches its nadir in the first quarter. Brazilian ethanol production in April and May was below even the disappointing levels of 2011 due to poor weather conditions. Though preliminary July data indicates that production has since recovered to some extent, Brazil's ethanol production is forecast to remain below the levels reached in the calendar year of 2010, when it averaged almost 500 thousand bbl/d. As a result, Brazil will depend on some combination of higher ethanol and gasoline imports.

The incorporation of seasonal variations into EIA's estimates of Brazilian ethanol production has unique implications for the global liquid fuels balance. The relatively large volumes of Brazilian ethanol that are produced in the third quarter would superficially imply that liquid fuels markets are slightly less tight in that quarter than previously estimated, with countervailing impacts on balances in the historically looser first quarter. Insofar as biofuels are close substitutes for petroleum products, this is a reasonable reflection of reality. However, certain caveats apply. First, Brazilian ethanol consumption, sales, and exports do not fluctuate as significantly as production, although ethanol storage infrastructure is not fully developed and supplies have been constrained in past years during inter-harvest periods. Second, unlike crude oil, which can be refined into various products according to market needs, ethanol is a much less fungible energy commodity given that it can only be used to supplement or supplant gasoline consumption. Moreover, relatively few countries possess automobiles and other relevant infrastructure that can support the use of large volumes of ethanol. Therefore, the relatively niche uses of ethanol in global energy markets should be considered when assessing the extent to which seasonal changes in ethanol production meaningfully contribute to relatively tighter or looser oil market conditions over the course of the year.

Several notable disruptions to non-OPEC production have commenced or intensified since the beginning of this year. Unplanned outages to non-OPEC production totaled around 900 thousand bbl/d in July 2012, slightly lower than the average in June. New developments

pertaining to unplanned disruptions have prompted EIA to increase or cut back the projected output for some non-OPEC countries. The Marib pipeline in Yemen was restored after several sabotage attacks left the pipeline offline for about a year. The pipeline has experienced over a dozen attacks since political instability escalated last year, compromising about 100 thousand bbl/d of Yemen's oil output. According to various news sources, the pipeline was repaired in July and soon after began pumping crude from connected oil fields to the Ras Eisa port on the Red Sea, from which the oil is shipped to the country's refinery in Aden. However, it is uncertain whether Yemen's production will climb back to its pre-crisis level of around 240 thousand bbl/d, or if the Marib pipeline will encounter another attack, suspending production again at the nearby oil fields. EIA increased the forecast for Yemen's output to reach 200 thousand bbl/d by the end of 2012 and 220 thousand bbl/d by the end of 2013.

In Syria, escalating violence has prompted EIA to cut back that country's projected output. EIA now expects Syria's production to average 200 thousand bbl/d in 2012 and 210 thousand bbl/d in 2013, compared with the forecasts in last month's *Outlook* of 240 thousand bbl/d and 340 thousand bbl/d in 2012 and 2013, respectively. On a more hopeful note, there are recent reports of a breakthrough in the dispute between Sudan and South Sudan. The two sides have apparently reached an understanding on oil transportation arrangements, including the pipeline, marine terminal, processing, and transit fees that South Sudan will pay to Sudan in order to export its oil. Although the understanding on oil transit fees marks a significant step forward, some officials have noted that a signed agreement may be contingent on a broader deal on border security. Given the considerable uncertainty surrounding the negotiations and the practical challenges associated with restarting production, EIA is keeping Sudan and South Sudan's forecasted oil production mostly unchanged from last month's *Outlook*, but will make revisions accordingly when a signed agreement is finalized or as other developments warrant.

Unplanned supply disruptions also persist in Brazil, Colombia, and China. In Brazil, production at the offshore Frade field was halted in March 2012 after the field's operator, Chevron, requested to shut in production to investigate a spill at the field. Prior to the field's initial spill in November 2011, which initiated an investigation by Brazil's National Petroleum Agency (ANP), output at Frade was about 80 thousand bbl/d. In Colombia, additional troops have been deployed to protect the country's energy infrastructure, particularly oil pipelines, from insurgent groups. Increased attacks on the Caño Limón-Covenas pipeline and on trucks transporting oil have curbed production at multiple fields. Although Colombia's production is higher than year-ago levels, analysts have attributed the less than 1 million bbl/d output in 2012 to these attacks. In China, over 100 thousand bbl/d remains offline, as an oil leak in the Bohai Bay in June 2011 caused the Chinese government to suspend all operations at the Penglai 19-3 field. Production is expected to start ramping up gradually by the end of 2012.

Supply disruptions in Norway and Argentina were mitigated in July, as workers' strikes that threatened to curtail a substantial amount of production in both countries were contained. On July 9, Norway's government ordered mandatory arbitration and an end to the strike, forestalling a threatened lockout that could have impacted all of Norway's offshore production. In Argentina, most of the output from the onshore Cerro Dragon field has been restored since a

workers' strike lowered production from the field in late June and July. The field's production capacity is almost 100 thousand bbl/d, which is about 15 percent of Argentina's crude output.

In addition to unplanned disruptions, some large non-OPEC producers are also undergoing planned maintenance that traditionally takes place during this time of the year. For example, in the North Sea, many gas platforms, pipelines, and power interconnectors undergo annual maintenance between May and September. Overall, planned maintenance is expected to affect more than 70,000 bbl/d in July and August. The Buzzard field, which has experienced a number of technical difficulties over the last year resulting in production shut-ins, will be taken offline for planned maintenance in the first week of September for several weeks. Production at the 200,000 bbl/d oilfield is expected to return to full rate by the middle of October.

OPEC Supply. EIA expects that OPEC members will continue to produce more than 30 million bbl/d of crude oil over the next two years to accommodate the projected increase in world oil consumption and to counterbalance supply disruptions. Projected OPEC crude oil production increases by about 0.9 million bbl/d in 2012 and then remains flat in 2013 as non-OPEC supply growth increases and stocks rise slightly. OPEC non-crude oil liquids (condensates, natural gas liquids, and gas-to-liquids), which are not covered by OPEC's production quotas, averaged 5.3 million bbl/d in 2011 and are forecast to increase by 0.3 million bbl/d in 2012 and by 0.2 million bbl/d in 2013.

EIA expects Iran's crude oil production to fall by about 1 million bbl/d by the end of 2012 relative to an estimated output level of 3.6 million bbl/d at the end of 2011, and by an additional 200 thousand bbl/d in 2013. Iran's output decline has continued to accelerate since the fourth quarter of 2011. EIA believes that this acceleration reflects erosion in Iran's crude oil production capacity due to the country's inability to carry out investment projects that are necessary to offset the natural decline in production from existing wells, as well as the impact of lower Iranian crude oil exports due to recently enforced EU and U.S. sanctions. A number of foreign companies that were investing in Iran's upstream have halted their activities as a result of previous U.S. sanctions, which have been compounded by tighter measures enforced since the start of this year that have made it increasingly difficult to do business with the country. EIA expects that the forecast decline in Iran's output will be offset by increased production from other OPEC member countries.

The impacts of newly imposed EU and U.S. sanctions on supplies and exports of Iranian oil are not easily extricated from the effects of sanctions enacted in previous years, the more general decline in Iran's production capacity, and other oil market developments. Undoubtedly, the EU embargo eliminates a significant market for Iranian oil. U.S. financial sanctions and EU insurance provisions have also impeded other countries' transactions for Iranian oil, leading to reports that Iran's ability to produce oil has outstripped its ability to sell it. Until recently, Iran could react to lower demand for its oil by adjusting the amount of oil it uses domestically or holds in onshore and offshore storage, in order to temporarily maintain relatively normal, albeit declining, levels of production. EIA estimates that Iranian production continued to fall in July as production capacity continues to be affected by country's inability to carry out investment projects that are

necessary to offset the natural decline in production from existing wells, as well as the impact of lower Iranian crude oil exports and possibly production shut-ins. EIA bases this assessment on preliminary commercial data on tanker liftings from Iran, press reports, official Iranian statements, and other relevant information. However, this tentative interpretation of a very fluid situation could change as data are revised, independent estimates of Iranian production are issued, and more details about Iranian storage levels, refinery utilization, and domestic consumption emerge.

Iran's threat to block oil shipments passing through the Strait of Hormuz is a potential risk to global supply. Hormuz is the world's most important oil chokepoint, which EIA defines as a narrow channel along widely used global sea routes. EIA estimates that about 17 million bbl/d passed through Hormuz in 2011, or roughly 35 percent of all seaborne traded oil. In response to the threat, Saudi Arabia and the United Arab Emirates (UAE) have recently increased their oil pipeline capacity to circumvent Hormuz. The UAE constructed the 1.5 million bbl/d Abu Dhabi Crude Oil Pipeline that runs from Habshan, a collection point for Abu Dhabi's onshore oil fields, to the port of Fujairah on the Gulf of Oman, allowing crude oil shipments to bypass Hormuz. However, the UAE currently does not have the ability to utilize the pipeline completely until it ramps to full capacity. Saudi Arabia recently converted a natural gas pipeline back to an oil pipeline. The pipeline is a part of a two-pipeline system called Petroline, or the East-West Pipeline, which runs across Saudi Arabia to the Red Sea, avoiding Hormuz. Despite the increased capacity, most potential bypass options in the Gulf are currently not operational and would require extensive renovations. EIA estimates that the available pipeline capacity to bypass Hormuz, which is not currently utilized, was 1 million b/d at the start of 2012 and could potentially increase to 4.3 million b/d by the end of this year.

OPEC members serve as the swing producers in the world market because only OPEC producers possess surplus or spare oil production capacity, most of which is in Saudi Arabia. EIA projects that OPEC surplus production capacity will average 2.3 million bbl/d in 2012 and rise to an average 2.6 million bbl/d in 2013.

OECD Petroleum Inventories. EIA estimates that OECD commercial oil inventories ended 2011 at 2.59 billion barrels, equivalent to 56 days of forward-cover. Projected OECD oil inventories increase to 2.62 billion barrels and 57 days of forward-cover by the end of 2012, which is among the highest end-of-year levels in the last decade, because of the decline in OECD consumption.

Crude Oil Prices. EIA projects that the discount of the WTI crude oil spot price to Brent crude oil spot price will continue in 2012, averaging \$13 per barrel in the second half of 2012 and \$10 per barrel in 2013. EIA projects the price of Brent crude oil will average \$108 per barrel in 2012 and \$100 per barrel in 2013. EIA expects the WTI price to average \$90 per barrel in the second half of 2012 and generally remain at this level, averaging \$90 per barrel in 2013.

Energy price forecasts are highly uncertain (<u>Market Prices and Uncertainty Report</u>). WTI futures for November 2012 delivery during the 5-day period ending August 2, 2012 averaged \$89 per barrel. Implied volatility averaged 32 percent, establishing the lower and upper limits of the 95-

percent confidence interval for the market's expectations of monthly average WTI prices in November 2012 at \$67 per barrel and \$119 per barrel, respectively. Last year at this time, WTI for November 2011 delivery averaged \$93 per barrel and implied volatility averaged 32 percent. The corresponding lower and upper limits of the 95-percent confidence interval were \$70 per barrel and \$125 per barrel.

U.S. Crude Oil and Liquid Fuels

U.S. Liquid Fuels Consumption. Total consumption fell by 340 thousand bbl/d (1.8 percent) last year. Motor gasoline consumption accounted for the bulk of that decline, shrinking by 260 thousand bbl/d (2.9 percent). In 2012, total consumption falls by a further 170 thousand bbl/d (0.9 percent). The year-over-year decline in total consumption narrowed from 680 thousand bbl/d in the first quarter of 2012 to 110 thousand bbl/d in the second quarter. In the third and fourth quarters of 2012 EIA expects a turnaround in total liquid fuels consumption with a smaller year-over-year decline of 30 thousand bbl/d (0.2 percent) in the third quarter and a projected year-over-year increase of 120 thousand bbl/d (0.6 percent). Most of the recovery comes from natural gas liquids, which rise because of continued growth in industrial use and the assumption of near-normal weather this coming winter.

In 2013, total liquid fuels consumption grows by 60 thousand bbl/d (0.3 percent), led by a 50-thousand-bbl/d (1.2-percent) increase in distillate consumption and 30 thousand bbl/d growth in liquefied petroleum gas consumption. Despite an assumed increase in the growth rate of U.S. real disposable income from 1.1 percent in 2012 to 1.7 percent in 2013 and projected declines in retail pump prices of almost 6 percent in 2013, forecast motor gasoline consumption declines by 30 thousand bbl/d (0.4 percent). Gasoline consumption continues to fall because of slow growth in the driving-age population, the acceleration of improvements in the average fuel economy of new vehicles, and increased rates of retirement of older, less-fuel-efficient vehicles.

U.S. Liquid Fuels Supply and Imports. Domestic crude oil production increased by an estimated 210 thousand bbl/d (3.9 percent) to 5.7 million bbl/d in 2011. Forecast U.S. total crude oil production increases to 6.3 million bbl/d in 2012, the highest annual level of production since 1997. Forecast lower-48 onshore crude oil production grows by a robust 670 thousand bbl/d in 2012 and output in the Gulf of Mexico stabilizes after having fallen last year, but Alaskan output continues to decline by 30 thousand bbl/d. In 2013, total crude oil output rises a further 390 thousand bbl/d, most of which is accounted for by increases in lower-48 onshore production. That increase is driven by increased oil-directed drilling activity, particularly in onshore tight oil formations. The number of onshore oil-directed drilling rigs reported by Baker Hughes has increased from 777 at the beginning of 2011 to 1,191 at the start of 2012, and to 1,429 as of August 3, 2012.

Concerns regarding the supply of refined products on the U.S. East Coast have eased considerably in recent months (see *This Week in Petroleum - Update of the Status of East Coast*

Refineries, July 25, 2012). Following the recently formed joint venture between The Carlyle Group and Sunoco, the Sunoco Philadelphia refinery is now expected to remain in operation. In addition, Delta Air Lines has purchased the Trainer refinery and has announced plans to restart it in the third quarter of 2012. The previously estimated regional "supply gap" of approximately 420,000 bbl/d for gasoline and ultra-low-sulfur diesel (ULSD) combined that would have resulted from the idling of three Philadelphia-area refineries (Potential Impacts of Reductions in Refinery Activity on Northeast Petroleum Product Markets, February 2012) is now expected to be just 50,000 bbl/d of ULSD, with the gasoline gap disappearing almost entirely. The remaining potential ULSD supply gap is largely the result of an expected increase in demand for ULSD because of New York State's requirement that, beginning in July 2012, all distillate fuel used for heating purposes be ULSD.

The share of total U.S. consumption met by total liquid fuel net imports (including both crude oil and products) has been falling since peaking at over 60 percent in 2005, and averaged 45 percent in 2011, down from 49 percent in 2010. EIA expects that the total net import share of consumption will continue to decline to 41 percent in 2012 and to 39 percent in 2013 as a result of lower consumption and the substantial increases in domestic crude oil production. If the 2013 estimate holds true, it would be the first time the share of total U.S. consumption met by total liquid fuel imports is less than 40 percent since 1991.

U.S. Petroleum Product Prices. After a sharp increase in gasoline prices earlier this year, reaching a monthly average of \$3.90 per gallon (regular grade) in April, gasoline prices have fallen for the third consecutive month, averaging \$3.44 per gallon in July. EIA expects regular gasoline retail prices to average \$3.49 per gallon during the third quarter of 2012, up from the \$3.39 per gallon projected in last month's *Outlook*, primarily as a result of the rise in oil prices in mid-July. EIA projects that crude oil prices will remain near their current levels through 2013, resulting in regular gasoline retail prices averaging \$3.53 per gallon in 2012 and \$3.33 per gallon in 2013, both about 4 cents per gallon higher than in last month's *Outlook*. EIA expects that onhighway diesel fuel retail prices, which averaged \$3.84 per gallon in 2011, will average \$3.84 per gallon and \$3.62 per gallon in 2012 and 2013, respectively.

Natural Gas

U.S. Natural Gas Consumption. EIA expects that natural gas consumption will average 69.8 billion cubic feet per day (Bcf/d) in 2012, an increase of 3.2 Bcf/d (4.8 percent) from 2011. Large gains in electric power use in 2012 will more than offset declines in residential and commercial use. Projected consumption of natural gas in the electric power sector averages 25.4 Bcf/d in 2012, 22 percent higher than in 2011, primarily driven by the improved relative cost advantages of natural gas over coal for power generation in some regions. Consumption in the electric power sector during 2012 peaks at 31.6 Bcf/d in the third quarter, when electricity demand for air conditioning is highest. As a result of the extreme heat last month, estimated electric-

power-sector natural gas consumption during July 2012 averaged 34.8 Bcf/d, 1.8 Bcf/d higher than projected in last month's *Outlook*.

Growth in total natural gas consumption slows in 2013, with forecast consumption averaging 70.9 Bcf/d. Growth in 2013 is driven by consumption increases from the residential, commercial, and industrial sectors, as consumption in the electric power sector levels off. A forecast of near-normal weather next winter drives 2013 increases in residential and commercial consumption of 9.2 percent and 6.4 percent, respectively. Although projected natural gas burn in the electric power sector declines by 3.5 percent from 2012, it remains near historically high levels in 2013.

U.S. Natural Gas Production and Imports. Total marketed production of natural gas grew by 4.8 Bcf/d (7.9 percent) in 2011. This strong growth was driven in large part by increases in shale gas production. EIA expects continued year-over-year growth in 2012 of 2.5 Bcf/d. EIA, however, expects a small drop in production in the coming months, reflecting both expected losses from hurricanes (2012 Outlook for Hurricane-Related Production Outages in the Gulf of Mexico) and declines related to recent drops in the rig count. According to Baker Hughes, the natural gas rig count was 498 as of August 3, 2012, compared with 811 at the start of 2012. While some declines in production have occurred so far in 2012, production remained flat from April to May. Declining production from less-profitable "dry" natural gas plays such as the Haynesville Shale, as well as the continued long-term decline in the Gulf of Mexico, is offset by growth in production from liquids-rich natural gas production areas such as the Eagle Ford and wet areas of the Marcellus Shale, and associated gas from the growth in domestic crude oil production.

EIA expects pipeline gross imports will fall by 0.1 Bcf/d (1.3 percent) in 2012, as domestic supply continues to displace Canadian sources. The warm winter in the United States also added to the year-over-year decline in imports, particularly to the Northeast, where imported natural gas can serve as additional supply in times of very cold weather. EIA expects pipeline gross imports will remain flat in 2013, at around 8.4 Bcf/d. Pipeline gross exports grew by 1.0 Bcf/d (33 percent) in 2011, driven by increased exports to Mexico, but are expected to remain flat in 2012, and grow by 0.2 Bcf/d in 2013.

Liquefied natural gas (LNG) imports are expected to fall by 0.5 Bcf/d (51 percent) in 2012 from the year before. EIA expects that an average of about 0.5 Bcf/d and 0.6 Bcf/d will arrive in the United States (mainly at the Elba Island terminal in Georgia) in 2012 and 2013, respectively, either to fulfill long-term contract obligations or to take advantage of temporarily high local prices due to cold snaps and disruptions. Higher prices for LNG, particularly in Asian markets, have made the U.S. a market of last resort for LNG.

