

# **Short-Term Energy Outlook**

## **Highlights**

- EIA projects the West Texas Intermediate (WTI) crude oil spot price to average about \$88 per barrel over the second half of 2012 and the U.S. refiner acquisition cost (RAC) of crude oil to average \$93 per barrel, both about \$7 per barrel lower than last month's *Outlook*. EIA expects WTI and RAC crude oil prices to remain roughly at these second half levels in 2013. Beginning in this month's *Outlook*, EIA is also providing a forecast of Brent crude oil spot prices (see *Brent Crude Oil Spot Price Added to Forecast*), which are expected to average \$106 per barrel for 2012 and \$98 per barrel in 2013. These price forecasts assume that world oil-consumption-weighted real gross domestic product (GDP) grows by 2.9 percent in both 2012 and 2013.
- With crude oil prices falling over the last month, EIA has lowered the average regular gasoline retail price forecast for the third quarter of 2012 to \$3.39 per gallon. EIA expects regular gasoline retail prices, which averaged \$3.53 per gallon in 2011, to average \$3.49 per gallon in 2012 and \$3.28 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.
- Natural gas working inventories ended June 2012 at an estimated 3.1 trillion cubic feet (Tcf), about 23 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 \$2.58 per MMBtu in 2012 and \$3.22 per MMBtu in 2013.
- In April 2012, the United States exported 12.5 million short tons of coal, which is a monthly record based on EIA data dating back to 1973. Although EIA projects coal exports to total 112 million tons in 2012, 4.6 percent higher than 2011, EIA expects that coal exports will fall by 15.5 million short tons (14 percent) in 2013.

### **Global Crude Oil and Liquid Fuels**

**Global Crude Oil and Liquid Fuels Overview.** The projected pace of global oil demand growth in this month's *Outlook* reflects less optimistic assumptions about the global economy. The forecast for global economic growth was lowered by 0.1 and 0.6 percentage points in 2012 and 2013, respectively, from last month's *Outlook*, and is now expected to average 2.9 percent in both years. The weaker growth outlook is prompted by increased economic concerns about the debt crisis in Europe and indications of slowing growth in China, both which could have spillover effects on other economies. The global liquid fuels consumption growth forecast for 2012 was lowered to 0.7 million bbl/d from 0.8 million bbl/d in last month's *Outlook*. Projected global consumption growth in 2013 was lowered by 0.4 million bb/d to 0.7 million bbl/d.

EIA recently released its recurring 60-day report on <u>The Availability and Price of Petroleum and Petroleum Products Produced in Countries Other Than Iran</u>. As noted in the report, oil markets have loosened over the last several months, which is reflected in a sharp decline in crude oil prices and backwardation since the end of April. EIA's historical supply and demand balance also shows signs of a looser market, as supply outpaced consumption by an average of 1.1 million bbl/d for the first half of 2012, and stocks built counter-seasonally during the first quarter – a marked contrast to significant stock draws during 2011.

EIA's downward price revisions reflect shifts in expectations about oil market balances and the additional downside risks that are currently dominating market sentiments. However, there are both upside and downside uncertainties. The possibility that the economic situation in European Union (EU) countries could deteriorate further poses a downside risk to global oil demand and prices, though the market's positive reaction to recent EU negotiations serves as a reminder that oil prices will fluctuate in both directions 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 0.3 million bbl/d in 2012 and by a further 0.4 million bbl/d in 2013. The prospect 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 continue to place downward pressure on oil prices. EIA currently projects annual increases in consumption in China of about 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.

EU sanctions, including an embargo on Iranian crude and an insurance ban on tankers carrying Iranian oil, became fully effective on July 1, shortly after the latest set of U.S. sanctions entered into force. The United States issued exceptions to all major importers of Iranian oil from sanctions that could have been imposed on foreign financial institutions which facilitated oil-related transactions with the Central Bank of Iran, but only after they had demonstrated or pledged significant reductions in their purchases of Iranian crude oil. The complete market effects of these sanctions are unknown and difficult to disentangle from previous rounds of sanctions, but EIA believes that most of their current and expected effects on Iranian oil supplies

have already been priced into the global oil market. Despite the market's mild reaction to the sanction start dates, upside price risks still persist, particularly if negotiations with Iran fail to progress.

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 0.7 million bbl/d in both 2012 and 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 (World Liquid Fuels Consumption Chart). Projected OECD liquid fuels consumption declines by 0.5 million bbl/d in 2012 and a further 0.3 million bbd/d in 2013.

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 0.7 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 substantially less than in 2010 or 2011, when third-quarter consumption outpaced supply by 1.5 million bbl/d and 1.8 million bbl/d, respectively.

Non-OPEC Supply. EIA expects crude oil and liquid fuels production by non-Organization of the Petroleum Exporting Countries (OPEC) to rise by 0.8 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 880 thousand bbl/d and 540 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 170 thousand bbl/d in 2013. In Brazil, output is projected to rise by 120 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.

Several notable disruptions to non-OPEC production commenced or intensified since the beginning of this year, as discussed in the June 26, 2012 report on *The Availability and Price of Petroleum and Petroleum Products Produced in Countries Other Than Iran*. Unplanned outages to non-OPEC production totaled around 1.0 million bbl/d in June 2012, higher than the estimate given in the June 26th report. The increase is due to an offshore workers' strike in Norway that affected 230 to 250 thousand bbl/d of crude oil and natural gas liquids production, according to Statoil. 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.

Unplanned disruptions also rose slightly in the second half of June due to a labor protest in Argentina that lowered production from the Cerro Dragon oil field, which has a capacity of 100

thousand bbl/d. The field's operator is gradually ramping up production at the field as protestors have mostly withdrawn from the area.

**OPEC Supply.** EIA expects that OPEC members will continue to produce about 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 0.8 million bbl/d in 2012, and then falls by 0.9 million bbl/d 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 5.5 million bbl/d in 2011 and are forecast to increase by 0.3 million bbl/d in 2012 and less than 0.1 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. However, EIA estimates that Iranian production fell faster than the prevailing trend in June as unsold or undelivered Iran cargoes tested the limits of available storage capacity and some combination of production shut-ins, greater-than-anticipated declines in production capacity, or overdue maintenance occurred. 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.

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 2.4 million bbl/d in 2012 and rise to an average 3.6 million bbl/d in 2013 (OPEC Surplus Crude Oil Production Capacity Chart). However, as discussed above, markets may be closely watching the composition of OPEC spare capacity, as well as its aggregate level, as the situation with respect to Iran evolves. Under plausible circumstances, the market may discount a portion of OPEC members' aggregate spare capacity.

**OECD Petroleum Inventories.** EIA estimates that OECD commercial oil inventories ended 2011 at 2.59 billion barrels, equivalent to 55.9 days of forward-cover (Days of Supply of OECD Commercial Stocks Chart). Projected OECD oil inventories increase to 2.63 billion barrels and 57.3 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.** Beginning in this month's *Outlook*, EIA is providing a forecast of Brent crude oil spot prices (see *Brent Crude Oil Spot Price Added to Forecast*). After WTI and Brent fell to year-to-date lows of \$78 per barrel and \$89 per barrel, respectively, on June 21, 2012, oil prices rose following news of a possible Euro-zone agreement regarding debt issues that have clouded the European and global economic outlooks. EIA projects the price of Brent crude oil to average \$106 per barrel in 2012 and \$98 per barrel in 2013. The WTI price forecast has been lowered by \$4 per barrel from last month's *Outlook* to \$93 per barrel in 2012 and by \$9 per barrel to \$89 per barrel in 2013 (West Texas Intermediate Crude Oil Price Chart).

Energy price forecasts are highly uncertain (*Market Prices and Uncertainty Report*). WTI futures for October 2012 delivery during the 5-day period ending July 5, 2012 averaged \$85 per barrel. Implied volatility averaged 33 percent, establishing the lower and upper limits of the 95-percent confidence interval for the market's expectations of monthly average WTI prices in October 2012 at \$64 per barrel and \$114 per barrel, respectively. Last year at this time, WTI for October 2011 delivery averaged \$98 per barrel and implied volatility averaged 28 percent. The corresponding lower and upper limits of the 95-percent confidence interval were \$76 per barrel and \$125 per barrel.

## **U.S. Crude Oil and Liquid Fuels**

**U.S. Liquid Fuels Consumption.** Total consumption fell 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 150 thousand bbl/d (0.8 percent). In the first quarter, total consumption fell 700 thousand bbl/d (3.7 percent) from the same period last year (U.S. Liquid Fuels Consumption Chart) as high retail pump prices and increases in fleet-wide fuel efficiency depressed consumption of motor gasoline. In addition, record warm weather and low natural gas prices substantially reduced consumption of heating oil and residual fuel oil. The second quarter witnessed an estimated year-over-year decline of 200 thousand bbl/d due primarily to continued declines in distillate fuel oil and residual fuel oil

consumption. For the second half of 2012, EIA expects a turnaround in liquid fuels consumption with a projected year-over-year increase of 140 thousand bbl/d (0.7 percent). The bulk of that growth comes from natural gas liquids and distillate fuel, which rise because of continued growth in industrial production and the assumption of near-normal weather next winter. Motor gasoline consumption, however, remains unchanged from the same period last year as continued efficiency increases offset modest growth in highway travel. Residual fuel consumption levels off, albeit at close to record-low levels.

In 2013, total liquid fuels consumption grows by just 70 thousand bbl/d (0.4 percent), led by a 60-thousand-bbl/d (1.7-percent) increase in distillate consumption. Despite assumed growth in U.S. real disposable income of 1.8 percent next year, forecast motor gasoline consumption declines by a further 40 thousand bbl/d (0.5 percent) in 2013. This projection reflects continued 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 200 thousand bbl/d (3.7 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 660 thousand bbl/d in 2012; output in the Gulf of Mexico (GOM) stabilizes after having fallen last year, but Alaskan output continues to decline by 30 thousand bbl/d (U.S. Crude Oil and Liquid Fuels Production Chart). In 2013, total crude oil output rises a further 410 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 1,419 on July 6, 2012.

Based on the outlook from the National Oceanic and Atmospheric Administration for the current Atlantic hurricane season, EIA statistical analysis based on a historical averages derives a 70-percent probability that total shut-in crude oil production in the GOM during the current hurricane season (June through November) will fall somewhere between 2.8 and 7.2 million barrels, with a median outcome of 4.5 million barrels (an average 25 thousand bbl/d over the 6 months; see the 2012 Outlook for Hurricane-Related Production Outages in the Gulf of Mexico). In late June, Tropical Storm Debby caused several days of disruption to crude oil and natural gas production. During the peak of Debby-related outages, 600 thousand bbl/d was shut in, or about 44 percent of normal production. Almost all shut-in production resumed after a few days with a total production outage of about 1.3 million barrels.