U.S. Natural Gas Inventories. Working natural gas inventories remain at historically high levels for this time of year. As of July 27, 2012, according to EIA's <u>Weekly Natural Gas Storage Report</u>, working inventories totaled 3,217 Bcf, 472 Bcf greater than last year's level and 407 Bcf above the five-year average. EIA expects that inventory levels at the end of October 2012 will set a new record of 3,954 Bcf, slightly lower than last month's *Outlook*, which forecast inventories

slightly above 4,000 Bcf. Though absolute levels of working inventories remain high (because of very high storage entering the summer injection season this year), builds since April, for the most part, have been below the five-year average and below last year's levels. The projected increase of 1,477 Bcf in working gas inventory during the 2012 injection season (from the end of March to the end of October) would be the smallest build since 1991. In 2013, working inventory levels recede from current record highs, although they will still remain abundant compared with recent history.

U.S. Natural Gas Prices. Natural gas spot prices averaged \$2.95 per MMBtu at the Henry Hub in July 2012, up \$0.49 per MMBtu from the June average, but still \$1.47 per MMBtu (33 percent) lower than the July 2011 average. While abundant supplies have kept prices relatively low, a hot summer and associated increases in demand for natural gas for power generation contributed to the increase in prices in July. EIA expects the Henry Hub natural gas price will average \$2.67 per MMBtu in 2012, with prices remaining below \$3.00 per MMBtu until December. EIA expects 2013 prices will average \$3.34 per MMBtu.

Natural gas futures prices for November 2012 delivery (for the 5-day period ending August 2, 2012) averaged \$3.26 per MMBtu, and the average implied volatility based on options and futures prices was 44 percent (*Market Prices and Uncertainty Report*). Current options and futures prices imply that market participants place the lower and upper bounds for the 95-percent confidence interval for November 2012 contracts at \$2.13 per MMBtu and \$4.98 per MMBtu, respectively. At this time last year, the November 2011 natural gas futures contract averaged \$4.23 per MMBtu and implied volatility averaged 32 percent. The corresponding lower and upper limits of the 95-percent confidence interval were \$3.12 per MMBtu and \$5.74 per MMBtu.

Coal

U.S. Coal Consumption. Power-sector coal consumption, which averaged over 1 billion short tons annually from 2003 through 2008, fell by 46 million short tons (MMst) in 2011. Lower electric power sector natural gas prices have led to a significant increase in the share of natural-gas-fired generation. EIA expects coal consumption in the electric power sector to total 825 MMst in 2012, the lowest amount in 20 years. EIA projects power sector coal consumption will remain flat in 2013 as the effects of higher electric power sector natural gas prices are offset by the weak increase in electricity consumption.

U.S. Coal Supply. EIA forecasts that coal production will decline by 7 percent in 2012 as domestic consumption falls. Production for the first six months of 2012 was 33 MMst (6 percent) below last year's level for the same period. EIA predicts that production will continue to decline in 2013, but at a slightly slower rate (4 percent). Despite declines in production, EIA projects that secondary inventories will increase in 2012, reaching near-record levels. Electric

power sector stocks are forecast to be 194 MMst by the end of the year (estimated stocks for May 2012 were 203 MMst) and inventories will remain at elevated levels in 2013.

U.S. Coal Trade. EIA expects U.S. coal exports to remain strong in 2012 and exceed the 107 MMst exported in 2011. The U.S. exported 12.3 MMst of coal in May, which was slightly below April's record-setting amount. EIA projects coal exports to total 116 MMst in 2012. EIA expects that coal exports will fall by 16 percent in 2013. Major reasons for the export decline include China's economic slowdown and high coal stockpiles, and increased exports from Indonesia and Australia. U.S. coal exports averaged 56 MMst in the decade preceding 2011.

U.S. Coal Prices. Delivered coal prices to the electric power industry had increased steadily over the last 10 years and this trend continued in 2011, with an average delivered coal price of \$2.40 per MMBtu (a 6-percent increase from 2010). However, EIA expects the decline in demand for coal, combined with the large coal inventories, will begin to put downward pressure on coal prices and contribute to the shut-in of higher-cost production. EIA forecasts that the average delivered coal price in 2012 will average \$2.41 per MMBtu, about the same as last year. EIA predicts the 2013 average delivered coal price to average \$2.36 per MMBtu, or about 2 percent lower than the 2012 price.

Electricity

U.S. Electricity Consumption. Many areas of the United States have experienced record temperatures this summer, similar to the hot weather last summer. According to the National Oceanic and Atmospheric Administration, U.S. cooling degree-days during July 2012 were about 25 percent higher than the 30-year average, but about the same as July 2011. EIA estimates that retail sales of electricity to the residential sector during the first half of this year were about 6.4 percent lower than the same period in 2011, as a result of mild winter temperatures in the South where many households heat using electricity. Residential sales for the entire year are projected to average about 3.0 percent lower than sales during 2011. Projected sales of electricity to the residential sector grow by 1.9 percent in 2013.

U.S. Electricity Generation. Starting with this month's *Outlook*, EIA has expanded its modeling of electricity generation to the four Census regions (Northeast, South, Midwest, and West) in addition to its standard U.S. projections. EIA expects total U.S. generation across all sectors during 2012 will average 0.4 percent lower than in 2011. However, generation fueled by natural gas is projected to rise this year by 23.2 percent. The South Census region accounts for the largest absolute increase in natural gas generation—an annual increase of 303 thousand megawatthours per day (MWh/d), or 18.4 percent. Yet, the Midwest region has the largest relative increase in natural gas generation—rising by 93.0 percent, or 152 thousand MWh/d, during 2012. This substantial increase in the share of generation fueled by natural gas is occurring at the expense of coal generation, which is projected to fall by 12.1 percent nationwide during 2012. Higher natural gas prices relative to coal prices leads to a reversal of

this trend next year, when U.S. natural gas generation falls by 4.3 percent and coal generation increases by 1.7 percent.

U.S. Electricity Retail Prices. EIA expects the average U.S. residential electricity price will rise by 1.6 percent during 2012 to an average of 11.99 cents per kilowatthour. The forecast cost of natural gas delivered to the electric power sector is about 28 percent lower in 2012 compared with the previous year, which should slow the growth in retail electricity rates. EIA projects U.S. residential retail electricity prices to rise by 0.9 percent in 2013. When measured in real terms, the average 2013 residential electricity price is 2.9 percent less than the price in 2009.

Renewables and Carbon Dioxide Emissions

U.S. Renewables. After growing by 14 percent in 2011, total renewable energy consumption is projected to decline by 2.4 percent in 2012. This decrease is the result of hydropower resource levels beginning to return to the long-term average, with consumption falling by 0.4 quadrillion Btu (13 percent). The decline in hydropower from 2011 to 2012 more than offsets the projected growth in the consumption of other renewable energy forms. Renewable energy consumption increases 2.1 percent in 2013 as hydropower continues to decline (2.9 percent) but non-hydropower renewables grow by an average of 4.7 percent.

Under current law, Federal production tax credits for wind-powered generation will not be available for turbines that begin operating after the end of 2012. Wind-powered generation, which grew by 26 percent in 2011, is forecast to grow an additional 17 percent in 2012. The forecast for wind capacity additions and generation in 2013 will likely respond to whatever decision is made regarding the extension of production tax credits.

As a result of drought conditions affecting corn harvests throughout the Midwest, EIA has reduced its ethanol production forecast for the second half of 2012 from an average of 900 thousand bbl/d in last month's *Outlook* to 830 thousand bbl/d. EIA expects ethanol production to recover in the second half of 2013, averaging 880 thousand bbl/d (13.5 billion gallons) for the year. The projected decline in ethanol production is generally matched by lower ethanol exports.

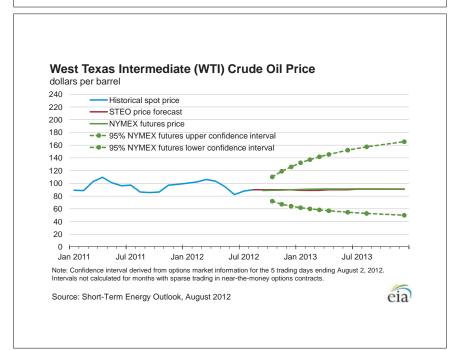
EIA estimates that biodiesel production in 2011 averaged about 63 thousand bbl/d (971 million gallons of total annual production). Forecast biodiesel production averages 72 thousand bbl/d in 2012 and 79 thousand bbl/d in 2013.

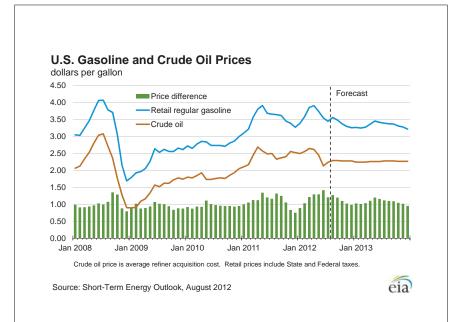
U.S. Energy-Related Carbon Dioxide Emissions. After declining by 2.4 percent in 2011, fossil fuel emissions are projected to further decline by 2.3 percent in 2012, but increase by 1.0 percent in 2013. Petroleum emissions decline in 2012 (1.1 percent) and then remain flat in 2013, while natural gas emissions rise by 5.3 percent and 1.3 percent in 2012 and 2013, respectively. Coal emissions decline by 9.0 percent in 2012 but rise by 1.9 percent in 2013.