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 in April 2012, gasoline prices have fallen for the second consecutive month, averaging \$3.54 per gallon in June 2012. Due to the sharp decline in crude oil prices throughout May and June, EIA expects regular gasoline retail prices to average \$3.39 per gallon during the third quarter of 2012, compared with \$3.51 per gallon in last month's *Outlook*, and \$3.63 per gallon during the same period last year. EIA projects that crude oil prices will remain near their current lower levels through 2013, resulting in regular gasoline retail prices averaging \$3.49 per gallon in 2012 and \$3.28 per gallon in 2013.

EIA expects that on-highway diesel fuel retail prices, which averaged \$3.84 per gallon in 2011, will average \$3.79 per gallon in 2012, down 11 cents per gallon from last month's *Outlook*. In 2013, diesel fuel retail prices are projected to decline another 21 cents to an average of \$3.58 per gallon (U.S. Diesel Fuel and Crude Oil Prices Chart).

#### **Natural Gas**

**U.S. Natural Gas Consumption.** EIA expects that natural gas consumption will average 69.9 billion cubic feet per day (Bcf/d) in 2012, an increase of 3.3 Bcf/d (4.9 percent) from 2011 and an upward revision of 0.5 Bcf/d from last month's *Outlook*. EIA expects that 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 grows by 21 percent in 2012, primarily driven by the increased relative cost advantages of natural gas over coal for power generation in some regions. Consumption in the electric power sector peaks at 31.2 Bcf/d in the third quarter of 2012, when electricity demand for air conditioning is highest. This compares with 27.7 Bcf/d during the third quarter of 2011.

Growth in total natural gas consumption slows in 2013, with forecast consumption averaging 71.1 Bcf/d (U.S. Natural Gas Consumption Chart). However, unlike 2012, growth in 2013 is driven by consumption increases from the residential, commercial, and industrial sectors. A forecast of near-normal weather next winter drives 2013 increases in residential and commercial consumption of 7.7 percent and 4.5 percent, respectively. Although projected natural gas burn in the electric power sector declines by 1.9 percent from 2012, it remains at 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, though not as strong as the previous year (U.S. Natural Gas Production and Imports Chart). This month's *Outlook* revises

upward the forecast for marketed production for 2012, partially reflecting upward revisions to historical data for the first few months of the year. EIA, however, expects a small drop in production in the coming months, reflecting the decline in rigs since October 2011. According to Baker Hughes, the natural gas rig count was 542 as of July 6, 2012, up slightly from last week, which was the lowest rig count since 1999. EIA's production survey indicates natural gas marketed production fell between February and March 2012, but rebounded in April. Declining production from less-profitable "dry" natural gas plays such as the Haynesville Shale 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.

Based on the outlook from National Oceanic and Atmospheric Administration for the current Atlantic hurricane season, EIA estimates a 70-percent probability that total shut-in natural gas production in the GOM during the upcoming hurricane season (June through November) will fall somewhere between 5.8 and 16.2 Bcf, with a median outcome of 9.5 Bcf (an average of 0.05 Bcf/d over the 6 months; see the 2012 Outlook for Hurricane-Related Production Outages in the Gulf of Mexico). In late June, Tropical Storm Debby caused several days of disruption to crude oil and natural gas production. During the peak of Debby-related outages, 1.6 Bcf/d of natural gas was shut in, or about 35 percent of normal production. Almost all shut-in production resumed after a few days with a total production outage of about 3.9 Bcf.

EIA expects pipeline gross imports will fall by 0.2 Bcf/d (2.6 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 increase by 2.2 percent in 2013, partially due to near-normal winter weather driving higher residential and commercial demand. 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 0.4 Bcf/d (44 percent) in 2012. EIA expects that an average of about 0.6 Bcf/d will arrive in the United States (mainly at the Elba Island terminal in Georgia) in 2012 and 2013, either to fulfill long-term contract obligations or to take advantage of temporarily high local prices due to cold snaps and disruptions.

**U.S. Natural Gas Inventories.** Working natural gas inventories remain at historically high levels for the time of year. As of June 29, 2012, according to EIA's <u>Weekly Natural Gas Storage Report</u>, working inventories totaled 3,102 Bcf, 602 Bcf greater than last year's level and 573 Bcf above the five-year average. The weekly report from June 15, 2012, marked the first time in EIA's history that working inventories surpassed the 3,000 Bcf mark during the month of June. EIA expects that inventory levels at the end of October 2012 will set a new record high slightly above 4,000 Bcf (U.S. Working Natural Gas in Storage Chart), although the projected increase of 1,525 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 record highs, although they will still remain abundant compared with recent history.

**U.S. Natural Gas Prices.** Natural gas spot prices averaged \$2.47 per MMBtu at the Henry Hub in June 2012, up \$0.04 per MMBtu from the May average. Prices remain at historically low levels; the June 2012 price averaged 46 percent less than the June 2011 price. Abundant supplies and lack of demand during the warm winter contributed to the current low prices. EIA expects the Henry Hub natural gas price will average \$2.58 per MMBtu in 2012, with modest monthly increases through the rest of the year. EIA expects 2013 prices will average \$3.22 per MMBtu (U.S. Natural Gas Prices Chart).

Natural gas futures prices for October 2012 delivery (for the 5-day period ending July 5, 2012) averaged \$2.90 per MMBtu, and the average implied volatility based on options and futures prices was 55 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 October 2012 contracts at \$1.74 per MMBtu and \$4.82 per MMBtu, respectively. At this time last year, the October 2011 natural gas futures contract averaged \$4.33 per MMBtu and implied volatility averaged 35 percent. The corresponding lower and upper limits of the 95-percent confidence interval were \$3.12 per MMBtu and \$6.00 per MMBtu.

#### Coal

**U.S. Coal Consumption.** Power-sector coal consumption fell from 975 million short tons (MMst) in 2010 to 929 MMst in 2011 (U.S. Coal Consumption Chart). Lower electric power sector natural gas prices have led to a significant increase in the share of natural-gas-fired generation in both 2011 and 2012. EIA expects coal consumption in the electric power sector to total slightly less than 800 MMst in 2012. Although EIA expects the price of natural gas relative to the price of coal at electric utilities to begin to show year-over-year increases beginning in early 2013, projected power sector coal consumption remains flat next year.

**U.S. Coal Supply.** EIA forecasts that coal production will decline by 9 percent in 2012 as domestic consumption falls (U.S. Coal Production Chart). Production for the first five months of 2012 was 25 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 (6 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 200 MMst by the end of the year (estimated stocks for April 2012 were 203 MMst) and inventories will remain at elevated levels in 2013 (U.S. Electric Power Sector Coal Stocks Chart).

**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 12.5 MMst of coal in April, which is a monthly record based on EIA data dating back to 1973. Although EIA projects coal exports to total 112 million tons in 2012, forecast coal exports weaken slightly with year-over-year declines beginning in the fourth quarter of 2012. Major reasons for the export decline include China's economic slowdown and high coal stockpiles, and increased exports from Indonesia and Australia. EIA expects that coal exports will fall by 16 million short tons (14 percent) in 2013. 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 put downward pressure on coal prices and contribute to the shut-in of higher-cost production. EIA forecasts the average delivered coal price in 2012 will be 0.4 percent lower than the 2011 average price. EIA predicts the 2013 average delivered coal price to be \$2.33 per MMBtu, or nearly 3 percent (\$0.06) lower than the 2012 price.

## **Electricity**

**U.S. Electricity Consumption.** This year's summer season has started out with abnormally hot temperatures. According to the National Oceanic and Atmospheric Administration, U.S. cooling degree-days during June 2012 were about 14 percent higher than the 30-year average, but 4 percent lower than June 2011. EIA expects that temperatures during the third quarter of 2012, although above normal, will average about 16 percent lower than last year. This reduced need for summer cooling contributes to EIA's projection of a 3.8-percent decline in residential electricity sales in 2012. EIA expects total consumption of electricity to fall by 1.3 percent during 2012, and then grow by 1.3 percent in 2013 (U.S. Total Electricity Consumption Chart).

**U.S. Electricity Generation.** For the first time since EIA began compiling monthly statistics, the share of total generation fueled by natural gas during April 2012 rose to the point where it was nearly equal to the share fueled by coal (about 32 percent for each). However, this situation is likely temporary. The year-over-year gains in the share of generation fueled by natural gas should slow and eventually reverse as the higher natural gas costs projected for later in 2012 and in 2013, along with record coal stocks, encourage generators to increase their utilization of coal-fired power plants over the forecast horizon. EIA forecasts total generation by coal across all sectors will decline by 14 percent in 2012, followed by an increase of 1.3 percent in 2013. In contrast, total generation by natural gas is forecast to rise by 23 percent this year and then decline by 1.0 percent next year (U.S. Electricity Generation Chart).

**U.S. Electricity Retail Prices.** EIA expects the average U.S. residential electricity price to rise from an average of 11.79 cents per kilowatthour in 2011 to 12.03 cents per kilowatthour this

year, an increase of 2.0 percent (U.S. Residential Electricity Prices Chart). The forecast cost of natural gas delivered to the electric power sector is about 30 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 only 0.2 percent in 2013, which would be the slowest growth rate in nominal prices in 10 years.

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

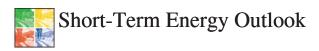
**U.S. Renewables.** After growing by 14 percent in 2011, total renewable energy supply is projected to decline by 1.3 percent in 2012 (U.S. Renewable Energy Supply Chart). This decrease is the result of hydropower resource levels beginning to return to the long-term average, with supply falling by 0.3 quadrillion Btu (11 percent). The decline in hydropower from the 2011 level more than offsets growth in other renewable energy supplies. Renewable energy supply increases slightly (0.5 percent) in 2013 as hydropower continues to decline (5.9 percent) but non-hydropower renewables grow by an average of 3.8 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 outlook for wind capacity additions and generation in 2013 will likely respond to whatever decision is made regarding the extension of production tax credits.

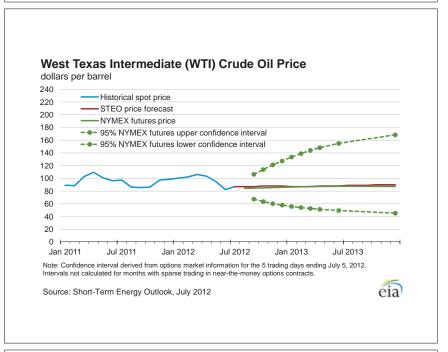
EIA expects fuel ethanol production to average 901 thousand bbl/d in 2012 and 2013, almost the same level as last year. This forecast assumes that E15 (gasoline blended with 15 percent ethanol by volume) does not yet reach the market in significant volumes. Consequently, U.S. ethanol production is projected to exceed the volume that can easily be used in the U.S. liquid fuels pool, so the Nation will continue to be a net exporter of ethanol over the next two years. EIA estimates that biodiesel production in 2011 averaged about 63 thousand bbl/d (971 million gallons of total annual production). Forecast biodiesel production averages 70 thousand bbl/d in 2012 and 75 thousand bbl/d in 2013.

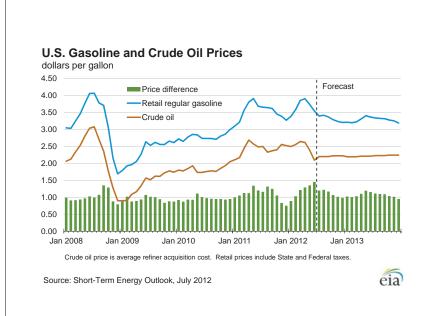
**U.S. Energy-Related Carbon Dioxide Emissions.** After declining by 2.4 percent in 2011, fossil fuel emissions are projected to further decline by 3.0 percent in 2012, but increase by 0.8 percent in 2013. Petroleum emissions decline in 2012 (0.9 percent) and then rise by 0.3 percent in 2013, while natural gas emissions rise by 5.3 percent and 1.5 percent in 2012 and 2013, respectively. Coal emissions decline in 2012 by 11 percent, but rise by 0.8 percent in 2013 (U.S. Carbon Dioxide Emissions Growth Chart).

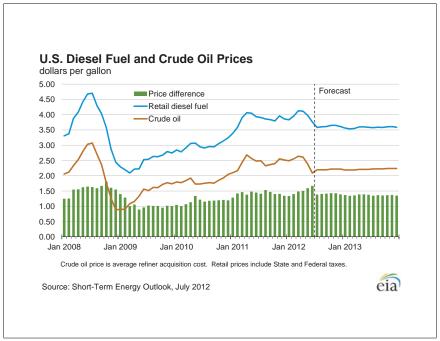


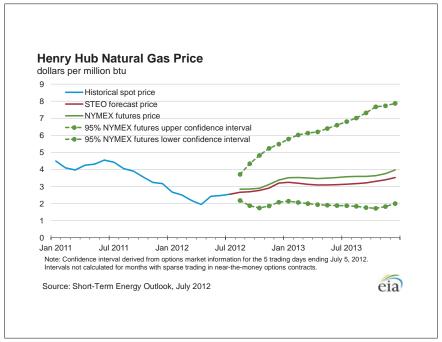


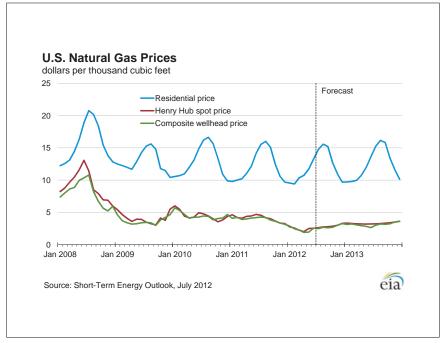
# Chart Gallery for July 2012

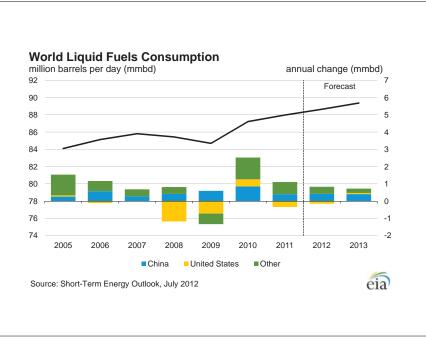


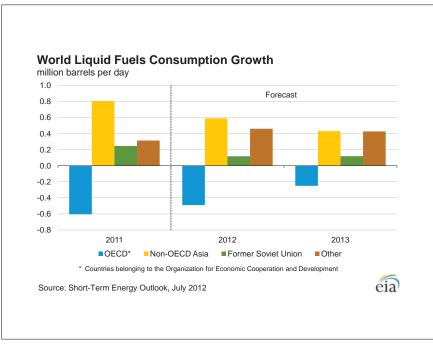


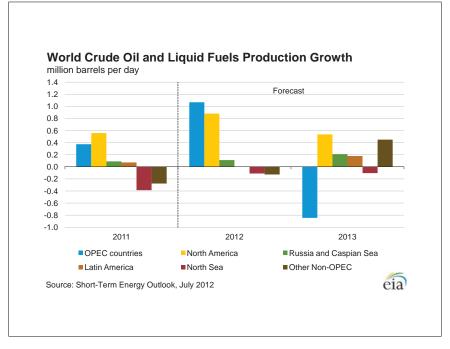


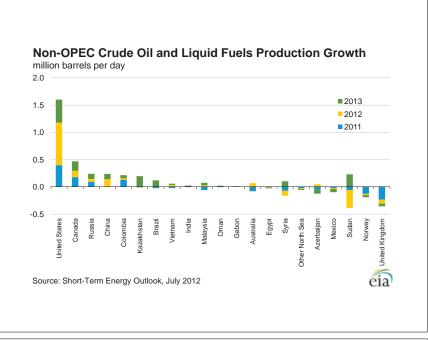


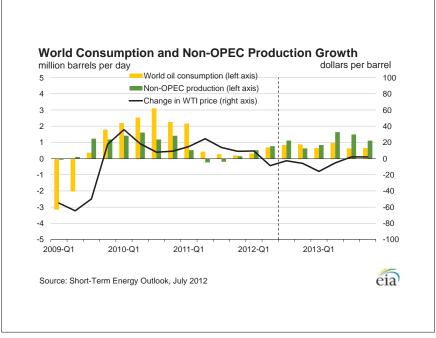


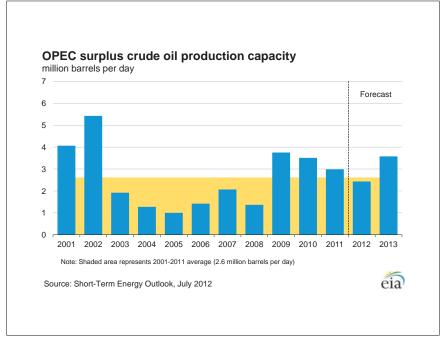


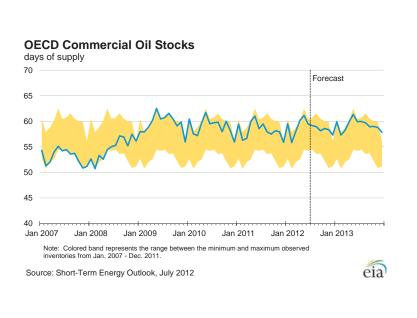


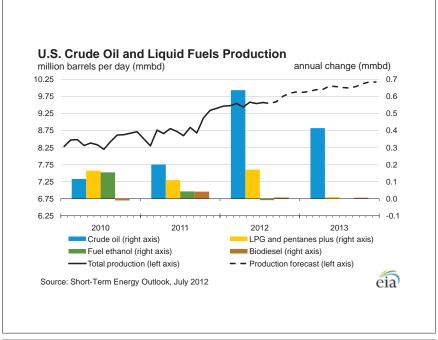


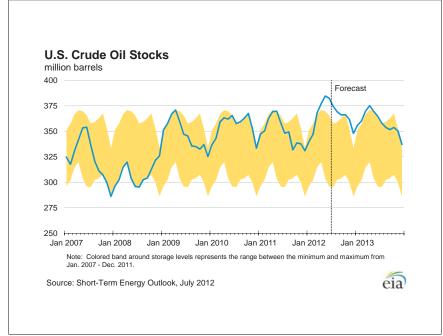


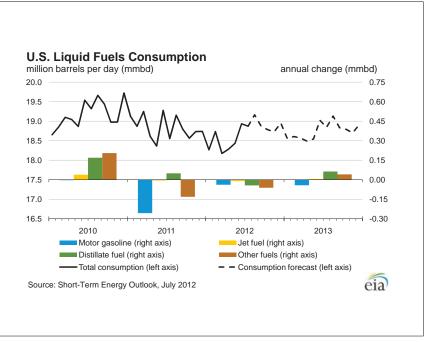


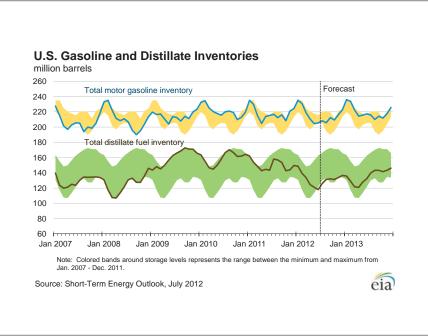


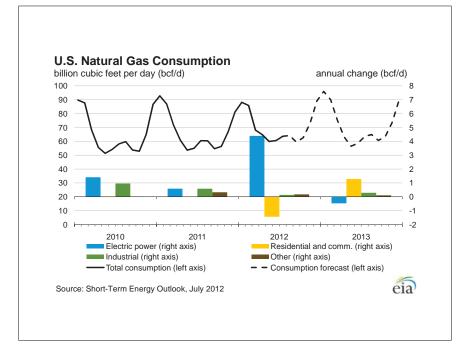


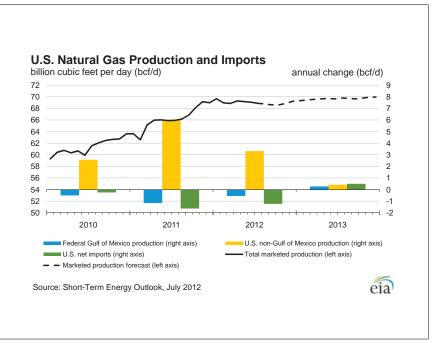


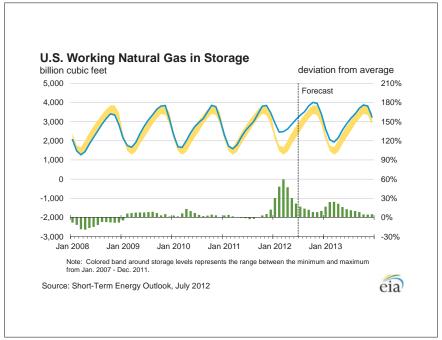


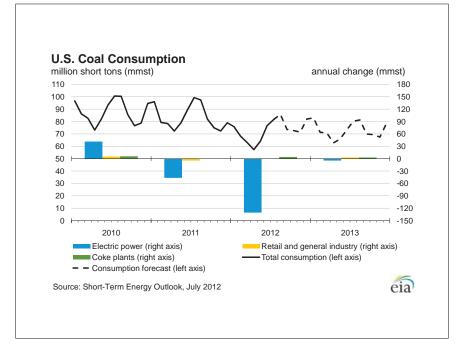


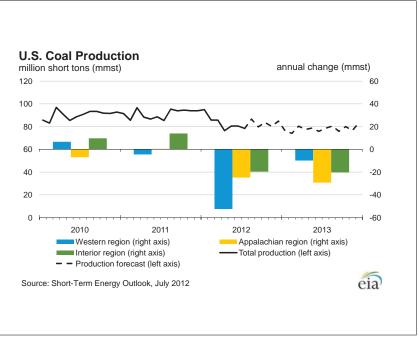


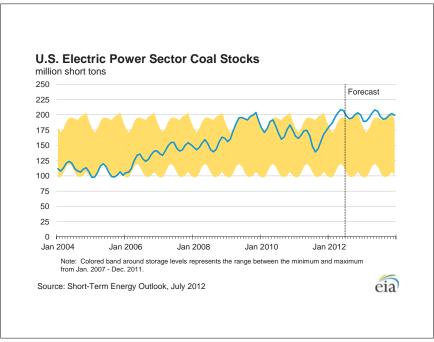


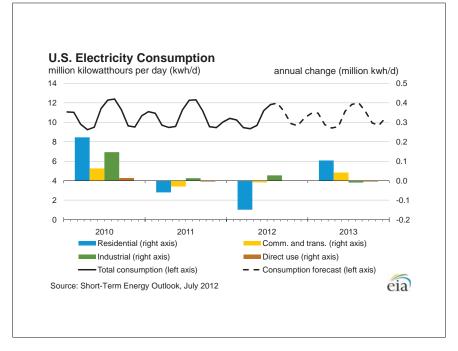


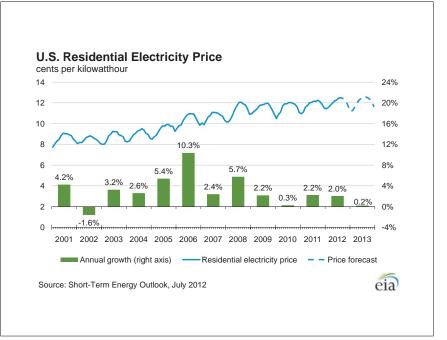


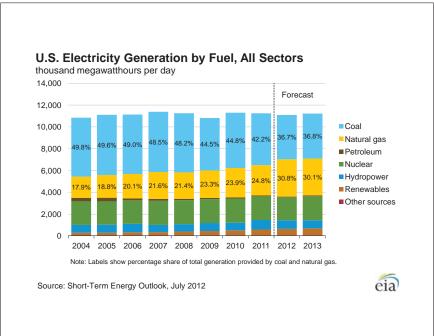


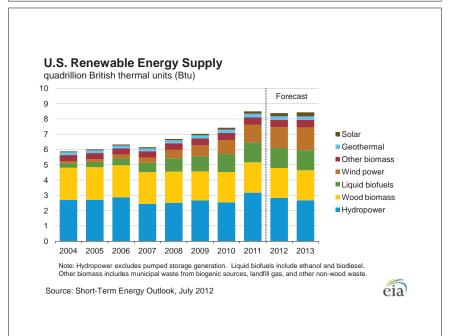


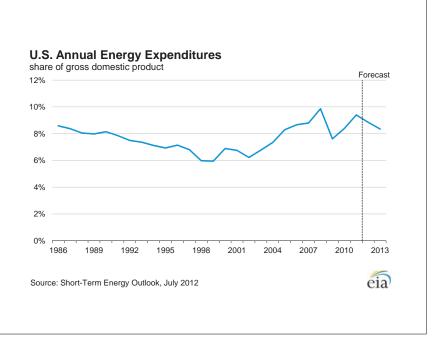


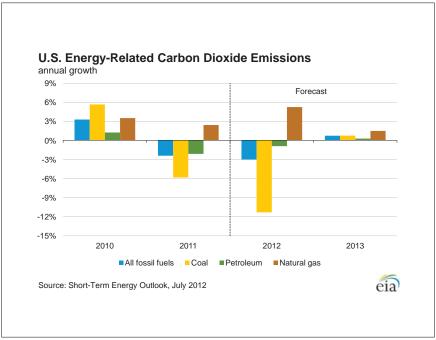


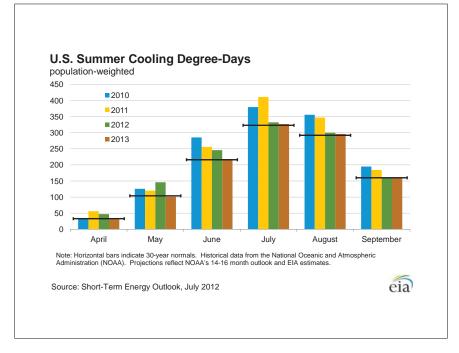


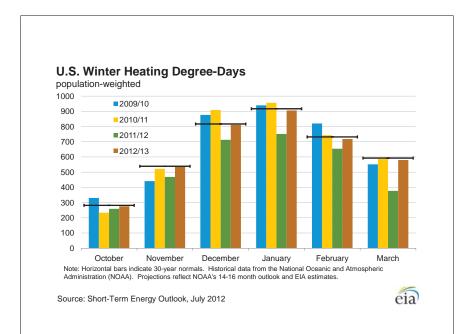












# U.S. Census Regions and Divisions



Source: Short-Term Energy Outlook, July 2012



Table SF01. U.S. Motor Gasoline Summer Outlook

U.S. Energy Information Administration	Snort-Ter	m Energy	Outlook - J	uly 2012					
		2011			2012		Year-o	ver-year ( (percent)	J
	Q2	Q3	Season	Q2	Q3	Season	Q2	Q3	Season
Nominal Prices (dollars per gallon)									
WTI Crude Oil (Spot) <sup>a</sup>	2.43	2.14	2.29	2.22	2.07	2.15	-8.6	-3.0	-6.0
Imported Crude Oil Price <sup>b</sup>	2.59	2.43	2.51	2.35	2.21	2.28	-9.2	-9.1	-9.2
U.S. Refiner Average Crude Oil Cost	2.57	2.40	2.48	2.36	2.20	2.27	-8.5	-8.3	-8.4
Wholesale Gasoline Price <sup>c</sup>	3.12	2.97	3.04	2.93	2.67	2.80	-5.9	-10.0	-8.0
Wholesale Diesel Fuel Price <sup>c</sup>	3.16	3.07	3.11	2.98	2.79	2.89	-5.7	-8.9	-7.3
Regular Gasoline Retail Priced	3.80	3.63	3.71	3.72	3.39	3.56	-1.9	-6.7	-4.3
Diesel Fuel Retail Price <sup>d</sup>	4.01	3.87	3.94	3.95	3.60	3.77	-1.6	-6.9	-4.3
Gasoline Consumption/Supply (million	barrels per	day)							
Total Consumption	8.863	8.875	8.869	8.847	8.865	8.856	-0.2	-0.1	-0.1
Total Refinery and Blender Output	7.482	7.818	7.651	7.503	7.758	7.631	0.3	-0.8	-0.3
Fuel Ethanol Blending	0.856	0.842	0.849	0.870	0.830	0.850	1.6	-1.4	0.1
Total Stock Withdrawal <sup>f</sup>	-0.003	-0.010	-0.007	0.148	-0.076	0.036			
Net Imports <sup>f</sup>	0.529	0.225	0.376	0.326	0.353	0.340	-38.3	56.8	-9.7
Refinery Utilization (percent)	85.8	89.8	87.8	89.2	91.6	90.4			
Gasoline Stocks, Including Blending C	omponents	s (million b	arrels)						
Beginning	214.9	215.2	214.9	218.8	205.3	218.8			
Ending	215.2	216.1	216.1	205.3	212.3	212.3			
Economic Indicators (annualized billion	2000 dollar	rs)							
Real GDP	13,272	13,332	13,302	13,554	13,618	13,586	2.1	2.1	2.1
Real Income	10,170	10,189	10,179	10,255	10,325	10,290	0.8	1.3	1.1

<sup>&</sup>lt;sup>a</sup> 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.

<sup>&</sup>lt;sup>b</sup> Cost of imported crude oil to U.S. refiners.