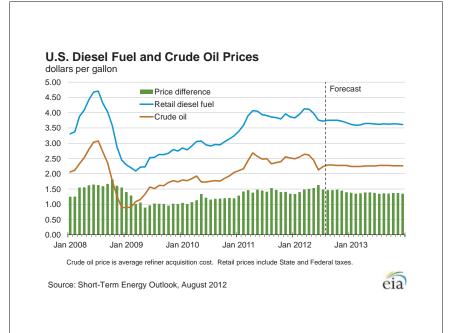


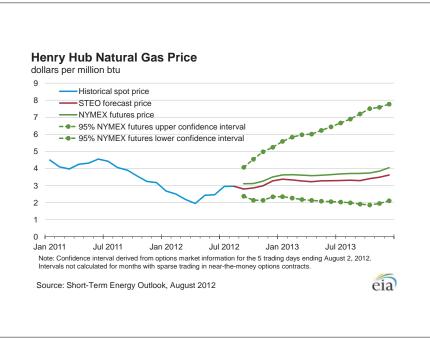


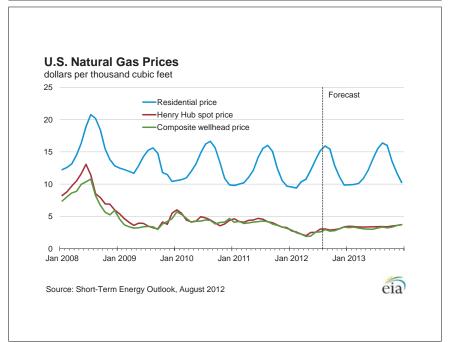
Chart Gallery for August 2012

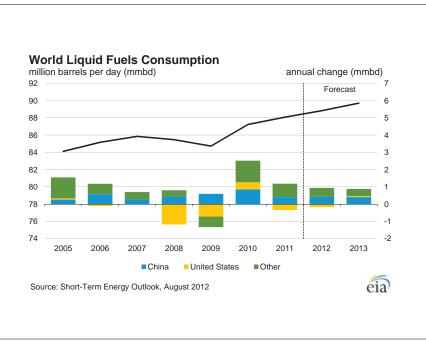


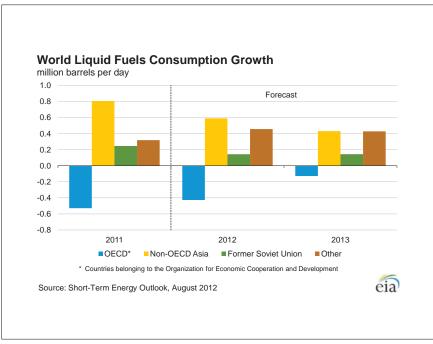


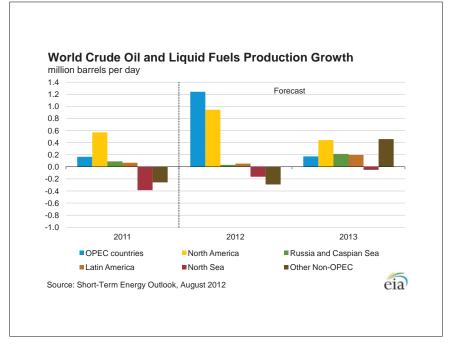


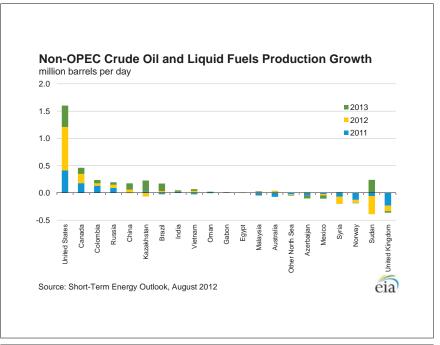


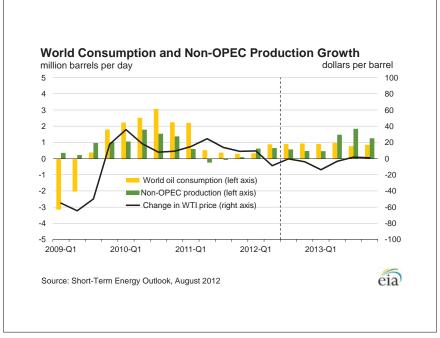


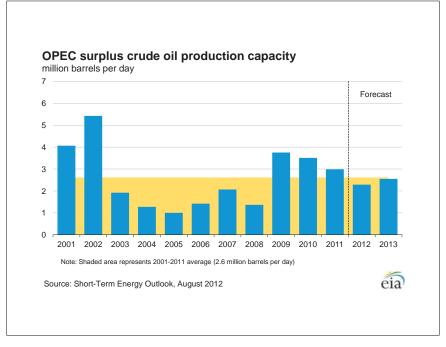


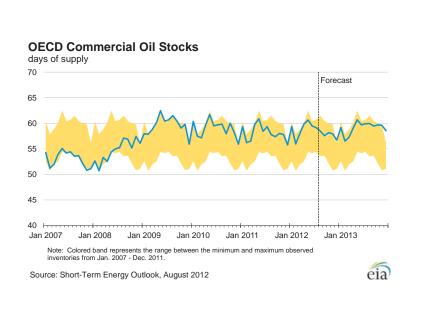


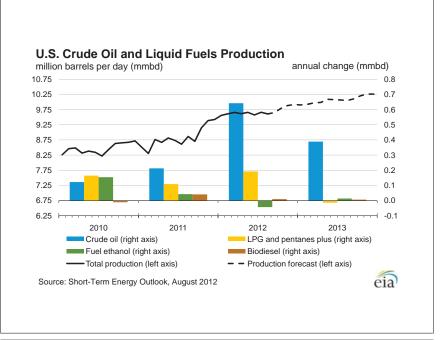


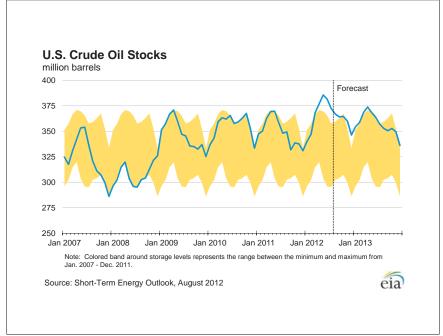


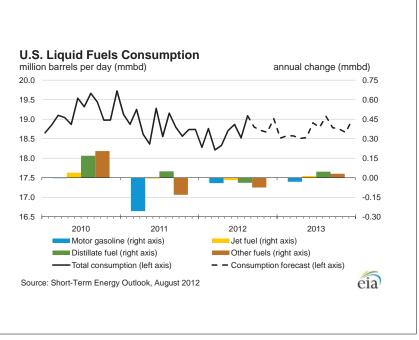


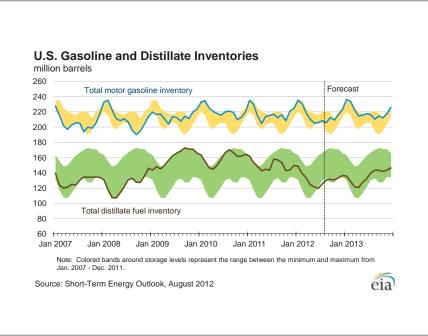


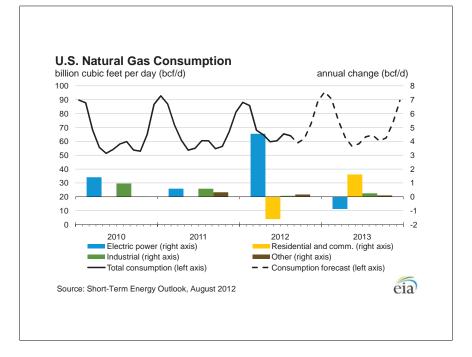


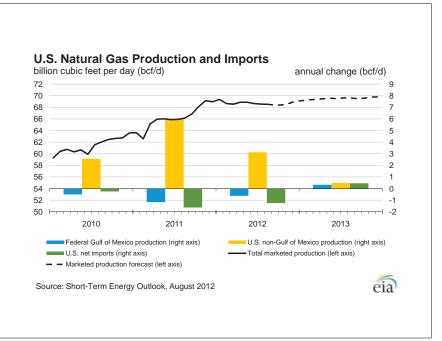


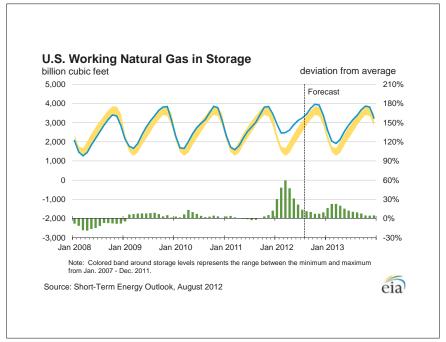


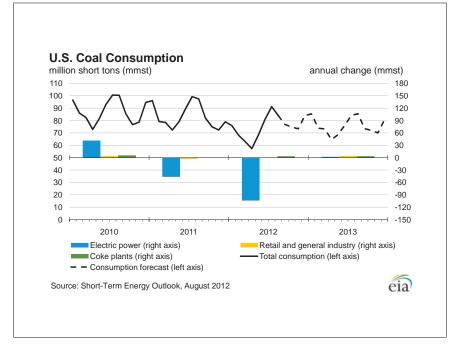


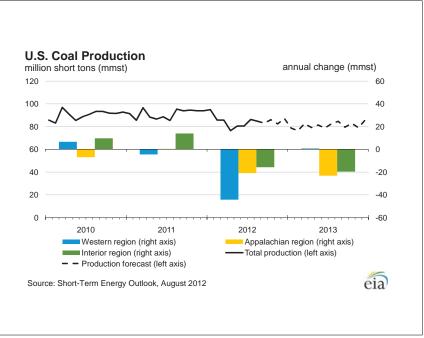


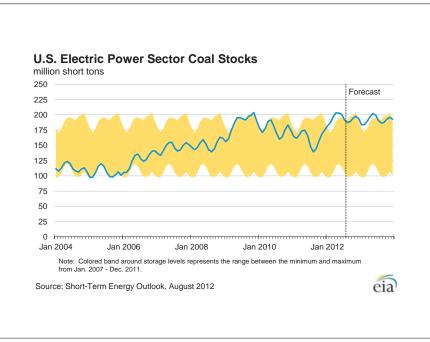


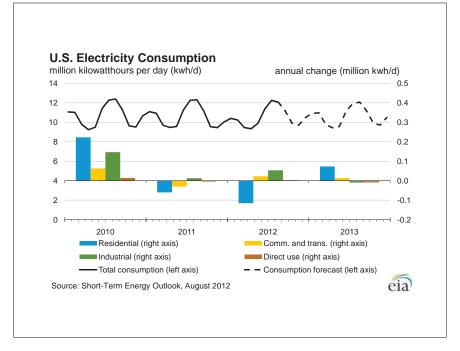


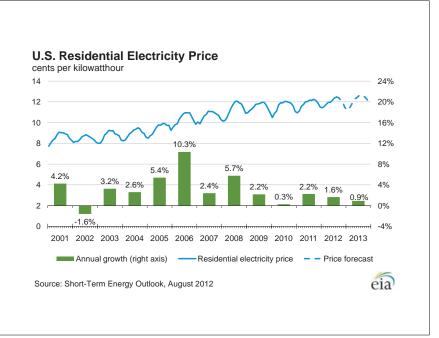


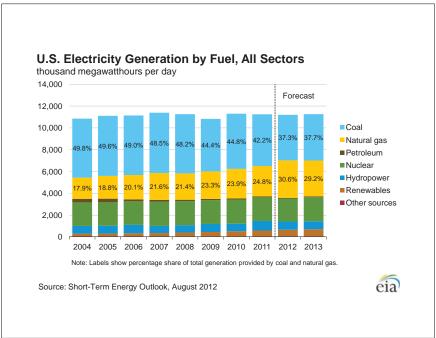


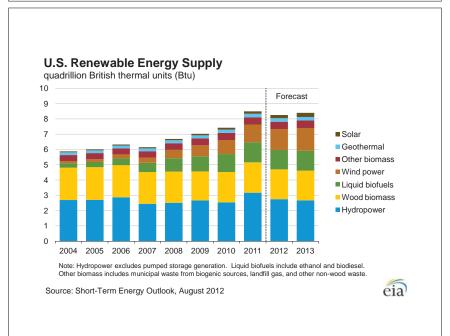


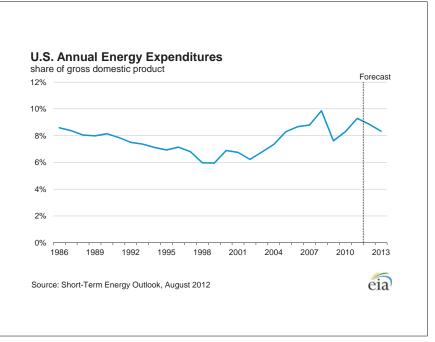


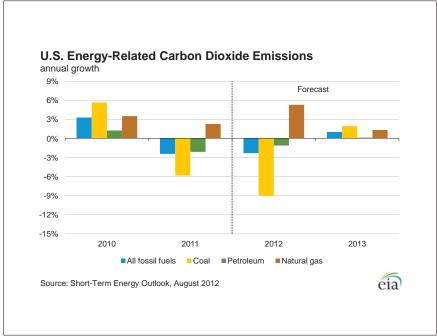


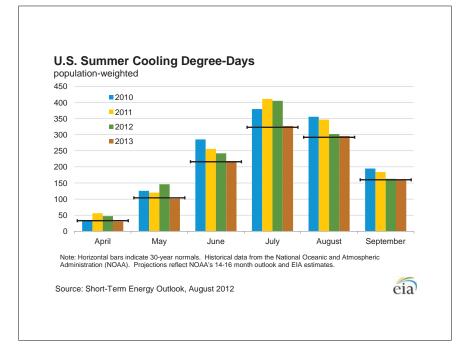












U.S. Winter Heating Degree-Days population-weighted 1000 2009/10 900 2010/11 800 ■2011/12 700 2012/13 600 400 300 200 100 0 February March October November December January Note: Horizontal bars indicate 30-year normals. Historical data from the National Oceanic and Atmospheric Administration (NOAA). Projections reflect NOAA's 14-16 month outlook and EIA estimates. eia Source: Short-Term Energy Outlook, August 2012

U.S. Census Regions and Divisions



Source: Short-Term Energy Outlook, August 2012



Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy Information Administration	Snort-Ter	m Energy	Outlook - A						
		2011			2012		Year-o	ver-year ((percent)	_
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) ^a	2.43	2.14	2.29	2.22	2.13	2.18	-8.6	-0.5	-4.8
Imported Crude Oil Price ^b	2.59	2.43	2.51	2.37	2.28	2.33	-8.3	-6.1	-7.2
U.S. Refiner Average Crude Oil Cost	2.57	2.40	2.48	2.39	2.27	2.33	-7.2	-5.3	-6.2
Wholesale Gasoline Price ^c	3.12	2.97	3.04	2.97	2.79	2.88	-4.9	-6.2	-5.5
Wholesale Diesel Fuel Price ^c	3.16	3.07	3.11	3.01	2.92	2.96	-4.9	-4.8	-4.8
Regular Gasoline Retail Priced	3.80	3.63	3.71	3.72	3.49	3.61	-1.9	-3.9	-2.9
Diesel Fuel Retail Price ^d	4.01	3.87	3.94	3.95	3.74	3.85	-1.6	-3.2	-2.4
Gasoline Consumption/Supply (million	barrels per	day)							
Total Consumption	8.863	8.875	8.869	8.911	8.795	8.853	0.5	-0.9	-0.2
Total Refinery and Blender Output	7.482	7.818	7.651	7.554	7.749	7.652	1.0	-0.9	0.0
Fuel Ethanol Blending	0.856	0.842	0.849	0.873	0.823	0.848	2.0	-2.3	-0.1
Total Stock Withdrawal ^f	-0.003	-0.010	-0.007	0.143	-0.071	0.035			
Net Imports ^f	0.529	0.225	0.376	0.341	0.294	0.318	-35.5	30.8	-15.5
Refinery Utilization (percent)	85.8	89.8	87.8	89.9	91.9	90.9			
Gasoline Stocks, Including Blending C	omponents	s (million b	arrels)						
Beginning	214.9	215.2	214.9	218.8	205.8	218.8			
Ending	215.2	216.1	216.1	205.8	212.3	212.3			
Economic Indicators (annualized billion	2000 dollar	rs)							
Real GDP	13,272	13,332	13,302	13,543	13,603	13,573	2.0	2.0	2.0
Real Income	10,170	10,189	10,179	10,267	10,330	10,299	1.0	1.4	1.2

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

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 crude oil spotprice). Macroeconomic projections are based on IHS Global Insight Macroeconomic Forecast Model.

^b Cost of imported crude oil to U.S. refiners.

^c Price product sold by refiners to resellers.

^d Average pump price including taxes.

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

^f Total stock withdrawal and net imports includes both finished gasoline and gasoline blend components. GDP = gross domestic product.

Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administra	tion	Short-Te		gy Outlo	ook - Aug			Т				1			
	1st	201 2nd	1 3rd	4th	1st	201 2nd	2 3rd	4th	1st	20 ²	13 3rd	4th	2011	Year 2012	2013
Energy Supply	101	2110	0.0	7611	101	2.1.4	5,4	761	101	2.10	oru	741	2011	2012	2010
Crude Oil Production (a) (million barrels per day)	5.54	5.61	5.60	6.02	6.22	6.25	6.32	6.55	6.65	6.70	6.69	6.85	5.69	6.34	6.73
Dry Natural Gas Production (billion cubic feet per day)	60.83	62.75	63.10	65.32	65.35	65.32	65.01	65.22	65.76	65.98	66.05	66.19	63.01	65.23	66.00
Coal Production (million short tons)	274	264	275	282	266	238	254	256	238	239	247	2 <i>4</i> 8	1,094	1,014	972
Energy Consumption															
Liquid Fuels (million barrels per day)	19.09	18.75	18.84	18.68	18.41	18.63	18.80	18.80	18.55	18.65	18.88	18.80	18.84	18.66	18.72
Natural Gas (billion cubic feet per day)	83.74	56.45	58.54	68.12	80.51	61.57	62.74	74.50	86.90	59.09	62.71	75.18	66.65	69.82	70.91
Coal (b) (million short tons)	254	241	279	226	207	207	252	232	232	209	243	223	999	898	907
Electricity (billion kilowatt hours per day)	10.56	10.09	11.92	9.68	10.03	10.19	11.84	10.04	10.54	10.05	11.73	10.05	10.57	10.53	10.60
Renewables (c) (quadrillion Btu)	2.08	2.29	2.02	2.00	2.06	2.18	1.99	1.96	2.07	2.25	2.02	2.03	8.39	8.19	8.37
Total Energy Consumption (d) (quadrillion Btu)	25.86	23.09	24.32	23.92	24.42	22.77	24.17	24.63	25.49	22.90	24.11	24.63	97.18	95.99	97.13
Energy Prices															
Crude Oil (e) (dollars per barrel)	94.00	108.13	100.61	104.55	107.62	100.35	95.29	95.50	94.00	94.75	95.50	95.00	101.91	99.58	94.83
Natural Gas Wellhead (dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.75	3.06	3.26	3.03	3.26	3.54	3.90	2.62	3.27
Coal (dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.43	2.42	2.37	2.41	2.36	2.35	2.30	2.40	2.41	2.36
Macroeconomic															
Real Gross Domestic Product (billion chained 2005 dollars - SAAR) Percent change from prior year	13,228 2.2	13,272 1.6	13,332 1.5	13,429 1.6	13,491 2.0	13,543 2.0	13,603 2.0	13,662 1.7	13,740 1.8	13,800 1.9	13,863 1.9	13,941 2.0	13,315 1.7	13,575 2.0	13,836 1.9
GDP Implicit Price Deflator (Index, 2005=100) Percent change from prior year	112.4 1.8	113.1 2.1	113.8 2.4	114.1 2.1	114.6 2.0	115.1 1.8	115.7 1.6	116.2 1.8	116.4 1.6	116.7 1.4	117.2 1.4	117.7 1.3	113.3 2.1	115.4 1.8	117.0 1.4
Real Disposable Personal Income (billion chained 2005 dollars - SAAR) Percent change from prior year	10,183 2.6	10,170 1.1	10,189 0.7	10,193 0.4	10,210 0.3	10,267 1.0	10,330 1.4	10,372 1.8	10,407 1.9	10,451 1.8	10,493 1.6	10,549 1.7	10,184 1.2	10,295 1.1	10,475 1.7
Manufacturing Production Index (Index, 2007=100) Percent change from prior year	90.4 6.8	90.6 4.0	91.7 3.9	92.9 4.5	95.2 5.3	95.6 5.6	96.1 4.8	96.7 4.0	97.3 2.2	98.1 2.6	98.9 2.9	99.6 3.0	91.4 4.8	95.9 4.9	98.5 2.7
Weather															
U.S. Heating Degree-Days U.S. Cooling Degree-Days	2,285 33	517 432	77 942	1,441 70	1,782 53	423 435	85 870	1,603 78	2,211 35	530 349	96 783	1,611 82	4,320 1,477	3,893 1,436	4,448 1,249

^{- =} 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: Generated by simulation of the EIA Regional Short-Term Energy Model. Macroeconomic projections are based on Global Insight Model of the U.S. Economy.

Weather projections from National Oceanic and Atmospheric Administration.

⁽a) Includes lease condensate.

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

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

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

⁽d) The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations of gross energy consumption in EIA's Monthly Energy Review (MER). 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.

Table 2. U.S. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - August 2012

		201	1			201	12			20	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	93.50	102.22	89.72	93.99	102.88	93.42	89.30	90.00	89.00	90.00	91.00	91.00	94.86	93.90	90.25
Brent Spot Average	104.96	117.36	113.34	109.40	118.49	108.42	103.54	101.83	99.50	100.00	100.50	100.00	111.26	108.07	100.00
Imported Average	94.23	108.72	102.05	105.36	108.13	99.73	95.80	96.00	94.25	95.00	95.75	95.25	102.67	99.92	95.08
Refiner Average Acquisition Cost	94.00	108.13	100.61	104.55	107.62	100.35	95.29	95.50	94.00	94.75	95.50	95.00	101.91	99.58	94.83
Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	267	312	297	271	297	297	279	262	259	273	267	257	287	283	264
Diesel Fuel	286	316	307	304	317	301	292	287	277	281	281	279	303	299	280
Heating Oil	275	305	295	296	312	297	283	281	276	274	272	275	291	296	275
Refiner Prices to End Users															
Jet Fuel	287	322	308	303	321	304	291	289	281	283	281	281	305	301	281
No. 6 Residual Fuel Oil (a)	218	246	249	250	270	270	259	254	247	242	241	240	239	263	243
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	329	380	363	337	361	372	349	330	326	341	337	326	353	353	333
Gasoline All Grades (b)	335	385	369	342	367	378	355	336	331	346	343	332	358	359	338
On-highway Diesel Fuel	363	401	387	387	397	395	374	372	360	364	363	363	384	384	362
Heating Oil	359	390	367	366	379	371	355	359	359	351	348	353	368	368	355
Natural Gas															
Average Wellhead (dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.75	3.06	3.26	3.03	3.26	3.54	3.90	2.62	3.27
Henry Hub Spot (dollars per thousand cubic feet)	4.31	4.50	4.25	3.42	2.52	2.35	2.99	3.13	3.42	3.36	3.40	3.61	4.12	2.75	3.44
Henry Hub Spot (dollars per Million Btu)	4.18	4.37	4.12	3.32	2.45	2.28	2.90	3.04	3.32	3.26	3.30	3.50	4.00	2.67	3.34
End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	5.45	5.15	4.94	4.53	4.13	3.19	3.82	4.27	4.69	4.15	4.30	4.71	5.02	3.88	4.47
Commercial Sector	8.75	9.16	9.72	8.52	8.19	8.11	8.66	8.64	8.58	8.68	9.20	9.16	8.86	8.39	8.84
Residential Sector	9.96	11.97	15.53	10.45	9.67	11.80	15.51	10.81	9.96	11.78	15.95	11.30	10.80	10.83	11.07
Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.34	2.42	2.46	2.37	2.41	2.43	2.42	2.37	2.41	2.36	2.35	2.30	2.40	2.41	2.36
Natural Gas	5.02	4.92	4.76	4.13	3.31	2.91	3.54	3.85	4.10	3.88	3.89	4.28	4.71	3.40	4.02
Residual Fuel Oil (c)	15.88	18.29	20.10	20.05	21.27	20.97	18.63	18.01	17.73	17.41	17.25	17.20	18.49	19.59	17.39
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	23.27	22.68	22.77	22.51	22.68	22.57	22.97	22.40	23.10	22.67
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.67	7.15	6.59	6.56	6.82	7.28	6.73	6.89	6.74	6.86
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.15	10.58	9.99	9.92	10.35	10.81	10.18	10.32	10.18	10.34
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.04	12.42	11.81	11.39	12.29	12.62	12.04	11.79	11.99	12.09

^{- =} no data available

Prices are not adjusted for inflation.

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

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

Prices exclude taxes unless otherwise noted.

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

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

Natural gas Henry Hub and WTI crude oil 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 Crude Oil and Liquid Fuels Supply, Consumption, and Inventories

U.S. Energy information Admini	2011				atiook 7	201				201	13			Year	
ľ	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million barrels per day) (a)															
OECD	21.49	21.19	21.35	22.36	22.59	22.33	22.10	22.63	22.65	22.69	22.75	23.03	21.60	22.41	22.78
U.S. (50 States)	9.74	9.99	10.05	10.65	10.81	10.84	10.89	11.09	11.12	11.27	11.32	11.48	10.11	10.91	11.30
Canada	3.67	3.42	3.71	3.86	3.95	3.78	3.76	3.86	3.85	3.89	4.01	4.03	3.66	3.83	3.95
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.93	2.92	2.90	2.88	2.87	2.85	2.96	2.93	2.87
North Sea (b)	3.61	3.34	3.10	3.34	3.36	3.22	2.93	3.22	3.25	3.12	3.01	3.14	3.35	3.18	3.13
Other OECD	1.49	1.47	1.56	1.57	1.54	1.55	1.59	1.54	1.53	1.53	1.56	1.53	1.52	1.56	1.54
Non-OECD	65.41	64.83	65.77	65.89	66.11	66.47	66.63	66.70	66.55	67.52	68.21	67.85	65.48	66.48	67.54
OPEC	35.11	34.43	35.21	35.69	36.28	36.55	36.26	36.31	36.33	36.49	36.66	36.61	35.11	36.35	36.52
Crude Oil Portion	29.78	29.20	29.99	30.35	30.87	30.97	30.60	30.62	30.61	30.76	30.92	30.81	29.83	30.76	30.77
Other Liquids	5.33	5.23	5.22	5.33	5.41	5.58	5.66	5.69	5.72	5.73	5.74	5.80	5.28	5.59	5.75
Former Soviet Union	13.35	13.35	13.25	13.30	13.41	13.37	13.19	13.48	13.44	13.61	13.59	13.63	13.31	13.36	13.57
China	4.39	4.36	4.25	4.20	4.31	4.34	4.36	4.43	4.40	4.47	4.51	4.51	4.30	4.36	4.47
Other Non-OECD	12.57	12.70	13.06	12.70	12.10	12.21	12.82	12.49	12.37	12.95	13.45	13.10	12.76	12.41	12.97
Total World Supply	86.91	86.03	87.11	88.25	88.70	88.80	88.73	89.33	89.20	90.22	90.97	90.89	87.08	88.89	90.32
Non-OPEC Supply	51.80	51.60	51.91	52.56	52.42	52.25	52.47	53.02	52.87	53.72	54.31	54.28	51.97	52.54	53.80
Consumption (million barrels per day	y) (c)														
OECD	46.34	44.58	45.98	45.82	45.49	44.33	45.53	45.66	45.41	44.35	45.11	45.63	45.68	45.25	45.12
U.S. (50 States)	19.09	18.75	18.84	18.68	18.41	18.63	18.80	18.80	18.55	18.65	18.88	18.80	18.84	18.66	18.72
U.S. Territories	0.30	0.30	0.30	0.30	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33	0.30	0.32	0.33
Canada	2.28	2.17	2.31	2.28	2.21	2.20	2.29	2.25	2.24	2.17	2.29	2.26	2.26	2.24	2.24
Europe	14.22	14.12	14.70	14.09	13.67	13.65	14.34	14.00	13.60	13.50	13.94	13.91	14.28	13.92	13.74
Japan	4.83	3.91	4.31	4.81	5.28	4.18	4.30	4.70	5.10	4.30	4.34	4.75	4.46	4.61	4.62
Other OECD	5.62	5.33	5.53	5.66	5.60	5.35	5.49	5.59	5.58	5.40	5.33	5.58	5.53	5.51	5.47
Non-OECD	41.65	42.51	42.79	42.59	42.81	43.65	44.15	43.68	43.80	44.59	45.32	44.56	42.39	43.57	44.57
Former Soviet Union	4.58	4.51	4.77	4.76	4.69	4.72	4.88	4.88	4.85	4.77	5.05	5.05	4.66	4.79	4.93
Europe	0.74	0.74	0.77	0.77	0.74	0.75	0.77	0.77	0.75	0.75	0.78	0.78	0.75	0.76	0.76
China	9.99	9.78	9.57	9.82	10.12	10.09	10.33	10.29	10.57	10.53	10.81	10.52	9.79	10.21	10.61
Other Asia	10.20	10.39	10.00	10.28	10.36	10.61	10.16	10.43	10.41	10.60	10.19	10.47	10.22	10.39	10.42
Other Non-OECD	16.13	17.09	17.69	16.96	16.90	17.49	18.00	17.31	17.22	17.95	18.50	17.74	16.97	17.43	17.85
Total World Consumption	87.98	87.09	88.77	88.41	88.31	87.97	89.67	89.34	89.21	88.94	90.44	90.19	88.07	88.83	89.70
Inventory Net Withdrawals (million ba	arrels per	day)													
U.S. (50 States)	0.27	-0.42	0.29	0.32	-0.29	-0.22	-0.18	0.53	0.08	-0.42	-0.13	0.48	0.12	-0.04	0.00
Other OECD	0.22	-0.10	0.20	0.32	-0.07	-0.28	0.42	-0.20	-0.03	-0.31	-0.15	-0.44	0.16	-0.03	-0.23
Other Stock Draws and Balance	0.58	1.58	1.17	-0.48	-0.04	-0.32	0.70	-0.32	-0.05	-0.55	-0.25	-0.73	0.71	0.00	-0.40
Total Stock Draw	1.07	1.07	1.66	0.16	-0.39	-0.82	0.94	0.01	0.01	-1.28	-0.53	-0.69	0.99	-0.06	-0.62
End-of-period Inventories (million ba	rrels)														
U.S. Commercial Inventory	1,043	1,081	1,085	1,056	1,082	1,102	1,118	1,069	1,062	1,100	1,112	1,068	1,056	1,069	1,068
OECD Commercial Inventory	2,617	2,664	2,650	2,591	2,623	2,668	2,646	2,615	2,610	2,677	2,702	2,699	2,591	2,615	2,699

^{- =} no data available

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

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

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

Monthly OECD supply and consumption does not yet include Chile, Estonia, Israel, or Slovenia.