<sup>&</sup>lt;sup>c</sup> Price product sold by refiners to resellers.

<sup>&</sup>lt;sup>d</sup> Average pump price including taxes.

<sup>&</sup>lt;sup>e</sup> Refinery and blender net production plus finished motor gasoline adjustment.

<sup>&</sup>lt;sup>f</sup> 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		erm Ener	gy Outlo	ook - Jul										
-	1st	201 2nd	1 3rd	4th	1st	201 2nd	2 3rd	4th	1st	20 <sup>2</sup>	13 3rd	4th	2011	Year 2012	2013
Energy Supply	151	ZIIU	Siu	401	151	ZIIU	Siu	401	151	Ziiu	Siu	4111	2011	2012	2013
Crude Oil Production (a)															
(million barrels per day)	5.54	5.60	5.58	5.98	6.17	6.21	6.32	6.55	6.65	6.70	6.69	6.85	5.68	6.31	6.73
Dry Natural Gas Production															
(billion cubic feet per day)	60.83	62.75	63.10	65.32	65.64	65.65	65.24	65.38	65.90	66.11	66.17	66.31	63.01	<i>65.4</i> 8	66.13
Coal Production															
(million short tons)	274	264	275	282	266	238	245	249	231	232	235	240	1,094	997	938
Energy Consumption															
Liquid Fuels															
(million barrels per day)	19.09	18.75	18.84	18.68	18.38	18.55	18.97	18.82	18.58	18.68	18.93	18.80	18.84	18.68	18.75
Natural Gas															
(billion cubic feet per day)	83.74	56.45	58.54	68.12	80.56	61.71	62.44	74.96	86.96	59.36	63.05	75.35	66.65	69.91	71.12
Cool (h)															
Coal (b) (million short tons)	254	241	279	226	207	198	241	226	225	202	231	215	999	872	874
						,,,,		220	220	202	20.	2.0	000	0.2	0
(hillion kilowett hours per dev)	40.50	40.00	44.00	0.00	40.00	40.07	44.04	0.00	40.50	40.00	44.05	10.01	40.57	40.40	10.50
(billion kilowatt hours per day)	10.56	10.09	11.92	9.68	10.03	10.07	11.64	9.99	10.52	10.03	11.65	10.04	10.57	10.43	10.56
Renewables (c)															
(quadrillion Btu)	2.08	2.29	2.02	2.00	2.07	2.22	2.01	1.99	2.07	2.24	2.02	2.02	8.39	8.29	8.35
Total Energy Consumption (d)															
(quadrillion Btu)	25.87	23.10	24.34	23.92	24.42	22.90	23.99	24.60	25.38	22.81	23.95	24.51	97.22	95.91	96.65
Energy Prices															
Crude Oil (e)															
(dollars per barrel)	94.00	108.13	100.61	104.55	107.62	98.96	92.25	93.25	92.00	92.75	93.50	94.00	101.91	97.89	93.08
Natural Gas Wellhead															
(dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.59	2.98	3.13	2.80	3.12	3.44	3.90	2.56	3.12
Coal															
(dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.42	2.39	2.35	2.38	2.33	2.32	2.27	2.40	2.39	2.33
Macroeconomic															
Macroeconomic															
Real Gross Domestic Product															
(billion chained 2005 dollars - SAAR)	13,228 2.2	13,272 1.6	13,332 1.5	13,429 1.6	13,491 2.0	13,554 2.1	13,618 2.1	13,682 1.9	13,744 1.9	13,805 1.9	13,875 1.9	13,959 2.0	13,315 1.7	13,586 2.0	13,846 1.9
Percent change from prior year	2.2	1.0	1.5	1.0	2.0	2.1	2.1	1.9	1.9	1.9	1.9	2.0	1.7	2.0	1.9
GDP Implicit Price Deflator															
(Index, 2005=100)	112.4 1.8	113.1 2.1	113.8 2.4	114.1 2.1	114.5	115.0	115.6	116.1 1.8	116.4 1.6	116.6	117.2 1.4	117.6	113.3	115.3 1.8	116.9 1.4
Percent change from prior year	1.0	2.1	2.4	2.1	1.9	1.7	1.6	1.0	1.0	1.4	1.4	1.2	2.1	1.0	1.4
Real Disposable Personal Income															
(billion chained 2005 dollars - SAAR)	10,183	10,170	10,189	10,193	10,204	10,255	10,325	10,368	10,401	10,451	10,495	10,560	10,184	10,288	10,477
Percent change from prior year	2.6	1.1	0.7	0.4	0.2	0.8	1.3	1.7	1.9	1.9	1.6	1.9	1.2	1.0	1.8
Manufacturing Production Index			_												
(Index, 2007=100)		90.6	91.7	92.9	95.2	95.5 5.5	96.2	96.6	97.3	97.9	98.6	99.3	91.4	95.9	98.3
Percent change from prior year	6.8	4.0	3.9	4.5	5.3	5.5	4.9	4.0	2.2	2.5	2.5	2.8	4.8	4.9	2.5
Weather															
U.S. Heating Degree-Days	2,285	517	77	1,441	1,782	421	93	1,622	2,204	527	95	1,617	4,320	3,918	4,443
U.S. Cooling Degree-Days	33	432	942	70	53	439	793	78	35	350	783	83	1,477	1,363	1,251

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

Prices are not adjusted for inflation.

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

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

 $Petroleum\ Supply\ Annual,\ DOE/EIA-0340/2;\ Weekly\ Petroleum\ Status\ Report,\ DOE/EIA-0208;\ Petroleum\ Marketing\ Monthly,\ DOE/EIA-0380;\ Natural\ Gas\ Monthly,\ DOE/EIA-0130;\ Natural\ Gas\ Monthly,\ Natural\ Gas\ Monthl$ 

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.

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

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

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

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

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

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

Table 2. U.S. Energy Prices

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

		201	1			201	2			201	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	87.00	88.00	87.00	88.00	89.00	90.00	94.86	92.83	88.50
Brent Spot Average	104.96	117.36	113.34	109.40	118.49	108.42	98.83	99.50	97.50	98.00	98.50	99.00	111.26	106.31	98.25
Imported Average	94.23	108.72	102.05	105.36	108.13	98.71	92.75	93.75	92.25	93.00	93.75	94.25	102.67	98.34	93.32
Refiner Average Acquisition Cost	94.00	108.13	100.61	104.55	107.62	98.96	92.25	93.25	92.00	92.75	93.50	94.00	101.91	97.89	93.08
Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	267	312	297	271	297	293	267	256	254	268	262	255	287	278	260
Diesel Fuel	286	316	307	304	317	298	279	281	272	277	277	277	303	294	276
Heating Oil	275	305	295	296	312	293	269	274	269	269	270	277	291	292	272
Refiner Prices to End Users															
Jet Fuel	287	322	308	303	321	302	279	282	276	278	277	279	305	295	278
No. 6 Residual Fuel Oil (a)	218	246	249	250	270	260	245	243	238	234	234	236	239	254	235
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	329	380	363	337	361	372	339	324	321	336	332	324	353	349	328
Gasoline All Grades (b)	335	385	369	342	367	378	345	330	326	341	338	329	358	355	334
On-highway Diesel Fuel	363	401	387	387	397	395	360	364	355	360	358	360	384	379	358
Heating Oil	359	390	367	366	379	369	342	350	351	344	344	354	368	364	350
Natural Gas															
Average Wellhead (dollars per thousand cubic feet)	4.06	4.10	4.10	3.37	2.54	2.12	2.59	2.98	3.13	2.80	3.12	3.44	3.90	2.56	3.12
Henry Hub Spot (dollars per thousand cubic feet)	4.31	4.50	4.25	3.42	2.52	2.35	2.71	3.05	3.29	3.19	3.27	3.51	4.12	2.66	3.31
Henry Hub Spot (dollars per Million Btu)	4.18	4.37	4.12	3.32	2.45	2.28	2.64	2.96	3.19	3.10	3.17	3.41	4.00	2.58	3.22
End-Use Prices (dollars per thousand cubic feet)															
Industrial Sector	5.45	5.15	4.94	4.53	4.13	3.22	3.59	4.19	4.58	4.07	4.17	4.63	5.02	3.79	4.37
Commercial Sector	8.75	9.16	9.72	8.52	8.19	7.94	8.27	8.41	8.38	8.47	8.99	9.05	8.86	8.24	8.67
Residential Sector	9.96	11.97	15.53	10.45	9.67	11.56	15.18	10.64	9.80	11.59	15.74	11.17	10.80	10.72	10.92
Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.34	2.42	2.46	2.37	2.41	2.42	2.39	2.35	2.38	2.33	2.32	2.27	2.40	2.39	2.33
Natural Gas	5.02	4.92	4.76	4.13	3.31	3.01	3.23	3.76	3.96	3.65	3.75	4.17	4.71	3.31	3.87
Residual Fuel Oil (c)	15.88	18.29	20.10	20.05	21.27	19.77	17.81	17.29	17.11	16.86	16.74	16.82	18.49	18.90	16.87
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	23.16	21.96	22.47	22.21	22.56	22.61	23.26	22.40	22.81	22.64
End-Use Prices (cents per kilowatthour)															
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.69	7.13	6.56	6.50	6.76	7.22	6.67	6.89	6.73	6.80
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.21	10.66	10.07	9.96	10.37	10.83	10.20	10.32	10.24	10.36
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.15	12.46	11.86	11.35	12.27	12.55	12.02	11.79	12.03	12.06

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

Prices are not adjusted for inflation.

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

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

Prices exclude taxes unless otherwise noted.

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

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

 $Natural\ gas\ Henry\ Hub\ and\ WTI\ crude\ oil\ spot\ prices\ from\ Reuter's\ News\ Service\ (http://www.reuters.com).$ 

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

Table 3a. International Crude Oil and Liquid Fuels Supply, Consumption, and Inventories

O.S. Energy information Admini	2011					201				201	13			Year	
<u> </u>	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million barrels per day) (a)					J.	I.	I.			L.	·				
OECD	21.48	21.18	21.28	22.34	22.43	22.26	22.25	22.71	22.71	22.73	22.77	23.02	21.57	22.41	22.81
U.S. (50 States)	9.73	9.98	10.02	10.61	10.74	10.77	10.86	11.09	11.14	11.27	11.30	11.44	10.09	10.87	11.29
Canada	3.67	3.42	3.71	3.86	3.78	3.74	3.75	3.87	3.86	3.90	4.01	4.04	3.66	3.78	3.96
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.95	2.93	2.90	2.89	2.88	2.86	2.96	2.94	2.88
North Sea (b)	3.61	3.34	3.10	3.34	3.36	3.21	3.10	3.27	3.26	3.12	3.01	3.14	3.35	3.23	3.13
Other OECD	1.49	1.47	1.51	1.59	1.61	1.58	1.60	1.55	1.54	1.54	1.57	1.54	1.52	1.59	1.55
Non-OECD	65.92	64.89	65.57	66.20	66.66	66.76	66.56	66.54	66.40	66.44	66.77	67.02	65.65	66.63	66.66
OPEC	35.31	34.63	35.41	35.89	36.49	36.81	36.26	35.97	35.67	35.33	35.50	35.65	35.31	36.38	35.54
Crude Oil Portion	29.78	29.20	29.99	30.35	30.87	30.90	30.56	30.23	29.91	29.56	29.72	29.81	29.83	30.64	29.75
Other Liquids	5.53	5.43	5.43	5.54	5.62	5.91	5.71	5.73	5.76	5.77	5.78	5.84	5.48	5.74	5.79
Former Soviet Union	13.35	13.35	13.25	13.30	13.41	13.36	13.45	13.54	13.54	13.68	13.66	13.70	13.31	13.44	13.64
China	4.36	4.33	4.22	4.26	4.31	4.41	4.48	4.54	4.50	4.53	4.54	4.55	4.29	4.44	4.53
Other Non-OECD	12.90	12.58	12.69	12.75	12.45	12.18	12.36	12.50	12.70	12.90	13.07	13.13	12.73	12.37	12.95
Total World Supply	87.40	86.07	86.85	88.55	89.09	89.02	88.81	89.25	89.11	89.18	89.54	90.04	87.22	89.05	89.47
Non-OPEC Supply	52.09	51.44	51.44	52.65	52.60	52.21	52.55	53.29	53.44	53.84	54.04	54.39	51.91	52.66	53.93
Consumption (million barrels per day	) (c)														
OECD	46.25	44.48	45.89	45.72	45.39	44.13	45.36	45.49	45.11	44.09	44.86	45.32	45.59	45.10	44.84
U.S. (50 States)	19.09	18.75	18.84	18.68	18.38	18.55	18.97	18.82	18.58	18.68	18.93	18.80	18.84	18.68	18.75
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	2.25	2.15	2.29	2.26	2.20	2.14	2.26	2.23	2.21	2.14	2.26	2.23	2.24	2.21	2.21
Europe	14.22	14.12	14.69	14.09	13.68	13.66	14.36	14.02	13.41	13.32	13.76	13.73	14.28	13.93	13.56
Japan	4.86	3.92	4.32	4.82	5.30	4.21	4.17	4.57	5.04	4.25	4.29	4.70	4.48	4.56	4.57
Other OECD	5.54	5.25	5.44	5.57	5.52	5.26	5.30	5.55	5.53	5.35	5.28	5.53	5.45	5.40	5.42
Non-OECD	41.64	42.51	42.79	42.58	42.81	43.55	44.15	43.68	43.75	44.54	45.27	44.51	42.38	43.55	44.52
Former Soviet Union	4.58	4.51	4.77	4.76	4.69	4.62	4.88	4.88	4.80	4.72	5.00	4.99	4.66	4.77	4.88
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	17.08	17.68	16.96	16.90	17.49	18.00	17.31	17.21	17.95	18.50	17.74	16.97	17.43	17.85
Total World Consumption	87.89	86.99	88.68	88.31	88.21	87.67	89.51	89.18	88.86	88.63	90.13	89.83	87.97	88.64	89.37
Inventory Net Withdrawals (million ba	rrels per o	day)													
U.S. (50 States)	0.27	-0.42	0.29	0.32	-0.28	-0.19	-0.20	0.53	0.07	-0.43	-0.13	0.49	0.12	-0.03	0.00
Other OECD	0.21	-0.09	0.20	0.32	0.03	-0.43	0.33	-0.23	-0.12	-0.04	0.26	-0.26	0.16	-0.07	-0.04
Other Stock Draws and Balance	0.01	1.42	1.33	-0.88	-0.63	-0.73	0.56	-0.38	-0.21	-0.08	0.46	-0.44	0.47	-0.29	-0.06
Total Stock Draw	0.49	0.92	1.82	-0.24	-0.88	-1.35	0.69	-0.08	-0.25	-0.54	0.59	-0.21	0.75	-0.40	-0.10
End-of-period Inventories (million bar	rrels)														
U.S. Commercial Inventory	1,043	1,081	1,085	1,056	1,081	1,098	1,116	1,067	1,061	1,100	1,112	1,066	1,056	1,067	1,066
OECD Commercial Inventory	2,618	2,664	2,650	2,591	2,614	2,670	2,657	2,629	2,634	2,676	2,664	2,643	2,591	2,629	2,643