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

Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

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

(b) Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

(c) Consumption of petroleum by the OECD countries is synonymous with "petroleum product supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109.

Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

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

Historical data: Latest data available from Energy Information Administration international energy statistics; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

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

 $\textbf{Projections:} \ \ \textbf{Generated by simulation of the EIA Regional Short-Term Energy Model}.$

Table 3b. Non-OPEC Crude Oil and Liquid Fuels Supply (million barrels per day)

U.S. Energy Information Admin	เรเเสแบก	20		inergy C	Juliook -	August 2		I		204	12			Voor	
}	1st	20 2nd	11 3rd	4th	1st	2nd	12 3rd	4th	1st	201 2nd	3rd	4th	2011	Year 2012	2013
	131	ZIIG	Jiu	7611	130	ZIIG	Jiu	701	131	ZIIG	514	701	2011	2012	2010
North America	16.39	16.39	16.69	17.44	17.69	17.56	17.58	17.86	17.87	18.04	18.19	18.36	16.73	17.68	18.12
Canada	3.67	3.42	3.71	3.86	3.95	3.78	3.76	3.86	3.85	3.89	4.01	4.03	3.66	3.83	3.95
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.93	2.92	2.90	2.88	2.87	2.85	2.96	2.93	2.87
United States	9.74	9.99	10.05	10.65	10.81	10.84	10.89	11.09	11.12	11.27	11.32	11.48	10.11	10.91	11.30
Central and South America	4.47	4.90	5.17	4.87	4.57	4.82	5.31	4.92	4.69	5.11	5.50	5.11	4.85	4.91	5.10
Argentina	0.78	0.72	0.78	0.79	0.78	0.76	0.77	0.76	0.76	0.75	0.76	0.75	0.77	0.76	0.75
Brazil	2.33	2.77	2.98	2.66	2.40	2.67	3.11	2.71	2.46	2.88	3.24	2.84	2.69	2.72	2.86
Colombia	0.89	0.95	0.95	0.97	0.96	0.97	0.99	1.01	1.02	1.03	1.05	1.07	0.94	0.98	1.04
Other Central and S. America	0.47	0.46	0.46	0.45	0.44	0.43	0.44	0.44	0.45	0.45	0.45	0.45	0.46	0.44	0.45
Europe	4.54	4.27	4.07	4.30	4.33	4.17	3.88	4.15	4.17	4.04	3.93	4.06	4.29	4.13	4.05
Norway	2.11	1.95	1.95	2.03	2.07	1.97	1.79	1.98	1.95	1.95	1.89	1.98	2.01	1.95	1.94
United Kingdom (offshore)	1.23	1.13	0.91	1.07	1.05	1.00	0.89	1.00	1.06	0.94	0.89	0.94	1.08	0.98	0.96
Other North Sea	0.26	0.27	0.24	0.24	0.24	0.25	0.25	0.24	0.24	0.23	0.23	0.22	0.25	0.24	0.23
Former Soviet Union (FSU)	13.35	13.35	13.25	13.30	13.41	13.37	13.19	13.48	13.44	13.61	13.59	13.63	13.31	13.36	13.57
Azerbaijan	1.00	1.00	0.97	0.98	0.96	0.95	1.01	1.12	0.97	0.97	0.96	0.94	0.99	1.01	0.96
Kazakhstan	1.67	1.65	1.63	1.61	1.63	1.59	1.45	1.62	1.73	1.75	1.78	1.82	1.64	1.57	1.77
Russia	10.22	10.24	10.19	10.25	10.35	10.33	10.22	10.24	10.24	10.38	10.34	10.36	10.23	10.29	10.33
Turkmenistan	0.22	0.22	0.22	0.23	0.24	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.22	0.24	0.27
Other FSU	0.45	0.45	0.45	0.46	0.47	0.49	0.51	0.51	0.50	0.51	0.51	0.51	0.45	0.49	0.51
Middle East	1.56	1.40	1.44	1.34	1.25	1.29	1.31	1.34	1.35	1.36	1.36	1.36	1.43	1.30	1.36
Oman	0.89	0.87	0.90	0.89	0.89	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.89	0.88	0.88
Syria	0.38	0.38	0.34	0.23	0.18	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.33	0.20	0.21
Yemen	0.24	0.10	0.15	0.16	0.13	0.16	0.17	0.20	0.21	0.21	0.21	0.22	0.16	0.17	0.21
Asia and Oceania	8.87	8.69	8.67	8.67	8.76	8.76	8.89	8.94	8.94	9.01	9.08	9.08	8.72	8.84	9.03
Australia	0.47	0.45	0.50	0.53	0.49	0.52	0.56	0.52	0.52	0.53	0.54	0.51	0.49	0.52	0.53
China	4.39	4.36	4.25	4.20	4.31	4.34	4.36	4.43	4.40	4.47	4.51	4.51	4.30	4.36	4.47
India	0.95	0.95	0.94	0.93	0.93	0.94	0.95	0.96	0.97	0.97	0.97	0.97	0.94	0.95	0.97
Indonesia	1.00	0.99	1.00	0.99	0.96	0.95	0.97	0.97	0.97	0.97	0.97	0.97	0.99	0.96	0.97
Malaysia	0.66	0.58	0.61	0.63	0.65	0.63	0.63	0.63	0.64	0.64	0.65	0.66	0.62	0.63	0.65
Vietnam	0.32	0.30	0.30	0.35	0.35	0.32	0.37	0.38	0.37	0.38	0.39	0.40	0.32	0.36	0.39
Africa	2.62	2.60	2.62	2.64	2.41	2.28	2.31	2.32	2.41	2.56	2.65	2.67	2.62	2.33	2.57
Egypt	0.71	0.71	0.70	0.70	0.71	0.70	0.71	0.71	0.71	0.71	0.70	0.70	0.71	0.71	0.71
Equatorial Guinea	0.30	0.30	0.29	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.35	0.30	0.33	0.33
Gabon	0.25	0.23	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.24	0.25	0.26
Sudan	0.48	0.45	0.45	0.45	0.20	0.08	0.11	0.11	0.19	0.35	0.45	0.45	0.46	0.12	0.36
Total non-OPEC liquids	51.80	51.60	51.91	52.56	52.42	52.25	52.47	53.02	52.87	53.72	54.31	54.28	51.97	52.54	53.80
OPEC non-crude liquids	5.33	5.23	5.22	5.33	5.41	5.58	5.66	5.69	5.72	5.73	5.74	5.80	5.28	5.59	5.75
Non-OPEC + OPEC non-crude	57.13	56.83	57.13	57.89	57.83	57.83	58.13	58.71	58.59	59.45	60.05	60.08	57.25	58.13	59.55

^{- =} no data available

Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Sudan production represents total production from both north and south.

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; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

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

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

U.S. Energy Information Admi	เมริเเลแบ			rengy	Outlook										
-	104	20.		446	104		2=4	446	104	201		446	2011	Year	2042
Crude Oil	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
	4 27	1.27	4 27	1.27	4 27	4 27							4 27		
Algeria	1.27		1.27		1.27	1.27	-	-	-	-	-	-	1.27	-	-
Angola	1.70	1.60	1.70	1.78	1.78	1.75	-	-	-	-	-	-	1.70	-	-
Ecudaor	0.50	0.50	0.49	0.50	0.50	0.50	-	-	-	-	-	-	0.50	-	-
Iran	3.70	3.70	3.65	3.58	3.40	3.09	-	-	-	-	-	-	3.66	-	-
Iraq	2.53	2.53	2.63	2.70	2.64	2.93	-	-	-	-	-	-	2.60	-	-
Kuwait	2.33	2.50	2.53	2.55	2.60	2.60	-	-	-	-	-	-	2.48	-	-
Libya	1.09	0.17	0.07	0.55	1.18	1.40	-	-	-	-	-	-	0.47	-	-
Nigeria	2.13	2.15	2.19	2.03	2.12	2.17	-	-	-	-	-	-	2.13	-	-
Qatar	0.85	0.85	0.85	0.85	0.82	0.73	-	-	-	-	-	-	0.85	-	-
Saudi Arabia	9.03	9.13	9.80	9.70	9.87	9.83	-	-	-	-	-	-	9.42	-	-
United Arab Emirates	2.43	2.60	2.60	2.63	2.50	2.50	-	-	-	-	-	-	2.57	-	-
Venezuela	2.20	2.20	2.20	2.20	2.20	2.20	-	-	-	-	-	-	2.20	-	-
OPEC Total	29.78	29.20	29.99	30.35	30.87	30.97	30.60	30.62	30.61	30.76	30.92	30.81	29.83	30.76	30.77
Other Liquids	5.33	5.23	5.22	5.33	5.41	5.58	5.66	5.69	5.72	5.73	5.74	5.80	5.28	5.59	5.75
Total OPEC Supply	35.11	34.43	35.21	35.69	36.28	36.55	36.26	36.31	36.33	36.49	36.66	36.61	35.11	36.35	36.52
Crude Oil Production Capacity															
Africa	6.18	5.18	5.22	5.64	6.34	6.58	6.59	6.75	6.94	7.07	7.20	7.27	5.55	6.57	7.12
South America	2.70	2.70	2.69	2.69	2.70	2.70	2.68	2.68	2.69	2.69	2.68	2.68	2.70	2.69	2.69
Middle East	24.54	24.55	24.60	24.58	24.10	23.95	23.66	23.48	23.48	23.51	23.53	23.56	24.57	23.80	23.52
OPEC Total	33.42	32.43	32.51	32.92	33.14	33.23	32.93	32.92	33.11	33.26	33.42	33.51	32.82	33.05	33.32
Surplus Crude Oil Production Capa	city														
Africa	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South America	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East	3.64	3.23	2.52	2.55	2.26	2.26	2.33	2.30	2.50	2.50	2.50	2.70	2.98	2.29	2.55
OPEC Total	3.64	3.23	2.52	2.57	2.26	2.26	2.33	2.30	2.50	2.50	2.50	2.70	2.99	2.29	2.55

^{- =} 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 East).

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

Historical data: Latest data available from Energy Information Administration international energy statistics; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

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

 $\textbf{Projections:} \ \textbf{Generated by simulation of the EIA Regional Short-Term Energy Model}.$

Table 3d. World Liquid Fuels Consumption (million barrels per day)

O.O. Energy information Administration	2011					20	12			20	13				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011	2012	2013
Nedla America	00.40	00.04	00.00	00.40	00.75	00.00	00.40	00.40	00.00	00.04	00.00	00.40	00.04	00.00	00.07
North America	23.48	23.04	23.30	23.13	22.75	22.92	23.19	23.16	22.90	22.94	23.26	23.16	23.24	23.00	23.07
Canada	2.28	2.17	2.31	2.28	2.21	2.20	2.29	2.25	2.24	2.17	2.29	2.26	2.26	2.24	2.24
Mexico	2.11	2.12	2.14	2.16	2.11	2.07	2.09	2.10	2.09	2.11	2.08	2.09	2.13	2.09	2.10
United States	19.09	18.75	18.84	18.68	18.41	18.63	18.80	18.80	18.55	18.65	18.88	18.80	18.84	18.66	18.72
Central and South America	6.26	6.49	6.51	6.49	6.44	6.67	6.70	6.68	6.63	6.88	6.90	6.88	6.44	6.62	6.82
Brazil	2.50	2.59	2.65	2.64	2.60	2.71	2.76	2.75	2.73	2.83	2.89	2.88	2.59	2.71	2.83
Europe	14.95	14.87	15.46	14.86	14.41	14.39	15.11	14.78	14.35	14.26	14.72	14.69	15.04	14.67	14.51
Former Soviet Union	4.58	4.51	4.77	4.76	4.69	4.72	4.88	4.88	4.85	4.77	5.05	5.05	4.66	4.79	4.93
Russia	3.09	3.05	3.22	3.22	3.16	3.21	3.30	3.29	3.27	3.22	3.41	3.40	3.15	3.24	3.32
Middle East	6.79	7.53	8.14	7.40	7.28	7.65	8.17	7.47	7.29	7.80	8.35	7.58	7.47	7.64	7.76
Asia and Oceania	28.56	27.31	27.28	28.41	29.26	28.17	28.20	28.92	29.58	28.72	28.59	29.25	27.89	28.64	29.03
China	9.99	9.78	9.57	9.82	10.12	10.09	10.33	10.29	10.57	10.53	10.81	10.52	9.79	10.21	10.61
Japan	4.83	3.91	4.31	4.81	5.28	4.18	4.30	4.70	5.10	4.30	4.34	4.75	4.46	4.61	4.62
India	3.36	3.35	3.07	3.32	3.44	3.47	3.14	3.40	3.55	3.53	3.24	3.50	3.27	3.36	3.46
Africa	3.36	3.34	3.32	3.35	3.48	3.45	3.43	3.46	3.61	3.58	3.56	3.59	3.34	3.45	3.58
Total OECD Liquid Fuels Consumption	46.34	44.58	45.98	45.82	45.49	44.33	45.53	45.66	45.41	44.35	45.11	45.63	45.68	45.25	45.12
Total non-OECD Liquid Fuels Consumption	41.65	42.51	42.79	42.59	42.81	43.65	44.15	43.68	43.80	44.59	45.32	44.56	42.39	43.57	44.57
Total World Liquid Fuels Consumption	87.98	87.09	88.77	88.41	88.31	87.97	89.67	89.34	89.21	88.94	90.44	90.19	88.07	88.83	89.70
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2007 Q1 = 100	109.7	110.2	111.1	111.7	112.7	113.3	114.2	115.0	115.9	116.7	117.5	118.5	110.7	113.8	117.1
Percent change from prior year	3.7	2.8	2.9	2.5	2.8	2.8	2.8	3.0	2.8	3.0	2.9	3.0	3.0	2.8	2.9
OECD Index, 2007 Q1 = 100	101.5	101.8	102.4	102.7	103.2	103.4	103.7	104.1	104.6	105.0	105.3	105.8	102.1	103.6	105.2
Percent change from prior year	2.2	1.5	1.6	1.3	1.7	1.6	1.3	1.4	1.4	1.6	1.5	1.6	1.6	1.5	1.5
Non-OECD Index, 2007 Q1 = 100	122.3	123.3	124.5	125.6	127.6	128.8	130.7	132.2	133.6	135.2	137.0	138.7	123.9	129.8	136.1
Percent change from prior year	5.7	4.7	4.8	4.0	4.3	4.5	4.9	5.2	4.7	5.0	4.8	5.0	4.8	4.8	4.9
Real U.S. Dollar Exchange Rate (a)															
Index, January 2007 = 100	96.28	94.62	95.09	97.70	97.96	99.37	100.04	99.97	100.44	101.24	102.72	102.50	95.92	99.33	101.73
Percent change from prior year	-1.9	-5.2	-3.9	0.8	1.7	5.0	5.2	2.3	2.5	1.9	2.7	2.5	-2.6	3.6	2.4

^{- =} no data available

Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

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

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

Slovakia, 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.

Historical data: Latest data available from Energy Information Administration international energy statistics; and International Energy Agency, Monthly Oil Data Service, latest monthly release.

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

⁽a) Weighted geometric mean of real indices for various countries with weights equal to each country's share of world oil consumption in the base period. Exchange rate is measured in foreign currency per U.S. dollar.

Table 4a. U.S. Crude Oil and Liquid Fuels Supply, Consumption, and Inventories

U.S. Energy Information Administration	Short-Ter			k - Augu	st 2012								ı	.,	
	1st	201 2nd	1 3rd	4th	1st	201 2nd	2 3rd	4th	1st	201 2nd	13 3rd	4th	2011	Year 2012	2013
Supply (million barrels per day)	151	ZIIU	Siu	4111	151	ZIIU	Siu	4111	151	ZIIU	Siu	4111	2011	2012	2013
Crude Oil Supply															
Domestic Production (a)	5.54	5.61	5.60	6.02	6.22	6.25	6.32	6.55	6.65	6.70	6.69	6.85	5.69	6.34	6.73
Alaska		0.59	0.53	0.60	0.59	0.53	0.50	0.55	0.56	0.70	0.47	0.53	0.57	0.54	0.73
Federal Gulf of Mexico (b)		1.35	1.19	1.28	1.34	1.29	1.30	1.34	1.36	1.38	1.36	1.39	1.32	1.32	1.38
Lower 48 States (excl GOM)		3.68	3.88	4.14	4.29	4.43	4.53	4.66	4.74	4.79	4.86	4.93	3.81	4.48	4.83
Crude Oil Net Imports (c)		8.95	9.07	8.80	8.58	8.81	4.33 8.97	7.95	7.81	8.30	8.51	7.68	8.87	8.58	8.07
SPR Net Withdrawals		0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Commercial Inventory Net Withdrawals		0.05	0.33	0.00	-0.41	-0.15	0.19	0.00	-0.25	0.05	0.00	0.16	0.00	-0.04	0.00
Crude Oil Adjustment (d)		0.03	0.29	-0.05	0.15	0.13	0.19	0.19	0.09	0.03	0.14	0.70	0.01	0.12	0.03
Total Crude Oil Input to Refineries		14.81	15.50	14.78	14.54	15.14	15.56	14.74	14.30	15.20	15.42	14.73	14.83	15.00	14.91
Other Supply	. 14.23	14.01	13.30	14.70	14.54	13.14	13.30	14.14	14.30	13.20	10.42	14.73	14.03	13.00	14.31
***	1.03	1.06	1.13	1.12	1.05	1.07	1.11	1.08	1.05	1.06	1.09	1.08	1.08	1.08	1.07
Refinery Processing Gain		2.19	2.18	2.32	2.38	2.38	2.38	2.36	2.32	2.37	2.39	2.36	2.18	2.37	2.36
Natural Gas Liquids Production		0.94	0.94	0.98	1.01	0.99	0.93	0.95	0.96	0.98		1.03	0.95	0.97	0.99
Renewables and Oxygenate Production (e)											1.00				
Fuel Ethanol Production		0.89	0.90	0.94	0.92	0.89	0.82	0.84	0.85	0.86	0.89	0.91	0.91	0.87	0.88
Petroleum Products Adjustment (f)		0.19	0.19	0.21	0.15	0.15	0.14	0.14	0.14	0.15	0.16	0.16	0.19	0.15	0.15
Product Net Imports (c)		0.02	-0.77	-1.04	-0.86	-1.05	-0.98	-0.86	-0.59	-0.69	-0.94	-0.93	-0.44	-0.94	-0.79
Pentanes Plus		0.06	-0.03	-0.03	-0.07	-0.06	-0.03	-0.03	-0.04	-0.03	-0.04	-0.04	0.00	-0.05	-0.04
Liquefied Petroleum Gas		-0.08	-0.05	0.02	-0.03	-0.07	-0.23	-0.18	-0.11	-0.14	-0.15	-0.09	-0.02	-0.13	-0.12
Unfinished Oils		0.65	0.63	0.60	0.53	0.59	0.66	0.63	0.55	0.63	0.64	0.59	0.62	0.60	0.60
Other HC/Oxygenates		-0.11	-0.11	-0.15	-0.11	-0.09	-0.05	-0.06	-0.06	-0.06	-0.06	-0.10	-0.12	-0.08	-0.07
Motor Gasoline Blend Comp.		0.83	0.59	0.57	0.58	0.66	0.66	0.61	0.59	0.68	0.63	0.63	0.66	0.63	0.63
Finished Motor Gasoline		-0.31	-0.37	-0.52	-0.33	-0.32	-0.36	-0.48	-0.31	-0.31	-0.39	-0.55	-0.37	-0.37	-0.39
Jet Fuel		0.01	-0.03	-0.05	-0.10	-0.06	-0.07	-0.07	-0.02	-0.02	-0.07	-0.09	-0.03	-0.08	-0.05
Distillate Fuel Oil		-0.62	-0.75	-0.90	-0.76	-0.99	-0.86	-0.75	-0.65	-0.77	-0.81	-0.71	-0.68	-0.84	-0.73
Residual Fuel Oil		-0.03	-0.22	-0.08	-0.10	-0.20	-0.16	-0.10	-0.11	-0.16	-0.16	-0.09	-0.08	-0.14	-0.13
Other Oils (g)		-0.38	-0.45	-0.50	-0.47	-0.52	-0.52	-0.43	-0.44	-0.52	-0.53	-0.48	-0.43	-0.49	-0.49
Product Inventory Net Withdrawals		-0.46	-0.33	0.31	0.12	-0.07	-0.37	0.34	0.33	-0.47	-0.27	0.32	0.03	0.00	-0.02
Total Supply	19.08	18.75	18.84	18.68	18.38	18.61	18.78	18.75	18.51	18.60	18.83	18.75	18.83	18.63	18.67
Consumption (million barrels per day)															
Natural Gas Liquids and Other Liquids															
Pentanes Plus	. 0.10	0.11	0.08	0.07	0.04	0.07	0.10	0.11	0.09	0.09	0.10	0.11	0.09	0.08	0.10
Liquefied Petroleum Gas		1.95	1.98	2.30	2.37	2.07	2.06	2.34	2.48	2.03	2.10	2.37	2.17	2.21	2.24
Unfinished Oils		-0.03	0.00	-0.03	0.09	-0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00
Finished Liquid Fuels	. 0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00
Motor Gasoline	. 8.60	8.86	8.87	8.60	8.48	8.91	8.80	8.59	8.45	8.83	8.81	8.56	8.74	8.69	8.66
Jet Fuel		1.47	1.48	1.38	1.35	1.44	1.46	1.38	1.36	1.47	1.47	1.38	1.43	1.41	1.42
Distillate Fuel Oil		3.75	3.78	3.93	3.83	3.73	3.75	3.94	3.87	3.75	3.82	4.00	3.85	3.81	3.86
Residual Fuel Oil		0.52	0.37	0.44	0.41	0.35	0.37	0.43	0.44	0.38	0.40	0.44	0.48	0.39	0.41
		2.11				2.09				2.09		1.95			
Other Oils (f)			2.26	1.98	1.84		2.25	2.00	1.87		2.19		2.08	2.04	2.03
Total Consumption	. 19.09	18.75	18.84	18.68	18.41	18.63	18.80	18.80	18.55	18.65	18.88	18.80	18.84	18.66	18.72
Total Liquid Fuels Net Imports	8.74	8.97	8.29	7.76	7.72	7.76	7.99	7.09	7.21	7.61	7.58	6.75	8.44	7.64	7.29
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)		358.5	331.8	330.9	368.1	381.6	364.1	346.3	368.6	363.8	350.6	336.1	330.9	346.3	336.1
Pentanes Plus		15.3	16.8	17.6	15.9	15.3	15.9	14.0	13.7	15.4	16.1	14.0	17.6	14.0	14.0
Liquefied Petroleum Gas		105.3	132.5	111.1	102.0	147.9	170.3	128.9	92.9	131.4	157.0	121.5	111.1	128.9	121.5
Unfinished Oils	. 87.4	91.9	89.1	79.1	90.8	84.4	82.8	78.6	89.6	87.4	85.2	79.2	79.1	78.6	79.2
Other HC/Oxygenates	23.2	21.2	20.7	21.3	26.8	24.2	23.5	22.7	23.8	22.8	23.3	23.4	21.3	22.7	23.4
Total Motor Gasoline	. 214.9	215.2	216.1	224.3	218.8	205.8	212.3	222.6	222.6	217.5	214.4	225.9	224.3	222.6	225.9
Finished Motor Gasoline	. 60.8	56.4	57.1	61.4	54.4	51.9	54.9	57.2	56.8	58.6	58.2	61.1	61.4	57.2	61.1
Motor Gasoline Blend Comp	. 154.1	158.8	159.0	162.8	164.4	153.8	157.4	165.4	165.7	158.9	156.2	164.9	162.8	165.4	164.9
Jet Fuel	40.0	42.3	46.0	41.7	39.1	39.1	41.2	40.1	40.7	42.3	43.4	41.0	41.7	40.1	41.0
Distillate Fuel Oil		440.7	153.7	149.7	133.8	119.7	131.5	136.6	121.8	132.3	143.4	146.5	149.7	136.6	146.5
	. 148.5	143.7	.00.7												
Residual Fuel Oil		143.7 37.4	34.6	34.1	36.3	35.1	34.4	36.1	35.9	36.7	35.7	36.7	34.1	36.1	36.7
	. 37.1						34.4 42.3	36.1 43.5	35.9 52.7		35.7 42.8	36.7 43.8	34.1 45.8	36.1 43.5	36.7 43.8
Residual Fuel Oil	. 37.1 . 49.6	37.4	34.6	34.1	36.3	35.1				36.7					
Residual Fuel Oil Other Oils (f)	. 37.1 49.6 1,043	37.4 50.5	34.6 43.8	34.1 45.8	36.3 50.4	35.1 48.6	42.3	43.5	52.7	36.7 50.5	42.8	43.8	45.8	43.5	43.8

^{- =} no data available

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

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.

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

⁽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. Petroleum Refinery Balance (Million Barrels per Day, Except Utilization Factor)

		201	1			201	2		•	201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Refinery and Blender Net Inputs															
Crude OII	14.23	14.81	15.50	14.78	14.54	15.14	15.56	14.74	14.30	15.20	15.42	14.73	14.83	15.00	14.91
Pentanes Plus	0.17	0.18	0.17	0.17	0.17	0.17	0.17	0.18	0.16	0.17	0.17	0.18	0.17	0.17	0.17
Liquefied Petroleum Gas	0.34	0.26	0.27	0.39	0.33	0.26	0.27	0.39	0.33	0.25	0.27	0.39	0.32	0.31	0.31
Other Hydrocarbons/Oxygenates	0.96	1.01	1.04	1.03	1.00	1.04	1.03	1.03	1.03	1.07	1.08	1.08	1.01	1.03	1.06
Unfinished Oils	0.48	0.63	0.66	0.74	0.31	0.68	0.66	0.68	0.43	0.65	0.67	0.65	0.63	0.58	0.60
Motor Gasoline Blend Components	0.60	0.82	0.54	0.44	0.45	0.55	0.55	0.52	0.56	0.75	0.65	0.53	0.60	0.52	0.62
Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs	16.78	17.72	18.18	17.55	16.79	17.84	18.23	17.53	16.81	18.09	18.26	17.56	17.56	17.60	17.68
Refinery Processing Gain	1.03	1.06	1.13	1.12	1.05	1.07	1.11	1.08	1.05	1.06	1.09	1.08	1.08	1.08	1.07
Refinery and Blender Net Production															
Liquefied Petroleum Gas	0.52	0.81	0.74	0.42	0.53	0.84	0.74	0.41	0.50	0.80	0.75	0.42	0.62	0.63	0.62
Finished Motor Gasoline	8.76	9.12	9.19	9.06	8.61	8.94	9.11	9.06	8.70	9.13	9.17	9.11	9.03	8.93	9.03
Jet Fuel	1.37	1.49	1.55	1.39	1.42	1.50	1.56	1.44	1.39	1.51	1.55	1.44	1.45	1.48	1.47
Distillate Fuel	4.21	4.31	4.63	4.78	4.39	4.51	4.69	4.69	4.31	4.58	4.70	4.69	4.49	4.57	4.57
Residual Fuel	0.53	0.55	0.56	0.51	0.54	0.53	0.53	0.55	0.55	0.56	0.54	0.54	0.54	0.54	0.54
Other Oils (a)	2.41	2.50	2.64	2.51	2.35	2.59	2.70	2.45	2.41	2.59	2.64	2.44	2.51	2.52	2.52
Total Refinery and Blender Net Production	17.80	18.78	19.31	18.67	17.84	18.92	19.34	18.61	17.86	19.16	19.35	18.64	18.64	18.68	18.75
Refinery Distillation Inputs	14.69	15.22	15.93	15.27	14.89	15.49	15.84	15.09	14.63	15.50	15.74	15.09	15.28	15.33	15.24
Refinery Operable Distillation Capacity	17.70	17.74	17.74	17.73	17.29	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.73	17.24	17.23
Refinery Distillation Utilization Factor	0.83	0.86	0.90	0.86	0.86	0.90	0.92	0.88	0.85	0.90	0.91	0.88	0.86	0.89	0.88

^{- =} 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

U.S. Energy information Administrat	1011 3	Short-refill Energy Outlook -				31 2012									
		201	11			201	12			20	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Prices (cents per gallon)															
Refiner Wholesale Price	267	312	297	271	297	297	279	262	259	273	267	257	287	283	264
Gasoline Regular Grade Retail Prices In	cluding Ta	axes													
PADD 1	329	377	364	337	363	366	347	331	327	339	335	327	352	352	332
PADD 2	326	380	364	329	355	366	347	323	320	337	332	319	350	348	327
PADD 3	314	365	349	317	346	353	329	313	309	326	321	308	336	335	316
PADD 4	311	365	355	337	322	374	350	324	312	332	334	321	342	343	325
PADD 5	353	400	377	368	390	414	375	360	350	364	365	354	375	385	359
U.S. Average	329	380	363	337	361	372	349	330	326	341	337	326	353	353	333
Gasoline All Grades Including Taxes	335	385	369	342	367	378	355	336	331	346	343	332	358	359	338
End-of-period Inventories (million barrels)														
Total Gasoline Inventories															
PADD 1	55.0	55.1	56.4	59.1	57.1	52.7	54.9	59.3	58.4	57.9	56.1	61.2	59.1	59.3	61.2
PADD 2	50.5	49.5	49.9	52.1	52.5	49.0	50.7	50.5	51.2	50.6	49.9	50.8	52.1	50.5	50.8
PADD 3	70.3	73.5	75.0	75.8	71.4	69.9	72.5	76.2	76.5	74.3	73.7	77.7	75.8	76.2	77.7
PADD 4	6.5	6.6	5.9	7.6	6.5	6.3	6.7	6.9	6.7	6.2	6.3	6.7	7.6	6.9	6.7
PADD 5	32.7	30.4	28.9	29.6	31.3	27.9	27.6	29.8	29.8	28.5	28.3	29.5	29.6	29.8	29.5
U.S. Total	214.9	215.2	216.1	224.3	218.8	205.8	212.3	222.6	222.6	217.5	214.4	225.9	224.3	222.6	225.9
Finished Gasoline Inventories															
U.S. Total	60.8	56.4	57.1	61.4	54.4	51.9	54.9	57.2	56.8	58.6	58.2	61.1	61.4	57.2	61.1
Gasoline Blending Components Invento	ories														
U.S. Total	154.1	158.8	159.0	162.8	164.4	153.8	157.4	165.4	165.7	158.9	156.2	164.9	162.8	165.4	164.9

^{- =} no data available

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

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

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

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

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

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

Prices are not adjusted for inflation.

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

U.S. Energy Information Admir	, ,														
L		201				201				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (billion cubic feet per day)															
Total Marketed Production	63.83	65.96	66.30	68.74	68.86	68.81	68.49	68.71	69.28	69.51	69.58	69.73	66.22	68.72	69.52
Alaska	1.12	1.00	0.86	1.02	1.07	0.99	1.02	0.99	1.00	0.91	0.96	0.96	1.00	1.02	0.96
Federal GOM (a)	5.60	5.23	4.54	4.58	4.57	4.34	4.15	4.36	4.75	4.75	4.55	4.66	4.98	4.35	4.68
Lower 48 States (excl GOM)	57.10	59.73	60.90	63.14	63.22	63.48	63.33	63.37	63.53	63.85	64.06	64.11	60.24	63.35	63.89
Total Dry Gas Production	60.83	62.75	63.10	65.32	65.35	65.32	65.01	65.22	65.76	65.98	66.05	66.19	63.01	65.23	66.00
Gross Imports	11.04	8.95	8.97	8.95	8.96	8.23	9.21	9.06	9.49	8.45	8.88	9.23	9.47	8.87	9.01
Pipeline	9.80	7.89	8.20	8.17	8.35	7.86	8.82	8.55	9.02	7.82	8.30	8.59	8.51	8.40	8.43
LNG	1.23	1.05	0.77	0.78	0.61	0.37	0.39	0.51	0.48	0.64	0.58	0.64	0.96	0.47	0.58
Gross Exports	4.51	4.16	3.82	4.04	4.42	4.20	3.72	4.22	4.70	4.27	4.08	4.32	4.13	4.14	4.34
Net Imports	6.53	4.79	5.15	4.91	4.54	4.04	5.49	4.85	4.80	4.18	4.80	4.91	5.34	4.73	4.67
Supplemental Gaseous Fuels	0.19	0.14	0.16	0.18	0.19	0.15	0.17	0.19	0.19	0.16	0.17	0.19	0.17	0.17	0.18
Net Inventory Withdrawals	16.98	-10.45	-9.63	-0.51	10.61	-7.11	-6.97	4.10	16.36	-10.61	-8.75	4.81	-0.97	0.15	0.39
Total Supply	84.53	57.23	58.78	69.91	80.69	62.39	63.70	74.35	87.11	59.71	62.27	76.10	67.55	70.28	71.24
Balancing Item (b)	-0.80	-0.78	-0.25	-1.79	-0.17	-0.82	-0.96	0.15	-0.21	-0.62	0.44	-0.91	-0.90	-0.45	-0.33
Total Primary Supply	83.74	56.45	58.54	68.12	80.51	61.57	62.74	74.50	86.90	59.09	62.71	75.18	66.65	69.82	70.91
Consumption (billion cubic feet per	day)														
Residential	26.13	7.58	3.73	14.65	20.63	6.24	3.87	17.29	24.84	6.84	3.78	17.12	12.96	12.00	13.10
Commercial	14.75	5.90	4.35	9.75	12.11	5.37	4.04	10.56	14.46	5.45	3.88	10.43	8.66	8.02	8.53
Industrial	20.02	17.65	17.19	18.93	19.72	17.72	17.54	19.08	20.37	17.87	17.67	19.18	18.44	18.51	18.77
Electric Power (c)	16.75	19.88	27.74	18.85	21.76	26.50	31.61	21.58	20.64	23.21	31.62	22.41	20.83	25.37	24.49
Lease and Plant Fuel	3.65	3.78	3.79	3.93	3.94	3.94	3.92	3.93	3.97	3.98	3.98	3.99	3.79	3.93	3.98
Pipeline and Distribution Use	2.36	1.59	1.65	1.92	2.26	1.71	1.67	1.96	2.52	1.65	1.69	1.96	1.87	1.90	1.95
Vehicle Use	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total Consumption	83.74	56.45	58.54	68.12	80.51	61.57	62.74	74.50	86.90	59.09	62.71	75.18	66.65	69.82	70.91
End-of-period Inventories (billion co	ubic feet)														
Working Gas Inventory	1,581	2,530	3,416	3,462	2,477	3,114	3,756	3,379	1,907	2,873	3,677	3,235	3,462	3,379	3,235
Producing Region (d)	738	992	1,070	1,193	1,034	1,122	1,208	1,159	832	1,053	1,169	1,100	1,193	1,159	1,100
East Consuming Region (d)	618	1,188	1,879	1,822	1,090	1,521	2,004	1,750	787	1,398	2,013	1,697	1,822	1,750	1,697
West Consuming Region (d)	225	350	468	447	353	472	544	470	288	422	496	438	447	470	438

^{- =} no data available

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

LNG: liquefied natural gas.