<sup>- =</sup> 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	เอเเสแปก	20		=nergy C	Juliook -	July 201 20		I		201	3			Year	
	1st	20d	3rd	4th	1st	2nd	3rd	4th	1st	201 2nd	3rd	4th	2011	2012	2013
		LIIG	0.0	761	101	2110	0.4	7611	101	2114	0.0	7411	2011	2012	
North America	16.39	16.38	16.67	17.41	17.46	17.47	17.55	17.89	17.91	18.07	18.19	18.34	16.71	17.59	18.13
Canada	3.67	3.42	3.71	3.86	3.78	3.74	3.75	3.87	3.86	3.90	4.01	4.04	3.66	3.78	3.96
Mexico	2.99	2.98	2.93	2.94	2.94	2.95	2.95	2.93	2.90	2.89	2.88	2.86	2.96	2.94	2.88
United States	9.73	9.98	10.02	10.61	10.74	10.77	10.86	11.09	11.14	11.27	11.30	11.44	10.09	10.87	11.29
Central and South America	4.80	4.79	4.85	4.95	4.91	4.74	4.87	4.89	4.96	5.00	5.06	5.11	4.85	4.85	5.03
Argentina	0.78	0.71	0.78	0.79	0.77	0.74	0.77	0.76	0.76	0.76	0.76	0.75	0.76	0.76	0.76
Brazil	2.67	2.68	2.67	2.76	2.75	2.61	2.70	2.71	2.76	2.79	2.83	2.87	2.69	2.69	2.81
Colombia	0.88	0.94	0.94	0.96	0.95	0.95	0.95	0.98	0.99	1.00	1.02	1.05	0.93	0.96	1.02
Other Central and S. America	0.47	0.46	0.46	0.45	0.44	0.44	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	4.16	4.05	4.20	4.18	4.04	3.93	4.06	4.29	4.18	4.05
Norway	2.11	1.95	1.95	2.03	2.07	1.96	1.91	2.00	1.95	1.95	1.89	1.98	2.01	1.98	1.94
United Kingdom (offshore)	1.23	1.13	0.91	1.07	1.05	1.00	0.95	1.04	1.07	0.95	0.89	0.94	1.08	1.01	0.96
Other North Sea	0.26	0.27	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.22	0.21	0.25	0.24	0.22
Former Soviet Union (FSU)	13.35	13.35	13.25	13.30	13.41	13.36	13.45	13.54	13.54	13.68	13.66	13.70	13.31	13.44	13.64
Azerbaijan		1.00	0.97	0.98	0.96	0.99	1.09	1.12	1.00	0.98	0.96	0.94	0.99	1.04	0.97
Kazakhstan	1.67	1.65	1.63	1.61	1.63	1.60	1.63	1.64	1.75	1.77	1.81	1.84	1.64	1.62	1.79
Russia		10.24	10.19	10.25	10.35	10.27	10.23	10.28	10.29	10.43	10.39	10.40	10.23	10.28	10.38
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	0.50	0.50	0.50	0.50	0.51	0.51	0.51	0.45	0.49	0.51
Middle East	1.56	1.40	1.44	1.34	1.26	1.30	1.32	1.41	1.43	1.44	1.43	1.43	1.43	1.32	1.43
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	0.21	0.24	0.32	0.35	0.35	0.34	0.34	0.33	0.24	0.34
Yemen	0.24	0.10	0.15	0.16	0.13	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.15	0.15
Asia and Oceania	8.83	8.64	8.55	8.71	8.82	8.91	9.01	9.05	9.05	9.10	9.15	9.12	8.68	8.95	9.11
Australia	0.46	0.45	0.46	0.55	0.55	0.55	0.56	0.53	0.53	0.54	0.56	0.53	0.48	0.55	0.54
China	4.36	4.33	4.22	4.26	4.31	4.41	4.48	4.54	4.50	4.53	4.54	4.55	4.29	4.44	4.53
India	0.95	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.95	0.95	0.95	0.94	0.94	0.94	0.94
Indonesia	0.99	0.97	0.97	0.96	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Malaysia	0.66	0.58	0.59	0.61	0.65	0.63	0.63	0.65	0.67	0.68	0.70	0.68	0.61	0.64	0.68
Vietnam	0.33	0.31	0.31	0.34	0.34	0.36	0.37	0.37	0.37	0.38	0.39	0.39	0.32	0.36	0.38
Africa	2.62	2.60	2.62	2.64	2.41	2.27	2.30	2.30	2.38	2.53	2.62	2.64	2.62	2.32	2.54
Egypt		0.71	0.70	0.70	0.70	0.70	0.70	0.69	0.69	0.68	0.68	0.67	0.71	0.70	0.68
Equatorial Guinea		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	0.34
Gabon		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	0.09	0.11	0.11	0.19	0.35	0.45	0.45	0.46	0.13	0.36
Total non-OPEC liquids	52.09	51.44	51.44	52.65	52.60	52.21	52.55	53.29	53.44	53.84	54.04	54.39	51.91	52.66	53.93
OPEC non crudo liquido	5.53	5.43	5.43	5.54	5.62	5.91	5.71	5.73	5.76	5 77	5.78	F 0.4	5.48	5.74	5.79
OPEC non-crude liquids  Non-OPEC + OPEC non-crude	5.53 57.62	5.43 56.87	5.43 56.87	58.19	58.22	5.91 58.12	5.71 58.25	5.73 59.02	5.76 59.20	5.77 59.61	5.78 59.82	5.84 60.23	5.48 57.39	5.74 58.41	5.79 59.72
HOIT OF LOT OF LOTION OF UNITED	37.02	30.07	30.07	30.13	30.22	JU. 12	00.20	03.02	03.20	03.07	03.02	00.23	31.33	JU. <del>T</del> 1	03.12

<sup>- =</sup> 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)

0.3. Lifergy information Admi	motratio	20.		Lileigy	Outlook		12			20	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Crude Oil						1									
Algeria	1.27	1.27	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	0.49	-	-	-	-	-	-	0.50	-	-
Iran	3.70	3.70	3.65	3.58	3.40	3.08	-	-	-	-	-	-	3.66	-	-
Iraq	2.53	2.53	2.63	2.70	2.64	2.91	-	-	-	-	-	-	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	9.80	-	-	-	-	-	-	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	30.90	30.56	30.23	29.91	29.56	29.72	29.81	29.83	30.64	29.75
Other Liquids	5.53	5.43	5.43	5.54	5.62	5.91	5.71	5.73	5.76	5.77	5.78	5.84	5.48	5.74	5.79
Total OPEC Supply	35.31	34.63	35.41	35.89	36.49	36.81	36.26	35.97	35.67	35.33	35.50	35.65	35.31	36.38	35.54
Crude Oil Production Capacity															
Africa	6.18	5.18	5.22	5.64	6.34	6.59	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	2.69	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	23.92	23.72	23.53	23.48	23.51	23.53	23.56	24.57	23.82	23.52
OPEC Total	33.42	32.43	32.51	32.92	33.14	33.20	32.99	32.97	33.11	33.26	33. <i>4</i> 2	33.51	32.82	33.07	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	2.30	2.43	2.73	3.20	3.70	3.70	3.70	2.98	2.43	3.58
OPEC Total	3.64	3.23	2.52	2.57	2.26	2.30	2.43	2.73	3.20	3.70	3.70	3.70	2.99	2.43	3.58

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

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

	2011				20	12			20	13					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2011	2012	2013
North America	23.40	22.97	23.23	23.06	22.65	22.75	23.33	23.16	22.89	22.95	23.29	23.13	23.16	22.97	23.07
Canada	2.25	2.15	2.29	2.26	2.20	2.14	2.26	2.23	2.21	2.14	2.26	2.23	2.24	2.21	2.21
Mexico	2.05	2.06	2.09	2.11	2.06	2.05	2.09	2.10	2.09	2.11	2.08	2.09	2.08	2.07	2.10
United States	19.09	18.75	18.84	18.68	18.38	18.55	18.97	18.82	18.58	18.68	18.93	18.80	18.84	18.68	18.75
Central and South America	6.26	6.49	6.51	6.49	6.43	6.67	6.69	6.67	6.63	6.87	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	14.96	14.86	15.46	14.85	14.42	14.40	15.13	14.79	14.16	14.08	14.54	14.51	15.03	14.69	14.32
Former Soviet Union	4.58	4.51	4.77	4.76	4.69	4.62	4.88	4.88	4.80	4.72	5.00	4.99	4.66	4.77	4.88
Russia	3.09	3.05	3.22	3.22	3.16	3.11	3.30	3.29	3.22	3.17	3.36	3.35	3.15	3.21	3.27
Middle East	6.79	7.54	8.14	7.40	7.28	7.66	8.18	7.47	7.29	7.81	8.36	7.58	7.47	7.65	7.76
Asia and Oceania	28.55	27.30	27.26	28.40	29.25	28.13	27.87	28.74	29.48	28.63	28.50	29.15	27.87	28.50	28.94
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	4.86	3.92	4.32	4.82	5.30	4.21	4.17	4.57	5.04	4.25	4.29	4.70	4.48	4.56	4.57
India	3.36	3.35	3.07	3.32	3.44	3.47	3.15	3.40	3.55	3.53	3.24	3.50	3.27	3.36	3.46
Africa	3.36	3.34	3.31	3.35	3.47	3.45	3.42	3.46	3.60	3.57	3.55	3.59	3.34	3.45	3.58
Total OECD Liquid Fuels Consumption	46.25	44.48	45.89	45.72	45.39	44.13	45.36	45.49	45.11	44.09	44.86	45.32	45.59	45.10	44.84
Total non-OECD Liquid Fuels Consumption	41.64	42.51	42.79	42.58	42.81	43.55	44.15	43.68	43.75	44.54	45.27	44.51	42.38	43.55	44.52
Total World Liquid Fuels Consumption	87.89	86.99	88.68	88.31	88.21	87.67	89.51	89.18	88.86	88.63	90.13	89.83	87.97	88.64	89.37
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2007 Q1 = 100	109.7	110.2	111.1	111.7	112.8	113.4	114.3	115.2	115.9	116.8	117.7	118.7	110.7	113.9	117.3
Percent change from prior year	3.6	2.8	2.9	2.5	2.8	2.9	2.9	3.1	2.8	3.0	2.9	3.0	2.9	2.9	2.9
OECD Index, 2007 Q1 = 100	101.5	101.8	102.4	102.7	103.2	103.4	103.8	104.2	104.6	105.0	105.4	105.9	102.1	103.6	105.2
Percent change from prior year	2.2	1.5	1.6	1.3	1.6	1.6	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.5	1.5
Non-OECD Index, 2007 Q1 = 100	122.3	123.3	124.5	125.6	127.7	129.0	130.9	132.5	133.8	135.6	137.3	139.1	123.9	130.0	136.5
Percent change from prior year	5.6	4.7	4.7	4.1	4.4	4.7	5.1	5.4	4.8	5.1	4.9	5.0	4.8	4.9	5.0
Real U.S. Dollar Exchange Rate (a)															
Index, January 2007 = 100	96.28	94.62	95.09	97.70	97.96	99.46	100.35	100.14	100.57	101.32	102.82	102.61	95.92	99.48	101.83
Percent change from prior year	-1.9	-5.2	-3.9	0.8	1.7	5.1	5.5	2.5	2.7	1.9	2.5	2.5	-2.6	3.7	2.4

<sup>- =</sup> 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.