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

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

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

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

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

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

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

0.5. Energy information	Adminis			Tellii El	iergy Ot	Itiook - A	_	712							
	4.1	201		441		201		441		20		441	2014	Year	2012
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Wholesale/Spot															
U.S. Average Wellhead	4.06	4.10	4.10	3.37	2.54	2.12	2.75	3.06	3.26	3.03	3.26	3.54	3.90	2.62	3.27
Henry Hub Spot Price	4.31	4.50	4.25	3.42	2.52	2.35	2.99	3.13	3.42	3.36	3.40	3.61	4.12	2.75	3.44
Residential															
New England	13.99	14.30	17.26	13.08	13.07	14.72	16.81	13.58	13.37	14.50	17.54	14.39	14.05	13.81	14.17
Middle Atlantic	11.84	14.11	18.14	12.66	11.29	13.23	17.16	13.18	11.80	13.44	17.77	13.95	12.83	12.63	13.06
E. N. Central	8.87	10.95	16.23	9.31	8.35	10.69	15.85	9.39	8.64	10.73	16.49	9.84	9.76	9.50	9.77
W. N. Central	8.83	11.17	16.78	9.51	8.45	12.00	16.66	9.24	8.63	10.83	16.97	9.70	9.80	9.67	9.70
S. Atlantic	11.97	17.55	22.89	13.51	12.43	17.65	22.60	13.19	12.21	17.67	23.90	14.13	13.78	14.07	14.17
E. S. Central	9.92	13.70	18.42	11.11	10.21	14.72	18.20	11.42	10.56	14.30	19.14	11.63	11.13	11.60	11.74
W. S. Central	8.60	14.31	19.03	10.16	9.25	14.24	18.16	10.16	8.50	13.86	19.05	11.00	10.47	10.91	10.62
Mountain	8.92	9.87	13.54	8.86	8.80	10.39	13.04	8.82	8.66	9.26	12.41	8.67	9.40	9.35	9.04
Pacific	9.97	10.91	11.63	9.92	9.40	9.51	10.45	9.55	9.67	9.80	10.69	9.87	10.34	9.59	9.88
U.S. Average	9.96	11.97	15.53	10.45	9.67	11.80	15.51	10.81	9.96	11.78	15.95	11.30	10.80	10.83	11.07
Commercial															
New England	11.16	10.64	10.43	10.45	10.26	10.53	10.59	11.12	11.18	10.83	11.15	11.62	10.83	10.60	11.24
Middle Atlantic	9.84	9.62	8.99	9.27	8.79	7.75	8.02	9.47	9.41	9.31	9.10	10.13	9.55	8.71	9.56
E. N. Central	8.35	8.98	9.85	7.88	7.46	7.76	8.53	7.99	8.08	8.60	9.12	8.59	8.45	7.79	8.40
W. N. Central	7.92	8.44	9.49	7.61	7.21	7.10	8.30	7.08	7.37	7.46	8.83	7.57	8.05	7.25	7.56
S. Atlantic	9.80	10.87	11.13	9.77	9.31	9.66	10.19	10.12	9.92	10.32	10.69	10.85	10.13	9.82	10.38
E. S. Central	8.82	9.59	10.39	9.24	8.78	9.17	9.82	9.68	9.21	9.72	10.36	10.19	9.22	9.25	9.69
W. S. Central	7.30	8.54	8.92	7.43	7.25	6.94	7.80	7.39	7.26	7.82	8.40	7.99	7.78	7.33	7.71
Mountain	8.03	8.05	9.00	7.72	7.49	7.85	8.75	7.93	7.56	7.39	8.23	7.85	8.05	7.83	7.68
Pacific	9.13	9.19	9.75	8.88	8.60	7.94	8.05	8.18	8.44	7.89	8.37	8.73	9.17	8.25	8.39
U.S. Average	8.75	9.16	9.72	8.52	8.19	8.11	8.66	8.64	8.58	8.68	9.20	9.16	8.86	8.39	8.84
Industrial															
New England	10.67	9.82	9.20	9.21	9.55	8.11	8.11	9.22	10.13	9.23	8.89	9.82	9.84	8.91	9.66
Middle Atlantic	9.58	9.28	8.88	9.24	8.54	7.22	7.63	9.12	9.01	7.93	8.11	9.62	9.36	8.36	8.85
E. N. Central	7.39	7.19	7.28	6.64	6.70	5.79	5.99	6.29	6.60	6.25	6.33	6.77	7.15	6.31	6.56
W. N. Central	6.27	5.77	5.55	5.54	5.41	3.98	4.15	4.79	5.30	4.23	4.37	5.07	5.81	4.62	4.80
S. Atlantic	6.53	6.23	6.07	5.71	5.05	4.22	4.89	5.39	5.72	5.34	5.54	6.03	6.15	4.92	5.68
E. S. Central	5.84	5.58	5.47	5.10	4.44	3.72	4.54	4.94	5.29	4.80	5.07	5.35	5.51	4.43	5.15
W. S. Central	4.29	4.51	4.39	3.64	2.94	2.47	3.23	3.26	3.52	3.55	3.77	3.75	4.21	2.98	3.65
Mountain	6.86	6.49	6.86	6.29	6.05	5.31	5.67	6.25	6.29	5.59	6.18	6.62	6.61	5.88	6.21
Pacific	7.51	7.33	7.37	6.94	6.66	5.81	5.88	6.65	6.79	6.06	6.37	7.10	7.29	6.30	6.62
U.S. Average	5.45	5.15	4.94	4.53	4.13	3.19	3.82	4.27	4.69	4.15	4.30	4.71	5.02	3.88	4.47

^{- =} 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.

 $\textbf{Projections:} \ \ \textbf{Generated by simulation of the EIA Regional Short-Term Energy Model}.$

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

U.S. Energy Information Administ	ration	Short-I	erm Ene	ergy Out	look - Au	ugust 20	12								
		201	11			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million short tons)															
Production	273.6	263.6	274.6	282.5	266.4	237.5	254.1	255.5	237.7	239.4	246.7	247.8	1094.3	1013.5	971.6
Appalachia	87.3	85.7	81.8	82.1	80.6	79.2	77.2	79.0	73.5	74.7	72.3	72.4	336.9	316.0	292.9
Interior	41.5	41.1	45.0	42.6	44.3	39.0	36.2	35.1	33.2	34.0	34.2	33.7	170.3	154.6	135.1
Western	144.8	136.8	147.8	157.7	141.5	119.3	140.7	141.4	131.1	130.7	140.2	141.7	587.1	542.9	543.6
Primary Inventory Withdrawals	5.5	-1.1	1.6	1.8	0.4	0.5	3.8	-0.2	5.5	-1.1	1.6	-2.6	7.9	4.5	3.5
Imports	3.4	3.4	3.6	2.7	2.0	2.8	4.4	4.0	3.6	3.6	4.4	4.0	13.1	13.2	15.7
Exports	26.6	27.0	26.0	27.7	28.6	35.4	27.3	24.4	23.7	24.9	24.5	24.2	107.3	115.8	97.2
Metallurgical Coal	17.2	17.8	16.5	18.0	17.5	21.3	17.4	16.4	16.4	17.2	16.5	16.1	69.5	72.5	66.1
Steam Coal	9.5	9.1	9.5	9.6	11.1	12.7	9.9	8.1	7.3	7.7	8.0	8.1	37.6	41.8	31.1
Total Primary Supply	255.9	239.0	253.9	259.3	240.2	205.4	235.0	234.9	223.1	217.1	228.3	225.1	1008.1	915.5	893.5
Secondary Inventory Withdrawals	8.9	0.7	20.7	-31.2	-20.3	-5.1	11.5	-6.0	5.9	-11.1	11.6	-5.6	-0.8	-19.8	0.9
Waste Coal (a)	3.3	2.9	3.4	3.0	2.8	3.2	3.2	3.2	3.4	3.2	3.2	3.2	12.5	12.3	12.9
Total Supply	268.0	242.6	278.0	231.1	222.8	203.5	249.7	232.1	232.4	209.2	243.1	222.7	1019.7	908.0	907.3
Consumption (million short tons)															
Coke Plants	5.2	5.4	5.4	5.4	5.3	6.1	6.8	6.7	7.0	6.8	7.5	7.1	21.4	24.9	28.5
Electric Power Sector (b)	234.8	223.5	261.5	208.6	189.9	189.5	232.9	212.2	212.2	189.1	223.2	202.2	928.6	824.5	826.7
Retail and Other Industry	13.5	11.7	11.7	12.2	11.7	11.2	12.0	13.2	13.2	13.3	12.4	13.3	49.1	48.2	52.2
Residential and Commercial	1.0	0.6	0.5	0.6	0.7	0.6	0.8	1.2	1.2	0.8	0.8	1.2	2.8	3.3	4.1
Other Industrial	12.5	11.1	11.2	11.6	11.0	10.6	11.2	12.0	11.9	12.5	11.6	12.1	46.3	44.9	48.1
Total Consumption	253.6	240.6	278.7	226.3	206.9	206.9	251.7	232.1	232.4	209.2	243.1	222.7	999.1	897.6	907.3
Discrepancy (c)	14.5	2.0	-0.6	4.9	15.8	-3.3	-2.1	0.0	0.0	0.0	0.0	0.0	20.6	10.4	0.0
End-of-period Inventories (million sho	rt tons)														
Primary Inventories (d)	44.3	45.4	43.8	41.9	41.5	41.0	37.2	37.4	32.0	33.0	31.4	34.0	41.9	37.4	34.0
Secondary Inventories	173.1	172.4	151.6	182.8	203.0	208.1	196.6	202.5	196.6	207.7	196.1	201.6	182.8	202.5	201.6
Electric Power Sector	166.7	165.7	144.4	175.1	196.4	200.7	188.6	194.2	189.3	199.7	187.6	192.8	175.1	194.2	192.8
Retail and General Industry	3.9	4.2	4.3	4.5	3.8	4.2	4.8	5.2	4.4	4.7	5.3	5.6	4.5	5.2	5.6
Coke Plants	2.0	2.0	2.4	2.6	2.3	2.7	2.6	2.6	2.3	2.7	2.7	2.7	2.6	2.6	2.7
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	5.22	5.22	5.22	5.22	5.12	5.12	5.12	5.12	4.97	4.97	4.97	4.97	5.22	5.12	4.97
Total Raw Steel Production															
(Million short tons per day)	0.257	0.261	0.266	0.264	0.274	0.278	0.130	0.258	0.292	0.294	0.276	0.277	0.262	0.235	0.285
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.43	2.42	2.37	2.41	2.36	2.35	2.30	2.40	2.41	2.36

^{- =} no data available

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

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

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

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

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

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

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

Table 7a. U.S. Electricity Industry Overview

0.3. Energy information Adminis	Juanon	201		Jigy Out	JOOK - AL	<u>1903(20 1</u> 201				201	2			Year	
	1st	201 2nd	3rd	4th	1st	201 2nd	2 3rd	4th	1st	201 2nd	3rd	4th	2011	2012	2013
Electricity Supply (billion kilowatthou							··				v				
Electricity Generation	11.07	10.94	12.65	10.33	10.56	11.04	12.50	10.70	11.04	10.86	12.41	10.71	11.25	11.20	11.26
Electric Power Sector (a)	10.66	10.54	12.22	9.92	10.14	10.63	12.06	10.29	10.64	10.46	11.98	10.32	10.84	10.78	10.85
End-use Sector (b)	0.41	0.41	0.43	0.41	0.42	0.41	0.43	0.40	0.41	0.39	0.42	0.40	0.41	0.42	0.40
Net Imports	0.08	0.10	0.13	0.09	0.10	0.13	0.14	0.09	0.08	0.08	0.11	0.07	0.10	0.12	0.09
Total Supply	11.15	11.04	12.78	10.42	10.66	11.16	12.64	10.79	11.13	10.94	12.51	10.78	11.35	11.31	11.34
Losses and Unaccounted for (c)	0.59	0.95	0.86	0.74	0.63	0.97	0.79	0.75	0.59	0.89	0.78	0.73	0.79	0.79	0.75
Electricity Consumption (billion kilowa	atthours p	er day)													
Retail Sales	10.21	9.74	11.55	9.33	9.66	9.84	11.47	9.69	10.19	9.71	11.37	9.71	10.21	10.17	10.25
Residential Sector	4.12	3.49	4.69	3.30	3.67	3.45	4.51	3.50	4.05	3.42	4.44	3.52	3.90	3.78	3.86
Commercial Sector	3.45	3.56	4.05	3.39	3.36	3.62	4.08	3.48	3.49	3.58	4.05	3.48	3.61	3.64	3.65
Industrial Sector	2.61	2.67	2.79	2.62	2.61	2.75	2.85	2.69	2.63	2.69	2.86	2.69	2.67	2.73	2.72
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)	0.35	0.35	0.37	0.35	0.36	0.35	0.37	0.35	0.35	0.34	0.36	0.34	0.36	0.36	0.35
Total Consumption	10.56	10.09	11.92	9.68	10.03	10.19	11.84	10.04	10.54	10.05	11.73	10.05	10.57	10.53	10.60
Prices															
Power Generation Fuel Costs (dollar	s per milli	on Btu)													
Coal	2.34	2.42	2.46	2.37	2.41	2.43	2.42	2.37	2.41	2.36	2.35	2.30	2.40	2.41	2.36
Natural Gas	5.02	4.92	4.76	4.13	3.31	2.91	3.54	3.85	4.10	3.88	3.89	4.28	4.71	3.40	4.02
Residual Fuel Oil	15.88	18.29	20.10	20.05	21.27	20.97	18.63	18.01	17.73	17.41	17.25	17.20	18.49	19.59	17.39
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	23.27	22.68	22.77	22.51	22.68	22.57	22.97	22.40	23.10	22.67
End-Use Prices (cents per kilowatthe	our)														
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.04	12.42	11.81	11.39	12.29	12.62	12.04	11.79	11.99	12.09
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.15	10.58	9.99	9.92	10.35	10.81	10.18	10.32	10.18	10.34
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.67	7.15	6.59	6.56	6.82	7.28	6.73	6.89	6.74	6.86

^{- =} no data available

Prices are not adjusted for inflation.

for which revenue information is not available. See Table 7.6 of the EIAMonthly Energy Review.

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

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

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

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

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

 $[\]hbox{(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)

U.S. Effergy informa		201	-	101111	Energy	201	Augusi	2012		201	12			Year	
	1st	201 2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Residential Sector	131	ZIIG	Jiu	701	131	ZIIU	Jiu	701	131	ZIIG	Jiu	701	2011	2012	2013
New England	144	115	143	116	133	113	146	125	140	115	144	126	130	129	131
Middle Atlantic		328	437	318	363	314	432	341	394	321	430	343	371	363	372
E. N. Central		455	608	457	516	453	602	481	563	446	566	483	524	513	515
W. N. Central		251	334	251	292	254	336	269	328	249	317	270	292	288	291
S. Atlantic		907	1,192	803	890	876	1,140	868	1,036	876	1,136	879	984	944	982
E. S. Central	,	296	408	261	312	293	394	292	360	292	384	289	334	323	331
W. S. Central		550	820	467	485	551	724	477	550	517	709	483	599	560	565
Mountain		228	334	229	237	242	329	235	250	239	334	239	260	261	266
Pacific contiguous	438	350	401	385	428	346	397	391	417	353	404	394	393	391	392
AK and HI		13	13	14	15	13	13	14	15	13	13	15	14	14	14
Total		3,493	4,689	3,302	3,670	3,455	4,515	3,495	4.054	3,421	4,437	3,520	3,901	3,785	3,858
Commercial Sector	4,110	0,400	4,000	0,002	0,010	0,400	1,010	0, 100	1,001	0, 12 1	1, 101	0,020	0,001	0,700	0,000
New England	123	119	133	115	118	118	134	119	123	120	134	119	123	122	124
Middle Atlantic		421	482	406	416	417	483	420	436	420	478	420	436	434	439
E. N. Central		484	551	473	476	491	561	493	502	482	547	491	501	505	505
W. N. Central		262	297	258	257	273	309	268	272	268	300	265	272	277	276
S. Atlantic		856	942	773	761	851	945	787	799	842	946	792	839	836	845
E. S. Central		227	265	206	207	231	269	213	217	229	266	213	229	230	231
W. S. Central	443	500	595	456	447	522	584	467	<i>4</i> 52	500	574	469	499	505	499
Mountain		249	287	243	233	261	288	249	240	263	292	248	254	258	261
Pacific contiguous	430	429	482	438	430	440	488	447	429	438	493	444	445	452	451
AK and HI		17	17	17	17	16	17	17	18	17	17	18	17	17	17
Total		3,564	4,052	3,386	3,364	3,620	4.078	3,482	3.487	3.579	4.047	3,478	3,614	3.637	3.649
Industrial Sector	0,100	0,004	4,002	0,000	0,004	0,020	1,070	0, 102	0, 101	0,070	1,011	0, 170	0,014	0,007	0,070
New England	75	76	81	73	73	74	79	73	71	73	78	72	76	75	73
Middle Atlantic		192	196	187	186	200	198	181	190	188	191	181	194	191	187
E. N. Central		541	567	536	546	559	570	547	546	544	579	549	546	556	555
W. N. Central		236	253	237	234	247	262	246	238	243	260	245	240	247	246
S. Atlantic		394	401	373	372	401	403	376	371	395	407	376	384	388	387
E. S. Central		320	336	336	345	353	356	353	347	342	358	357	334	352	351
W. S. Central		441	456	422	410	433	476	443	418	433	471	435	434	441	439
Mountain		219	239	215	206	228	246	220	208	225	252	223	219	225	227
Pacific contiguous	221	233	247	228	220	237	250	240	223	232	252	237	232	237	236
AK and HI		13	14	14	14	14	14	14	13	14	15	14	14	14	14
Total		2,666	2,791	2,620	2,607	2,746	2,855	2,694	2,626	2,688	2,862	2,687	2,673	2,726	2,716
Total All Sectors (a)	_,	_,000	_,. • .	_,0_0	_,	_,	2,000	2,00	2,020	2,000	2,002	2,007	_,0.0	2,.20	2,7.70
New England	344	311	359	307	326	306	361	319	336	309	358	319	330	328	330
Middle Atlantic		952	1,126	921	977	942	1,125	955	1,033	942	1,113	957	1,012	1,000	1,011
E. N. Central	-	1,482	1,728	1,468	1,541	1,504	1,735	1,523	1,613	1,473	1,694	1,524	1,573	1,576	1,576
W. N. Central		749	884	746	783	774	907	783	838	761	877	780	803	812	814
S. Atlantic		2,161	2,539	1,952	2,027	2,132	2,492	2.035	2,211	2,116	2,492	2,051	2,211	2,172	2,218
E. S. Central	931	844	1,009	803	864	877	1,020	857	924	862	1,007	858	897	905	913
W. S. Central	1,417	1,491	1,871	1,346	1,342	1,507	1,784	1,388	1,420	1,450	1,754	1,386	1,532	1,506	1,503
Mountain	691	696	860	687	676	732	864	705	698	728	877	709	734	745	753
Pacific contiguous	1,090	1,015	1,132	1,054	1,081	1,026	1,137	1.081	1,071	1,026	1,151	1,077	1,073	1.082	1,082
AK and HI	,	43	44	45	45	42	44	46	46	44	45	46	45	1,002	45
Total		9,743	11,553	9,328	9,663	9,841	11,470	9.693	10,190	9,709	11,369	9,708	10,209	10,169	10,246

 ^{- =} 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 Information	tion Admi	nistratior	n Sho	ort-Term	Energy	Outlook	 August 	2012							
		201				201	12			201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Residential Sector															
New England	15.94	16.10	15.94	15.94	16.01	15.98	16.17	16.03	15.97	16.19	15.99	15.92	15.98	16.05	16.01
Middle Atlantic	15.16	15.98	16.48	15.76	14.94	15.54	16.37	15.64	15.16	16.47	17.34	15.93	15.86	15.66	16.26
E. N. Central	10.98	12.04	12.20	11.93	11.69	12.56	12.71	12.17	11.69	12.94	13.00	12.55	11.78	12.30	12.53
W. N. Central	9.01	10.52	11.16	9.80	9.61	10.96	11.40	9.89	9.40	11.05	11.60	10.19	10.13	10.50	10.54
S. Atlantic	10.73	11.43	11.62	11.23	11.13	11.55	11.87	11.30	10.77	11.52	11.83	11.39	11.26	11.49	11.39
E. S. Central	9.60	10.21	10.23	10.51	9.91	10.31	10.52	10.18	9.73	10.54	10.58	10.60	10.11	10.25	10.35
W. S. Central	10.01	10.76	10.79	10.53	10.31	10.49	10.61	10.25	10.06	10.74	10.75	10.35	10.55	10.44	10.49
Mountain	9.75	10.83	11.23	10.21	10.11	11.12	11.47	10.44	10.09	11.25	11.71	10.65	10.57	10.85	10.99
Pacific	12.18	12.53	13.70	12.56	12.30	12.90	14.08	12.36	12.39	12.93	14.22	12.79	12.74	12.90	13.09
U.S. Average	11.19	11.95	12.18	11.82	11.57	12.04	12.42	11.81	11.39	12.29	12.62	12.04	11.79	11.99	12.09
Commercial Sector															
New England	14.38	14.37	14.49	14.05	13.98	13.86	14.23	13.94	13.98	14.05	14.21	13.81	14.33	14.01	14.02
Middle Atlantic	13.23	13.76	14.52	13.00	12.57	13.02	13.92	12.74	12.77	13.54	14.47	13.01	13.66	13.10	13.48
E. N. Central	9.30	9.62	9.63	9.34	9.51	9.71	9.70	9.38	9.38	9.66	9.78	9.54	9.48	9.58	9.59
W. N. Central	7.60	8.47	8.96	7.77	7.89	8.55	8.94	7.72	7.67	8.54	9.10	7.93	8.23	8.30	8.33
S. Atlantic	9.40	9.51	9.62	9.53	9.48	9.47	9.60	9.58	9.46	9.57	9.79	9.70	9.52	9.53	9.64
E. S. Central	9.54	9.73	9.81	9.79	9.67	9.71	9.64	9.59	9.46	9.70	9.86	9.91	9.72	9.66	9.74
W. S. Central	8.55	8.65	8.90	8.43	8.29	8.09	8.28	8.15	8.44	8.58	8.69	8.35	8.65	8.20	8.53
Mountain	8.25	9.01	9.29	8.66	8.40	9.14	9.41	8.73	8.51	9.29	9.57	8.94	8.83	8.95	9.11
Pacific	10.89	12.29	13.71	11.46	10.83	11.96	13.62	11.34	10.81	12.12	13.67	11.56	12.14	11.99	12.10
U.S. Average	9.97	10.38	10.76	10.07	9.93	10.15	10.58	9.99	9.92	10.35	10.81	10.18	10.32	10.18	10.34
Industrial Sector															
New England	12.67	12.61	12.99	12.41	12.09	11.99	12.10	12.26	12.49	12.13	12.49	12.18	12.68	12.11	12.32
Middle Atlantic	8.46	8.21	8.34	7.67	7.53	7.56	8.10	7.68	7.82	7.78	8.10	7.65	8.17	7.72	7.84
E. N. Central	6.45	6.56	6.78	6.54	6.49	6.61	6.88	6.55	6.46	6.57	6.80	6.53	6.59	6.63	6.59
W. N. Central	5.77	6.13	6.64	5.78	5.92	6.25	6.66	5.90	5.92	6.34	6.93	6.03	6.09	6.20	6.32
S. Atlantic	6.52	6.76	7.11	6.57	6.41	6.61	6.99	6.63	6.53	6.68	7.13	6.79	6.75	6.67	6.79
E. S. Central	5.81	6.16	6.82	5.94	5.79	6.02	6.58	5.92	5.88	6.14	6.52	6.13	6.18	6.08	6.17
W. S. Central	5.78	6.03	6.63	5.77	5.47	5.40	5.99	5.48	5.48	5.79	6.36	5.77	6.07	5.60	5.87
Mountain	5.59	6.08	6.87	5.80	5.66	6.12	6.89	5.81	5.90	6.43	7.18	6.13	6.11	6.15	6.44
Pacific	7.34	7.73	8.70	7.82	7.30	7.62	8.31	7.32	7.06	7.69	8.38	7.48	7.92	7.65	7.68
U.S. Average	6.63	6.86	7.36	6.68	6.51	6.67	7.15	6.59	6.56	6.82	7.28	6.73	6.89	6.74	6.86
All Sectors (a)															
New England	14.63	14.55	14.70	14.34	14.35	14.15	14.52	14.34	14.46	14.37	14.53	14.25	14.56	14.35	14.41
Middle Atlantic	13.05	13.39	14.19	12.86	12.48	12.68	13.82	12.80	12.75	13.36	14.45	13.01	13.41	12.98	13.43
E. N. Central	8.94	9.24	9.60	9.12	9.16	9.41	9.82	9.24	9.19	9.51	9.84	9.41	9.24	9.42	9.50
W. N. Central	7.65	8.42	9.13	7.82	7.94	8.60	9.19	7.90	7.85	8.66	9.36	8.12	8.28	8.44	8.51
S. Atlantic	9.54	9.81	10.17	9.66	9.64	9.78	10.22	9.77	9.58	9.84	10.29	9.89	9.81	9.87	9.92
E. S. Central	8.19	8.54	8.99	8.42	8.20	8.43	8.91	8.28	8.22	8.57	8.95	8.57	8.55	8.48	8.59
W. S. Central	8.31	8.65	9.18	8.32	8.16	8.19	8.62	8.02	8.20	8.52	8.90	8.24	8.66	8.27	8.49
Mountain	8.00	8.68	9.37	8.28	8.17	8.86	9.48	8.39	8.30	9.05	9.70	8.63	8.63	8.77	8.97
Pacific	10.68	11.32	12.61	11.06	10.68	11.26	12.60	10.81	10.64	11.39	12.69	11.11	11.44	11.36	11.48
U.S. Average	9.61	9.98	10.52	9.74	9.63	9.84	10.45	9.70	9.64	10.06	10.63	9.90	9.98	9.93	10.08

^{- =} 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.

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.

 $\textbf{Projections:} \ \ \textbf{Generated by simulation of the EIA Regional Short-Term Energy Model}.$

Prices are not adjusted for inflation.

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

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

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

O.O. Energy information Admin	notration	20	11	Lilorgy	Outlook	201				201	13			Year	
<u> </u>	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
United States															
Coal	4,933	4,616	5,320	4,139	3,834	3,873	4,697	4,294	4,440	3,907	4,529	4,116	4,751	4,176	4,248
Natural Gas	2,294	2,609	3,602	2,623	3,024	3,507	4,212	2,976	2,826	3,080	4,166	3,056	2,785	3,431	3,285
Petroleum (a)	88	76	83	61	61	58	75	65	79	75	82	70	77	65	76
Other Gases	29	30	33	31	36	34	34	33	37	33	33	33	31	34	34
Nuclear	2,258	1,943	2,288	2,170	2,175	2,016	2,183	2,071	2,233	2,161	2,298	2,132	2,165	2,111	2,206
Renewable Energy Sources:	2,230	1,343	2,200	2,170	2,173	2,010	2,103	2,071	2,233	2,101	2,290	2,132	2,103	2,111	2,200
Conventional Hydropower	917	1,066	863	719	781	921	746	630	762	886	700	647	891	769	748
• •	330	•				394									420
Wood Riamana		384 97	235 106	364	422		310	401	437	474	347	425	328	382	103
Wood Biomass	102			100	101	96	107	102	102	98	108	106	101	101	
Waste Biomass	51	55	55	56	53	55	56 47	55	56	58 45	59	57	54	55 47	57
Geothermal	47	45	44	46	47	46	47	46	47	45	46	46	46	47	46
Solar	2	7	7	4	4	15	17	7	10	25	26	10	5	11	18
Pumped Storage Hydropower	-11	-16	-21	-16	-9	-12	-20	-17	-16	-14	-20	-17	-16	-14	-17
Other Nonrenewable Fuels (b)	28	31	31	30	29	31	32	31	29	31	32	31	30	31	31
Total Generation	11,070	10,944	12,647	10,326	10,558	11,035	12,495	10,696	11,044	10,858	12,407	10,713	11,249	11,198	11,257
Northeast Census Region															
Coal	372	329	373	264	262	228	294	316	403	248	255	291	334	275	299
Natural Gas	424	477	605	483	503	550	696	535	462	512	694	532	498	571	551
Petroleum (a)	11	5	8	2	2	2	6	4	8	4	8	4	6	4	6
Other Gases	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2
Nuclear	545	447	539	516	544	485	517	477	514	497	529	490	512	506	507
Hydropower (c)	98	112	91	110	116	92	76	94	113	94	77	95	103	95	94
Other Renewables (d)	52	48	46	53	58	50	48	59	61	54	51	63	50	54	57
Other Nonrenewable Fuels (b)	10	12	12	11	11	12	12	12	11	11	11	12	11	12	11
Total Generation	1,515	1,431	1,676	1,442	1,499	1,421	1,652	1,499	1,573	1,422	1,627	1,489	1,516	1,518	1,528
South Census Region															
Coal	2,177	2,180	2,408	1,688	1,567	1,784	2,080	1,732	1,840	1,805	2,004	1,689	2,113	1,791	1,835
Natural Gas	1,311	1,645	2,139	1,473	1,685	2,094	2,368	1,639	1,580	1,854	2,375	1,658	1,644	1,947	1,868
Petroleum (a)	41	35	38	24	25	24	32	27	35	37	37	30	34	27	35
Other Gases	14	14	15	14	14	15	14	14	14	15	15	15	14	14	15
Nuclear	940	831	977	920	898	871	960	890	961	929	989	917	917	905	949
Hydropower (c)	120	126	79	112	140	80	66	96	137	91	67	98	109	95	98
Other Renewables (d)	171	198	151	180	195	191	166	191	198	206	174	198	175	186	194
Other Nonrenewable Fuels (b)	11	13	12	12	11	12	13	12	12	13	13	12	12	12	12
Total Generation	4,787	5,042	5,819	4,423	4,533	5,071	5,698	4,602	4,776	4,949	5,672	4,617	5,019	4,977	5.005
Midwest Census Region	.,	-,	-,	-,	.,	-,	-,	.,	.,	.,	-,	.,	-,	.,	-,
Coal	1,804	1,628	1,896	1,573	1,468	1,419	1,710	1,594	1,614	1,423	1,714	1,553	1,725	1,548	1,576
Natural Gas	141	132	239	141	260	330	447	226	236	236	337	236	164	316	261
Petroleum (a)	9	9	8	7	7	6	9	8	8	8	9	8	8	7	8
Other Gases	7	8	9	8	12	10	10	9	13	10	10	8	8	10	10
Nuclear	561	485	577	524	553	516	542	508	550	532	566	525	537	530	543
Hydropower (c)	49	61	56	45	46	56	48	38	45	57	49	39	53	47	48
Other Renewables (d)	144	151	91	167	183	158	116	180	191	185	131	192	138	159	175
Other Nonrenewable Fuels (b)	2	131	31	107	103	130	110	200	2	200	131	192	130	2	3
	2,717	2 477	2,880	2 460	2,532	2 400	2 006	2 566	2 660	2. <i>454</i>	2,820	2,565	2,636	2,621	
Total Generation West Census Region	2,717	2,477	2,000	2,469	2,332	2,499	2,886	2,566	2,660	2,434	2,020	2,303	2,030	2,021	2,625
•	580	480	642	61.4	538	442	612	652	583	121	557	502	579	562	F20
Coal		480 355	642	614 526			613			431 470		583		562 597	539 605
Natural Gas	418		619	526	576	533	702	576	549	478	759	630	480		605
Petroleum (a)	28	28	29	28	26	25	28	27	28	26	29	28	28	27	28
Other Gases	6	6	6	7	7	7	7	7	8	7	7	7	6	7	7
Nuclear	212	180	196	210	181	145	163	195	209	202	215	200	199	171	207
Hydropower (c)	639	750	616	436	470	681	536	385	452	630	488	398	610	518	492
Other Renewables (d)	165	192	159	168	191	207	206	183	202	254	230	192	171	197	219
Other Nonrenewable Fuels (b)	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total Generation	2,052	1,995	2,271	1,991	1,993	2,044	2,259	2,029	2,035	2,032	2,288	2,042	2,078	2,082	2,100

⁽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.

Projections: Generated by simulation of the U.S. Energy Information Administration Short-Term Energy Outlook model.

⁽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

C.C. Energy Information 7 talling	2011				<u> </u>	7 tagast				20	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Fuel Consumption for Electricity Ge	neration,	All Sector	s					•							
United States															
Coal (thousand st/d)	2,622	2,467	2,859	2,277	2,098	2,090	2,546	2,319	2,371	2,090	2,442	2,211	2,556	2,264	2,279
Natural Gas (million cf/d)	17,454	20,657	28,512	19,639	22,549	27,288	32,440	22,045	21,032	23,688	32,163	22,704	21,590	26,087	24,921
Petroleum (thousand b/d)	157	133	146	107	108	103	132	116	142	133	147	125	136	115	137
Residual Fuel Oil	43	42	42	30	29	32	44	31	35	40	46	33	39	34	39
Distillate Fuel Oil	33	31	30	25	22	27	28	25	31	24	27	25	30	25	27
Petroleum Coke (a)	77	55	70	48	54	40	54	55	68	63	69	61	62	50	65
Other Petroleum Liquids (b)	5	4	5	4	4	5	6	5	8	5	6	5	5	5	6
Northeast Census Region															
Coal (thousand st/d)	171	151	174	123	122	106	136	146	184	114	118	135	154	127	137
Natural Gas (million cf/d)	3,203	3,652	4,724	3,605	3,756	4,233	5,362	3,943	3,422	3,870	5,292	3,886	3,800	4,325	4,122
Petroleum (thousand b/d)	20	9	15	5	5	5	12	8	15	8	16	8	12	7	12
South Census Region															
Coal (thousand st/d)	1,114	1,134	1,258	913	837	943	1,102	911	954	938	1,045	877	1,105	949	953
Natural Gas (million cf/d)	10,019	13,155	17,007	11,095	12,670	16,478	18,461	12,283	11,874	14,427	18,548	12,467	12,833	14,975	14,342
Petroleum (thousand b/d)	75	62	69	45	48	46	58	49	66	69	68	56	63	50	65
Midwest Census Region															
Coal (thousand st/d)	1,014	918	1,073	899	840	796	970	899	909	802	972	876	976	876	890
Natural Gas (million cf/d)	1,082	1,092	2,040	1,064	1,908	2,508	3,257	1,572	1,683	1,754	2,507	1,674	1,321	2,312	1,906
Petroleum (thousand b/d)	16	16	16	13	12	12	17	14	15	15	16	14	15	14	15
West Census Region															
Coal (thousand st/d)	322	263	355	343	300	245	339	363	324	236	307	324	321	312	298
Natural Gas (million cf/d)	3,149	2,757	4,742	3,876	4,214	4,069	5,360	4,247	4,054	3,636	5,816	4,676	3,636	4,474	4,551
Petroleum (thousand b/d)	46	46	47	44	43	40	45	45	46	42	47	47	46	43	45
End-of-period U.S. Fuel Inventories	Held by E	lectric Po	wer Secto	r											
Coal (million short tons)	166.7	165.7	144.4	175.1	196.4	200.7	188.6	194.2	189.3	199.7	187.6	192.8	175.1	194.2	192.8
Residual Fuel Oil (mmb)	15.4	16.4	15.7	15.5	15.3	15.4	14.9	14.6	14.0	15.2	14.4	13.9	15.5	14.6	13.9
Distillate Fuel Oil (mmb)	16.5	16.8	16.7	17.1	16.9	16.9	17.0	17.2	16.6	16.6	16.7	16.9	17.1	17.2	16.9
Petroleum Coke (mmb)	2.4	2.5	1.9	2.3	2.0	1.9	2.0	2.1	2.4	2.4	2.5	2.5	2.3	2.1	2.5

⁽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.

 $\textbf{Projections}: \textbf{Generated by simulation of the U.S. Energy Information Administration \textit{Short-Term Energy Outlook} \ \text{model}.$

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

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

C.C. Energy information 7 and	2011				Odilook	201				201	3			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electric Power Sector		•	•	•	•		•	•	•	•			•		
Hydroelectric Power (a)	0.801	0.941	0.771	0.641	0.688	0.813	0.666	0.561	0.664	0.782	0.625	0.576	3.154	2.729	2.648
Wood Biomass (b)	0.046	0.040	0.047	0.042	0.045	0.039	0.051	0.049	0.051	0.046	0.056	0.055	0.175	0.184	0.209
Waste Biomass (c)		0.067	0.069	0.069	0.066	0.068	0.070	0.069	0.069	0.072	0.074	0.072	0.269	0.273	0.287
Wind	0.290	0.341	0.211	0.326	0.375	0.350	0.278	0.360	0.384	0.421	0.311	0.382	1.168	1.363	1.497
Geothermal	0.042	0.040	0.040	0.041	0.041	0.041	0.042	0.042	0.041	0.040	0.041	0.042	0.163	0.166	0.164
Solar	0.002	0.006	0.006	0.003	0.004	0.013	0.015	0.007	0.008	0.022	0.023	0.009	0.018	0.038	0.063
Subtotal	1.245	1.435	1.145	1.122	1.219	1.325	1.122	1.087	1.217	1.383	1.132	1.136	4.947	4.753	4.869
Industrial Sector															
Hydroelectric Power (a)	0.005	0.005	0.003	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.018	0.020	0.019
Wood Biomass (b)	0.325	0.322	0.331	0.334	0.325	0.306	0.320	0.320	0.306	0.302	0.317	0.323	1.311	1.271	1.248
Waste Biomass (c)	0.043	0.042	0.043	0.044	0.043	0.043	0.047	0.043	0.043	0.042	0.045	0.043	0.172	0.175	0.173
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004
Subtotal	0.378	0.375	0.383	0.388	0.378	0.359	0.376	0.374	0.359	0.354	0.373	0.376	1.524	1.487	1.462
Commercial Sector															
Wood Biomass (b)	0.017	0.018	0.018	0.018	0.018	0.017	0.019	0.017	0.017	0.017	0.018	0.017	0.071	0.071	0.069
Waste Biomass (c)	0.009	0.008	0.009	0.010	0.009	0.009	0.010	0.009	0.009	0.009	0.009	0.009	0.036	0.036	0.036
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	0.032	0.032	0.033	0.034	0.032	0.032	0.034	0.032	0.032	0.031	0.034	0.032	0.131	0.131	0.129
Residential Sector															
Wood Biomass (b)	0.106	0.107	0.108	0.108	0.107	0.106	0.107	0.107	0.103	0.104	0.105	0.105	0.430	0.426	0.417
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.040	0.039	0.040
Solar (d)	0.035	0.035	0.035	0.035	0.042	0.042	0.043	0.043	0.050	0.051	0.052	0.052	0.140	0.170	0.205
Subtotal	0.150	0.152	0.154	0.154	0.159	0.158	0.159	0.159	0.163	0.165	0.167	0.167	0.610	0.636	0.661
Transportation Sector															
Ethanol (e)		0.272	0.270	0.270	0.257	0.270	0.261	0.270	0.261	0.275	0.278	0.278	1.070	1.057	1.092
Biodiesel (e)	0.014	0.026	0.035	0.037	0.018	0.036	0.037	0.037	0.037	0.038	0.039	0.039	0.112	0.128	0.153
Subtotal	0.271	0.298	0.305	0.307	0.275	0.306	0.298	0.307	0.298	0.313	0.317	0.316	1.182	1.186	1.245
All Sectors Total															
Hydroelectric Power (a)		0.946	0.775	0.645	0.693	0.818	0.671	0.566	0.669	0.787	0.630	0.581	3.171	2.748	2.668
Wood Biomass (b)	0.495	0.486	0.504	0.502	0.494	0.468	0.496	0.493	0.477	0.469	0.496	0.500	1.987	1.950	1.943
Waste Biomass (c)	0.116	0.118	0.121	0.123	0.117	0.120	0.126	0.121	0.121	0.122	0.129	0.124	0.477	0.484	0.496
Wind	0.290	0.341	0.211	0.326	0.375	0.350	0.278	0.360	0.384	0.421	0.311	0.382	1.168	1.363	1.497
Geothermal	0.057	0.056	0.056	0.057	0.057	0.057	0.058	0.058	0.057	0.056	0.057	0.057	0.226	0.229	0.228
Solar	0.037	0.041	0.042	0.039	0.046	0.055	0.058	0.049	0.059	0.073	0.075	0.061	0.158	0.208	0.267
Ethanol (e)	0.263	0.277	0.276	0.275	0.262	0.283	0.269	0.275	0.266	0.281	0.284	0.283	1.091	1.090	1.114
Biodiesel (e)		0.026	0.035	0.037	0.018	0.036	0.037	0.037	0.037	0.038	0.039	0.039	0.112	0.128	0.153
Total Consumption	2.077	2.292	2.019	2.004	2.062	2.180	1.990	1.960	2.070	2.247	2.022	2.027	8.392	8.193	8.366

^{- =} 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.