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

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

U.S. Energy Information Administration	Short-Ter	m Energy 201		k - July 2	2012	201	12			201	2			Year	
	1st	201 2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (million barrels per day)	100	Ziid	or a	7611	100	Ziiu	o.u	7	101	Ziid	oru	7411	2011	2012	
Crude Oil Supply													ł		
Domestic Production (a)	5.54	5.60	5.58	5.98	6.17	6.21	6.32	6.55	6.65	6.70	6.69	6.85	5.68	6.31	6.73
Alaska		0.59	0.53	0.60	0.59	0.53	0.50	0.55	0.56	0.53	0.47	0.53	0.57	0.54	0.52
Federal Gulf of Mexico (b)		1.35	1.19	1.27	1.34	1.30	1.30	1.34	1.36	1.38	1.36	1.39	1.32	1.32	1.38
Lower 48 States (excl GOM)	3.51	3.67	3.86	4.11	4.24	4.37	4.53	4.66	4.74	4.79	4.86	4.93	3.79	4.45	4.83
Crude Oil Net Imports (c)		8.95	9.07	8.80	8.58	8.82	8.94	7.94	7.76	8.20	8.39	7.63	8.87	8.57	8.00
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	-0.32	0.05	0.29	0.01	-0.41	-0.16	0.18	0.20	-0.24	0.06	0.14	0.16	0.01	-0.05	0.03
Crude Oil Adjustment (d)	0.35	0.22	0.23	-0.01	0.20	0.26	0.06	0.04	0.09	0.14	0.07	0.04	0.20	0.14	0.09
Total Crude Oil Input to Refineries	14.23	14.81	15.50	14.78	14.54	15.13	15.51	14.73	14.27	15.10	15.29	14.69	14.83	14.98	14.84
Other Supply													ł		
Refinery Processing Gain	1.03	1.06	1.13	1.12	1.05	1.07	1.10	1.08	1.05	1.06	1.08	1.08	1.08	1.07	1.07
Natural Gas Liquids Production	2.04	2.19	2.18	2.32	2.38	2.38	2.32	2.34	2.31	2.38	2.39	2.37	2.18	2.35	2.36
Renewables and Oxygenate Production (e)	0.95	0.94	0.94	0.98	0.95	0.93	0.93	0.93	0.94	0.93	0.93	0.93	0.95	0.93	0.93
Fuel Ethanol Production	0.91	0.89	0.90	0.94	0.92	0.89	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.90	0.90
Petroleum Products Adjustment (f)		0.19	0.19	0.21	0.21	0.19	0.19	0.19	0.19	0.20	0.21	0.21	0.19	0.20	0.20
Product Net Imports (c)		0.02	-0.77	-1.04	-0.86	-1.07	-0.70	-0.78	-0.50	-0.51	-0.69	-0.81	-0.44	-0.85	-0.63
Pentanes Plus		0.06	-0.03	-0.03	-0.07	-0.05	-0.03	-0.03	-0.04	-0.03	-0.04	-0.05	0.00	-0.05	-0.04
Liquefied Petroleum Gas		-0.08	-0.05	0.02	-0.03	-0.13	-0.21	-0.14	-0.10	-0.14	-0.16	-0.10	-0.02	-0.13	-0.12
Unfinished Oils		0.65	0.63	0.60	0.53	0.57	0.69	0.63	0.57	0.64	0.65	0.62	0.62	0.60	0.62
Other HC/Oxygenates		-0.11	-0.11	-0.15	-0.11	-0.07	-0.11	-0.11	-0.11	-0.11	-0.10	-0.12	-0.12	-0.10	-0.11
Motor Gasoline Blend Comp		0.83	0.59	0.57	0.58	0.57	0.71	0.61	0.59	0.68	0.62	0.62	0.66	0.62	0.63
Finished Motor Gasoline		-0.31	-0.37	-0.52	-0.33	-0.25	-0.36	-0.46	-0.30	-0.27	-0.29	-0.48	-0.37	-0.35	-0.34
Jet Fuel		0.01	-0.03	-0.05	-0.10	-0.06	-0.03	-0.06	-0.01	-0.01	-0.02	-0.07	-0.03	-0.06	-0.03
Distillate Fuel Oil		-0.62	-0.75	-0.90	-0.76	-1.01	-0.74	-0.71	-0.57	-0.69	-0.72	-0.68	-0.68	-0.80	-0.67
Residual Fuel Oil		-0.03	-0.22	-0.08	-0.10	-0.15	-0.17	-0.11	-0.10	-0.09	-0.15	-0.10	-0.08	-0.13	-0.11
Other Oils (g)		-0.38	-0.45	-0.50	-0.47	-0.52	-0.45	-0.40	-0.40	-0.48	-0.47	-0.46	-0.43	-0.46	-0.45
Product Inventory Net Withdrawals	0.60	-0.46	-0.33	0.31	0.13	-0.03	-0.38	0.34	0.32	-0.48	-0.28	0.33	0.03	0.01	-0.03
Total Supply	. 19.08	18.75	18.84	18.68	18.38	18.59	18.97	18.82	18.58	18.68	18.93	18.80	18.83	18.69	18.75
Pentanes Plus Liquefied Petroleum Gas Unfinished Oils Finished Liquid Fuels Motor Gasoline Jet Fuel Distillate Fuel Oil Residual Fuel Oil Other Oils (f)	2.45 0.06 8.60 1.36 3.95 0.60	0.11 1.95 -0.03 8.86 1.47 3.75 0.52 2.11	0.08 1.98 0.00 8.87 1.48 3.78 0.37 2.26	0.07 2.30 -0.03 8.60 1.38 3.93 0.44 1.98	0.04 2.37 0.09 8.48 1.35 3.81 0.41 1.84	0.07 2.02 0.01 8.85 1.44 3.68 0.40 2.10	0.10 2.05 0.00 8.87 1.48 3.81 0.38 2.27	0.11 2.34 0.00 8.60 1.39 3.93 0.43 2.03	0.09 2.47 0.01 8.42 1.37 3.89 0.45 1.89	0.09 2.02 0.00 8.79 1.46 3.76 0.46 2.11	0.10 2.09 0.00 8.84 1.47 3.84 0.39 2.21	0.11 2.36 0.00 8.57 1.39 3.98 0.42 1.96	0.09 2.17 0.00 8.74 1.43 3.85 0.48 2.08	0.08 2.19 0.03 8.70 1.41 3.81 0.40 2.06	0.10 2.23 0.00 8.66 1.42 3.87 0.43 2.04
Total Consumption		18.75	18.84	18.68	18.38	18.55	18.97	18.82	18.58	18.68	18.93	18.80	18.84	18.68	18.75
,													1		
Total Liquid Fuels Net Imports	8.74	8.97	8.29	7.76	7.72	7.74	8.24	7.15	7.27	7.69	7.69	6.82	8.44	7.71	7.37
													ł		
End-of-period Inventories (million barrels)													ł		
Commercial Inventory													ł		
Crude Oil (excluding SPR)	362.6	358.5	331.8	330.9	368.1	382.5	366.0	347.9	369.9	364.9	351.6	337.0	330.9	347.9	337.0
Pentanes Plus	10.8	15.3	16.8	17.6	15.9	16.6	17.0	14.8	14.3	15.9	16.6	14.4	17.6	14.8	14.4
Liquefied Petroleum Gas		105.3	132.5	111.1	102.0	146.4	164.5	124.6	90.2	129.6	155.4	119.7	111.1	124.6	119.7
Unfinished Oils		91.9	89.1	79.1	90.8	84.7	84.5	79.5	89.3	87.2	85.3	79.4	79.1	79.5	79.4
Other HC/Oxygenates	. 23.2	21.2	20.7	21.3	26.0	23.2	23.7	23.0	24.4	23.6	24.1	23.4	21.3	23.0	23.4
Total Motor Gasoline	214.9	215.2	216.1	224.3	218.8	205.3	212.3	222.6	222.5	217.4	214.1	225.6	224.3	222.6	225.6
Finished Motor Gasoline	60.8	56.4	57.1	61.4	54.4	52.1	54.0	56.2	56.0	58.1	58.3	61.8	61.4	56.2	61.8
Motor Gasoline Blend Comp	154.1	158.8	159.0	162.8	164.4	153.2	158.3	166.4	166.5	159.3	155.9	163.9	162.8	166.4	163.9
Jet Fuel	40.0	42.3	46.0	41.7	39.1	38.9	40.9	39.9	40.6	42.2	43.3	40.9	41.7	39.9	40.9
Distillate Fuel Oil	148.5	143.7	153.7	149.7	133.8	118.1	132.2	136.7	121.9	132.3	143.4	146.2	149.7	136.7	146.2
Residual Fuel Oil	37.1	37.4	34.6	34.1	36.3	35.1	34.8	36.1	36.0	36.8	35.8	36.7	34.1	36.1	36.7
Other Oils (f)	49.6	50.5	43.8	45.8	50.4	47.6	40.5	42.0	51.5	49.6	42.0	43.0	45.8	42.0	43.0
Total Commercial Inventory	. 1,043	1,081	1,085	1,056	1,081	1,098	1,116	1,067	1,061	1,100	1,112	1,066	1,056	1,067	1,066
Crude Oil in SPR		727	696	696	696	696	696	696	696	696	696	696	696	696	696
Heating Oil Reserve	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

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

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

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

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

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

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

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

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

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

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

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

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

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

Table 4b. U.S. Petroleum Refinery Balance (Million Barrels per Day, Except Utilization Factor)