Projections: Generated by simulation of the U.S. Energy Information Administration Short-Term Energy Outlook model.

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

⁽b) Wood and wood-derived fuels.

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

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

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

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

		201				201				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2005 dollars - SAAR)	13,228	13,272	13,332	13,429	13,491	13,543	13,603	13,662	13,740	13,800	13,863	13,941	13,315	13,575	13,836
Real Disposable Personal Income															
(billion chained 2005 Dollars - SAAR)	10,183	10,170	10,189	10,193	10,210	10,267	10,330	10,372	10,407	10,451	10,493	10,549	10,184	10,295	10,475
Real Fixed Investment															
(billion chained 2005 dollars-SAAR)	1,699	1,737	1,790	1,818	1,844	1,877	1,901	1,921	1,954	1,988	2,022	2,065	1,761	1,886	2,007
Business Inventory Change															
(billion chained 2005 dollars-SAAR)	33.28	24.16	11.34	32.98	13.86	6.44	14.82	12.75	10.50	7.66	4.86	7.09	25.44	11.97	7.53
Housing Stock															
(millions)	123.5	123.5	123.5	123.5	123.6	123.6	123.6	123.6	123.7	123.8	123.8	123.9	123.5	123.6	123.9
Non-Farm Employment															
(millions)	130.7	131.2	131.5	132.0	132.7	133.0	133.3	133.7	134.2	134.6	135.0	135.5	131.4	133.2	134.8
Commercial Employment															
(millions)	88.7	89.2	89.5	90.0	90.5	90.8	91.1	91.5	92.0	92.4	92.8	93.1	89.4	91.0	92.6
Industrial Production Indices (Index, 2007=	-100)														
Total Industrial Production	92.6	92.9	94.2	95.3	96.6	97.4	97.6	98.0	98.6	99.2	99.9	100.4	93.7	97.4	99.5
Manufacturing	90.4	90.6	91.7	92.9	95.2	95.6	96.1	96.7	97.3	98.1	98.9	99.6	91.4	95.9	98.5
Food	99.5	100.3	100.4	101.2	102.4	102.5	103.1	103.4	103.8	104.3	104.8	105.3	100.3	102.8	104.5
Paper	87.5	86.0	85.0	85.3	85.3	84.6	84.6	84.5	84.3	84.6	85.2	85.8	86.0	84.7	85.0
Chemicals	87.2	86.2	86.6	86.8	87.5	86.8	87.2	87.2	87.2	87.8	88.5	89.1	86.7	87.2	88.1
Petroleum	94.7	96.6	100.8	102.0	102.1	101.4	102.3	102.6	103.0	103.5	103.8	103.9	98.5	102.1	103.5
Stone, Clay, Glass	69.1	71.3	72.3	71.1	72.3	72.1	72.5	72.9	73.7	75.1	76.8	78.5	71.0	72.5	76.0
Primary Metals	95.7	95.3	95.9	100.2	102.7	101.2	101.1	100.5	100.3	101.4	103.5	105.0	96.8	101.4	102.6
Resins and Synthetic Products	87.1	80.7	80.7	80.8	84.5	81.4	82.1	82.0	81.7	82.1	83.1	83.9	82.3	82.5	82.7
Agricultural Chemicals	93.6	91.4	92.8	94.6	96.1	93.0	93.4	93.3	93.2	93.8	94.8	95.3	93.1	93.9	94.3
Natural Gas-weighted (a)	89.9	88.7	89.8	90.8	92.3	91.2	91.7	91.6	91.7	92.3	93.3	94.1	89.8	91.7	92.9
· , ,															
Price Indexes															
Consumer Price Index (all urban consumers)															
(index, 1982-1984=1.00)	2.22	2.25	2.26	2.27	2.28	2.29	2.29	2.30	2.31	2.31	2.33	2.34	2.25	2.29	2.32
Producer Price Index: All Commodities															
(index, 1982=1.00)	1.98	2.02	2.02	2.03	2.04	2.00	2.00	2.02	2.02	2.01	2.02	2.04	2.01	2.01	2.02
Producer Price Index: Petroleum															
(index, 1982=1.00)	2.74	3.22	3.07	2.94	3.08	3.07	2.96	2.85	2.79	2.85	2.82	2.77	2.99	2.99	2.81
GDP Implicit Price Deflator															
(index, 2005=100)	112.4	113.1	113.8	114.1	114.6	115.1	115.7	116.2	116.4	116.7	117.2	117.7	113.3	115.4	117.0
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	7,585	8,324	8,251	7,951	7,610	8,412	8,396	8,042	7,752	8,465	8,447	8,079	8,029	8,116	8,187
Air Travel Capacity												,			
(Available ton-miles/day, thousands)	519	549	554	527	515	553	545	519	526	566	550	524	537	533	541
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	307	339	344	320	307	346	335	315	320	354	337	314	328	326	331
Airline Ticket Price Index															
(index, 1982-1984=100)	298.2	308.1	307.8	302.0	299.2	314.6	295.0	292.4	310.3	323.5	300.8	294.9	304.0	300.3	307.4
Raw Steel Production															
(million short tons per day)	0.257	0.261	0.266	0.264	0.274	0.278	0.130	0.258	0.292	0.294	0.276	0.277	0.262	0.235	0.285
0.1												·			
Carbon Dioxide (CO ₂) Emissions (million m			F70		FF.	F07	F7F	F70	<i></i>	500	F70	l	0.000	0.071	0.077
Petroleum	571	575	578	575	556	567	575	576	554	568	578	576	2,299	2,274	2,277
Natural Gas	402	273	286	333	391	298	308	366	417	287	307	369	1,294	1,362	1,380
Coal	474	450	520	423	387	390	478	442	443	400	463	425	1,867	1,698	1,731
Total Fossil Fuels	1,446	1,298	1,385	1,331	1,335	1,255	1,360	1,384	1,415	1,255	1,348	1,370	5,459	5,334	5,388

^{- =} no data available

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

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

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

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

 $⁽a) \ Natural \ gas \ share \ weights \ of \ individual \ sector \ indices \ based \ on \ EIA \textit{Manufacturing Energy Consumption Survey}, \ 2002.$

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

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Informa	tion Aami			ort- I erm	Energy			1 2012							
		201				20				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Real Gross State Produc															
New England		720	724	730	734	736	738	741	745	748	751	754	723	737	749
Middle Atlantic	-	1,953	1,960	1,966	1,977	1,982	1,987	1,998	2,008	2,016	2,023	2,034	1,957	1,986	2,020
E. N. Central	1,807	1,811	1,815	1,822	1,832	1,835	1,839	1,844	1,852	1,860	1,868	1,878	1,814	1,838	1,865
W. N. Central	855	856	858	861	866	869	872	875	880	884	888	892	858	871	886
S. Atlantic	2,401	2,409	2,419	2,438	2,445	2,450	2,454	2,464	2,480	2,492	2,504	2,520	2,417	2,453	2,499
E. S. Central	613	613	614	617	619	620	622	625	628	631	634	637	614	621	632
W. S. Central	1,575	1,586	1,598	1,609	1,621	1,638	1,660	1,668	1,682	1,693	1,702	1,712	1,592	1,647	1,697
Mountain	867	870	876	882	886	891	897	901	907	911	915	920	874	894	913
Pacific	2,328	2,337	2,351	2,386	2,394	2,403	2,414	2,425	2,437	2,445	2,457	2,471	2,351	2,409	2,453
Industrial Output, Manut	facturing (I	ndex, Yea	r 2007=10	0)											
New England	92.1	91.8	92.9	93.7	95.5	95.1	95.4	95.8	96.3	96.9	97.4	98.0	92.6	95.4	97.2
Middle Atlantic	89.9	89.8	90.4	91.2	93.5	93.2	93.6	94.0	94.4	95.0	95.7	96.2	90.3	93.6	95.3
E. N. Central	89.4	89.9	91.2	92.6	95.6	96.5	96.9	97.4	98.0	99.0	100.0	100.8	90.8	96.6	99.5
W. N. Central	92.9	93.3	94.7	96.2	99.1	99.6	100.1	100.6	101.3	102.2	103.1	103.9	94.3	99.8	102.6
S. Atlantic	87.2	87.1	88.2	89.4	91.2	91.1	91.5	92.1	92.7	93.4	94.1	94.7	88.0	91.5	93.7
E. S. Central	86.1	86.0	87.0	88.6	90.5	91.4	92.2	93.1	94.0	95.0	96.1	97.0	86.9	91.8	95.5
W. S. Central	93.5	93.9	95.3	96.9	99.3	99.9	100.6	101.4	102.2	103.1	103.9	104.6	94.9	100.3	103.4
Mountain	90.1	90.2	91.6	92.9	95.4	96.1	96.7	97.3	98.0	98.9	99.7	100.5	91.2	96.4	99.3
Pacific	91.8	91.9	93.1	94.1	95.9	96.3	96.7	97.1	97.6	98.3	99.0	99.6	92.7	96.5	98.6
Real Personal Income (E	Billion \$200	5)													
New England	649	653	649	648	650	655	660	663	667	671	674	676	650	657	672
Middle Atlantic	1,752	1,749	1,751	1,752	1,759	1,769	1,784	1,796	1,807	1,819	1,826	1,835	1,751	1,777	1,822
E. N. Central	1,604	1,601	1,606	1,609	1,614	1,620	1,631	1,638	1,647	1,657	1,662	1,667	1,605	1,626	1,658
W. N. Central	746	747	749	751	753	757	764	768	773	778	781	784	748	761	779
S. Atlantic	2,132	2,133	2,135	2,133	2,138	2,152	2,168	2,182	2,199	2,215	2,226	2,238	2,133	2,160	2,219
E. S. Central	564	565	566	567	567	571	575	579	582	586	589	591	565	573	587
W. S. Central	1,251	1,256	1,263	1,267	1,267	1,280	1,291	1,300	1,310	1,321	1,329	1,338	1,259	1,285	1,325
Mountain	740	742	743	746	748	753	760	766	771	777	781	786	743	757	779
Pacific	1,947	1,943	1,950	1,949	1,958	1,973	1,988	2,000	2,014	2,029	2,039	2,051	1,947	1,980	2,033
Households (Thousands	s)														
New England	5,657	5,661	5,664	5,668	5,677	5,685	5,694	5,703	5,713	5,723	5,732	5,741	5,668	5,703	5,741
Middle Atlantic	15,556	15,575	15,590	15,605	15,627	15,647	15,664	15,682	15,703	15,719	15,734	15,750	15,605	15,682	15,750
E. N. Central	18,026	18,032	18,034	18,042	18,064	18,091	18,119	18,150	18,182	18,213	18,238	18,264	18,042	18,150	18,264
W. N. Central	8,133	8,145	8,159	8,175	8,198	8,220	8,241	8,262	8,284	8,306	8,325	8,345	8,175	8,262	8,345
S. Atlantic	23,215	23,266	23,319	23,381	23,458	23,539	23,621	23,712	23,806	23,900	23,992	24,085	23,381	23,712	24,085
E. S. Central	7,215	7,226	7,238	7,250	7,266	7,283	7,301	7,319	7,340	7,360	7,380	7,400	7,250	7,319	7,400
W. S. Central	13,337	13,377	13,419	13,466	13,524	13,583	13,641	13,704	13,769	13,833	13,894	13,956	13,466	13,704	13,956
Mountain	8,290	8,307	8,326	8,352	8,387	8,424	8,460	8,499	8,540	8,580	8,618	8,656	8,352	8,499	8,656
Pacific	17,502	17,539	17,576	17,619	17,677	17,738	17,800	17,862	17,930	17,997	18,057	18,119	17,619	17,862	18,119
Total Non-farm Employr	nent (Millio	ns)													
New England	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.8	6.9	6.9
Middle Atlantic	18.1	18.2	18.2	18.3	18.4	18.4	18.5	18.5	18.6	18.6	18.7	18.7	18.2	18.4	18.7
E. N. Central	20.2	20.2	20.2	20.3	20.4	20.4	20.5	20.5	20.6	20.6	20.7	20.7	20.2	20.5	20.7
W. N. Central	9.8	9.9	9.9	9.9	10.0	10.0	10.0	10.0	10.1	10.1	10.1	10.2	9.9	10.0	10.1
S. Atlantic	24.9	25.0	25.0	25.1	25.2	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.0	25.3	25.6
E. S. Central	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.4	7.5	7.6
W. S. Central	15.0	15.1	15.2	15.3	15.4	15.5	15.5	15.5	15.6	15.7	15.7	15.8	15.2	15.5	15.7
Mountain	9.0	9.1	9.1	9.2	9.2	9.2	9.3	9.3	9.3	9.4	9.4	9.4	9.1	9.3	9.4
Pacific	19.3	19.4	19.4	19.5	19.6	19.7	19.7	19.8	19.9	19.9	20.0	20.1	19.4	19.7	20.0

^{- =} no data available

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

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

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

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

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Informat	tion Admir			rt- I erm	Energy (2012							
		201	1			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Heating Degree-days															
New England	3,314	846	105	1,870	2,659	779	172	2,254	3,191	918	173	2,236	6,135	5,864	6,518
Middle Atlantic	3,023	609	67	1,715	2,360	594	113	2,037	2,929	736	115	2,030	5,414	5,104	5,810
E. N. Central	3,306	755	182	1,943	2,468	631	123	2,213	3,123	766	153	2,291	6,186	5,435	6,333
W. N. Central	3,517	769	200	2,155	2,525	533	149	2,415	3,248	712	182	2,488	6,641	5,622	6,630
South Atlantic	1,501	179	18	900	1,120	189	23	1,044	1,519	239	23	1,036	2,598	2,376	2,817
E. S. Central	1,866	247	44	1,230	1,321	202	25	1,340	1,880	284	31	1,351	3,387	2,888	3,546
W. S. Central	1,273	101	9	839	888	55	7	884	1,288	110	9	873	2,222	1,834	2,280
Mountain	2,338	773	71	1,938	2,099	525	159	1,955	2,312	725	167	1,921	5,120	4,738	5, 125
Pacific	1,481	675	52	1,171	1,416	476	93	1,145	1,412	554	107	1,122	3,379	3,130	3,195
U.S. Average	2,285	517	77	1,441	1,782	423	85	1,603	2,211	530	96	1,611	4,320	3,893	4,448
Heating Degree-days, 30-	-year Norma	al (a)													
New England	3,219	930	190	2,272	3,219	930	190	2,272	3,219	930	190	2,272	6,611	6,611	6,611
Middle Atlantic	2,968	752	127	2,064	2,968	752	127	2,064	2,968	752	127	2,064	5,911	5,911	5,911
E. N. Central	3,227	798	156	2,316	3,227	798	156	2,316	3,227	798	156	2,316	6,497	6,497	6,497
W. N. Central	3,326	729	183	2,512	3,326	729	183	2,512	3,326	729	183	2,512	6,750	6,750	6,750
South Atlantic	1,523	247	25	1,058	1,523	247	25	1,058	1,523	247	25	1,058	2,853	2,853	2,853
E. S. Central	1,895	299	33	1,377	1,895	299	33	1,377	1,895	299	33	1,377	3,604	3,604	3,604
W. S. Central	1,270	112	9	896	1,270	112	9	896	1,270	112	9	896	2,287	2,287	2,287
Mountain	2,321	741	183	1,964	2,321	741	183	1,964	2,321	741	183	1,964	5,209	5,209	5,209
Pacific	1,419	556	108	1,145	1,419	556	108	1,145	1,419	556	108	1,145	3,228	3,228	3,228
U.S. Average	2,242	543	101	1,638	2,242	543	101	1,638	2,242	543	101	1,638	4,524	4,524	4,524
Cooling Degree-days															
New England	0	111	496	1	0	119	438	0	0	72	371	0	608	557	443
Middle Atlantic	0	216	670	1	0	211	617	5	0	146	535	6	887	833	687
E. N. Central	0	227	668	2	17	294	701	11	1	205	507	8	897	1,023	721
W. N. Central	1	294	810	13	13	381	834	16	3	269	653	12	1,118	1,244	937
South Atlantic	99	789	1,262	182	154	676	1,175	212	110	579	1,103	222	2,332	2,217	2,014
E. S. Central	9	653	1,134	21	52	613	1,123	69	31	475	1,021	68	1,817	1,857	1,595
W. S. Central	113	1,091	1,767	201	146	1,013	1,478	181	75	788	1,432	187	3,172	2,818	2,482
Mountain	11	316	971	70	9	472	878	60	15	383	858	78	1,368	1,419	1,334
Pacific	2	68	606	41	0	120	537	41	7	152	511	46	717	698	716
U.S. Average	33	432	942	70	53	435	870	78	35	349	783	82	1,477	1,436	1,249
Cooling Degree-days, 30	-year Norma	al (a)													
New England	0	81	361	1	0	81	361	1	0	81	361	1	443	443	443
Middle Atlantic	0	151	508	7	0	151	508	7	0	151	508	7	666	666	666
E. N. Central	1	208	511	10	1	208	511	10	1	208	511	10	730	730	730
W. N. Central	3	270	661	14	3	270	661	14	3	270	661	14	948	948	948
South Atlantic	113	576	1,081	213	113	576	1,081	213	113	576	1,081	213	1,983	1,983	1,983
E. S. Central	29	469	1,002	66	29	469	1,002	66	29	469	1,002	66	1,566	1,566	1,566
W. S. Central	80	790	1,424	185	80	790	1,424	185	80	790	1,424	185	2,479	2,479	2,479
Mountain	17	383	839	68	17	383	839	68	17	383	839	68	1,307	1,307	1,307
Pacific	10	171	526	49	10	171	526	49	10	171	526	49	756	756	756
U.S. Average	34	353	775	80	34	353	775	80	34	353	775	80	1,242	1,242	1,242

^{- =} 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, National Oceanic and Atmospheric Association (NOAA).

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

Projections: Based on forecasts by the NOAA Climate Prediction Center.

⁽a) 30-year normal represents average over 1971 - 2000, reported by National Oceanic and Atmospheric Administration.