	•	201	11			20	12			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	15.13	15.51	14.73	14.27	15.10	15.29	14.69	14.83	14.98	14.84
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	1.03	0.99	1.00	0.99	1.03	1.02	1.02	1.01	1.01	1.02
Unfinished Oils	0.48	0.63	0.66	0.74	0.31	0.63	0.69	0.68	0.45	0.66	0.67	0.68	0.63	0.58	0.62
Motor Gasoline Blend Components	0.60	0.82	0.54	0.44	0.45	0.59	0.64	0.53	0.56	0.75	0.65	0.53	0.60	0.55	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	17.82	18.28	17.49	16.76	17.96	18.08	17.48	17.56	17.60	17.58
Refinery Processing Gain	1.03	1.06	1.13	1.12	1.05	1.07	1.10	1.08	1.05	1.06	1.08	1.08	1.08	1.07	1.07
Refinery and Blender Net Production															
Liquefied Petroleum Gas	0.52	0.81	0.74	0.42	0.53	0.83	0.74	0.41	0.50	0.79	0.75	0.42	0.62	0.63	0.61
Finished Motor Gasoline	8.76	9.12	9.19	9.06	8.61	8.94	9.20	9.04	8.67	9.05	9.10	9.06	9.03	8.95	8.97
Jet Fuel	1.37	1.49	1.55	1.39	1.42	1.49	1.54	1.44	1.39	1.48	1.50	1.43	1.45	1.47	1.45
Distillate Fuel	4.21	4.31	4.63	4.78	4.39	4.52	4.70	4.68	4.30	4.57	4.68	4.69	4.49	4.57	4.56
Residual Fuel	0.53	0.55	0.56	0.51	0.54	0.53	0.55	0.55	0.54	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	2.58	2.65	2.45	2.40	2.57	2.60	2.43	2.51	2.51	2.50
Total Refinery and Blender Net Production	17.80	18.78	19.31	18.67	17.84	18.89	19.38	18.57	17.81	19.02	19.16	18.56	18.64	18.67	18.64
Refinery Distillation Inputs	14.69	15.22	15.93	15.27	14.89	15.38	15.79	15.07	14.59	15.40	15.62	15.05	15.28	15.28	15.17
Refinery Operable Distillation Capacity	17.70	17.74	17.74	17.73	17.29	17.25	17.23	17.23	17.23	17.23	17.23	17.23	17.73	17.25	17.23
Refinery Distillation Utilization Factor	0.83	0.86	0.90	0.86	0.86	0.89	0.92	0.87	0.85	0.89	0.91	0.87	0.86	0.89	0.88

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

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

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

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

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

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

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

C.C. Energy information / turning tall	- 1	201		,		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	293	267	256	254	268	262	255	287	278	260
Gasoline Regular Grade Retail Prices In	cluding Ta	axes													
PADD 1	329	377	364	337	363	366	335	324	322	335	330	324	352	347	328
PADD 2	326	380	364	329	355	366	338	317	315	332	327	316	350	344	323
PADD 3	314	365	349	317	346	353	320	307	304	321	316	306	336	331	312
PADD 4	311	365	355	337	322	374	335	317	307	327	329	318	342	337	321
PADD 5	353	400	377	368	390	414	367	353	345	359	360	351	375	381	354
U.S. Average	329	380	363	337	361	372	339	324	321	336	332	324	353	349	328
Gasoline All Grades Including Taxes	335	385	369	342	367	378	345	330	326	341	338	329	358	355	334
End-of-period Inventories (million barrels	)														
Total Gasoline Inventories	,														
PADD 1	55.0	55.1	56.4	59.1	57.1	52.4	55.1	59.3	58.4	58.1	56.2	61.1	59.1	59.3	61.1
PADD 2	50.5	49.5	49.9	52.1	52.5	49.0	50.4	50.5	51.2	50.5	49.8	50.7	52.1	50.5	50.7
PADD 3	70.3	73.5	75.0	75.8	71.4	69.7	72.1	76.1	76.5	74.1	73.5	77.5	75.8	76.1	77.5
PADD 4	6.5	6.6	5.9	7.6	6.5	6.3	6.3	6.8	6.6	6.2	6.2	6.7	7.6	6.8	6.7
PADD 5	32.7	30.4	28.9	29.6	31.3	27.9	28.4	30.0	29.8	28.5	28.5	29.6	29.6	30.0	29.6
U.S. Total	214.9	215.2	216.1	224.3	218.8	205.3	212.3	222.6	222.5	217.4	214.1	225.6	224.3	222.6	225.6
Finished Gasoline Inventories															
U.S. Total	60.8	56.4	57.1	61.4	54.4	52.1	54.0	56.2	56.0	58.1	58.3	61.8	61.4	56.2	61.8
Gasoline Blending Components Invento	ries														
U.S. Total	154.1	158.8	159.0	162.8	164.4	153.2	158.3	166.4	166.5	159.3	155.9	163.9	162.8	166.4	163.9

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

Prices are not adjusted for inflation.

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

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

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

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

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

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

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

U.S. Energy information Admi	nistratio	_		i Energy	Outlook			1				1		.,	
-	4-1	20		411-	4-4 1	20		411-	4-1	201		40.	0044	Year	0040
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply (billion cubic feet per day)				20 = 4	00.45	00.40	00.74	00.00	00.40	00.05	00.70	00.00		00.00	20.07
Total Marketed Production	63.83	65.96	66.30	68.74	69.15	69.16	68.74	68.88	69.43	69.65	69.72	69.86	66.22	68.98	69.67
Alaska	1.12	1.00	0.86	1.02	1.07	0.97	1.00	0.97	0.99	0.91	0.96	0.96	1.00	1.00	0.95
Federal GOM (a)	5.60	5.23	4.54	4.58	4.57	4.50	4.26	4.41	4.79	4.78	4.58	4.69	4.98	4.44	4.71
Lower 48 States (excl GOM)	57.10	59.73	60.90	63.14	63.51	63.68	63.48	63.50	63.65	63.97	64.18	64.22	60.24	63.54	64.01
Total Dry Gas Production	60.83	62.75	63.10	65.32	65.64	65.65	65.24	65.38	65.90	66.11	66.17	66.31	63.01	<i>65.48</i>	66.13
Gross Imports	11.04	8.95	8.97	8.95	8.98	8.20	8.90	9.20	9.82	8.55	9.06	9.20	9.47	8.82	9.16
Pipeline	9.80	7.89	8.20	8.17	8.37	7.89	8.32	8.56	9.03	7.82	8.49	8.56	8.51	8.29	8.47
LNG	1.23	1.05	0.77	0.78	0.61	0.30	0.58	0.64	0.79	0.74	0.58	0.64	0.96	0.53	0.69
Gross Exports	4.51	4.16	3.82	4.04	4.41	4.10	3.82	4.14	4.64	4.25	4.08	4.31	4.13	4.11	4.32
Net Imports	6.53	4.79	5.15	4.91	4.57	4.10	5.08	5.07	5.18	4.31	4.99	4.89	5.34	4.71	4.84
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	-7.05	-7.67	4.58	16.29	-10.51	-8.78	4.96	-0.97	0.11	0.44
Total Supply	84.53	57.23	58.78	69.91	81.01	62.85	62.82	75.21	87.56	60.07	62.55	76.35	67.55	70.46	71.58
Balancing Item (b)	-0.80	-0.78	-0.25	-1.79	-0.45	-1.13	-0.38	-0.26	-0.60	-0.71	0.50	-1.01	-0.90	-0.55	-0.45
Total Primary Supply	83.74	56.45	58.54	68.12	80.56	61.71	62.44	74.96	86.96	59.36	63.05	75.35	66.65	69.91	71.12
Consumption (billion cubic feet per	r day)														
Residential	26.13	7.58	3.73	14.65	20.65	6.55	3.87	17.47	24.80	6.84	3.78	16.98	12.96	12.13	13.06
Commercial	14.75	5.90	4.35	9.75	12.12	5.43	4.06	10.64	14.21	5.37	3.87	10.32	8.66	8.06	8.42
Industrial	20.02	17.65	17.19	18.93	19.72	17.78	17.60	19.22	20.47	17.98	17.76	19.29	18.44	18.58	18.87
Electric Power (c)	16.75	19.88	27.74	18.85	21.76	26.24	31.22	21.62	20.88	23.44	31.86	22.70	20.83	25.22	24.75
Lease and Plant Fuel	3.65	3.78	3.79	3.93	3.96	3.96	3.93	3.94	3.97	3.99	3.99	4.00	3.79	3.95	3.99
Pipeline and Distribution Use	2.36	1.59	1.65	1.92	2.27	1.66	1.67	1.97	2.52	1.65	1.69	1.96	1.87	1.89	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	80.56	61.71	62.44	74.96	86.96	59.36	63.05	75.35	66.65	69.91	71.12
End-of-period Inventories (billion c	ubic feet)														
Working Gas Inventory	1,581	2,530	3,416	3,462	2,477	3,114	3,820	3,399	1,933	2,890	3,697	3,240	3,462	3,399	3,240
Producing Region (d)	738	992	1,070	1,193	1,034	1,122	1,211	1,149	829	1,052	1,169	1,097	1,193	1,149	1,097
East Consuming Region (d)	618	1,188	1,879	1,822	1,090	1,521	2.070	1,783	819	1,418	2,034	1,707	1,822	1,783	1,707
West Consuming Region (d)	225	350	468	447	353	472	540	467	285	420	494	437	447	467	437

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

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

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.

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

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

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

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

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

U.S. Energy information	Auminis			Tellii Ei	lergy Ou	Itiook - J	•								
		201				201			1	201				Year	
	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	2.59	2.98	3.13	2.80	3.12	3.44	3.90	2.56	3.12
Henry Hub Spot Price	4.31	4.50	4.25	3.42	2.52	2.35	2.71	3.05	3.29	3.19	3.27	3.51	4.12	2.66	3.31
Residential															
New England	13.99	14.30	17.26	13.08	13.07	14.88	16.84	13.51	13.27	14.35	17.34	14.26	14.05	13.82	14.04
Middle Atlantic	11.84	14.11	18.14	12.66	11.29	13.23	16.91	12.91	11.57	13.21	17.56	13.80	12.83	12.52	12.86
E. N. Central	8.87	10.95	16.23	9.31	8.35	10.14	15.27	9.13	8.43	10.49	16.23	9.72	9.76	9.31	9.58
W. N. Central	8.83	11.17	16.78	9.51	8.45	11.43	16.09	8.99	8.41	10.63	16.79	9.59	9.80	9.50	9.52
S. Atlantic	11.97	17.55	22.89	13.51	12.43	17.84	22.56	13.13	12.15	17.45	23.69	14.00	13.78	14.05	14.07
E. S. Central	9.92	13.70	18.42	11.11	10.21	14.30	17.78	11.20	10.43	14.14	18.95	11.53	11.13	11.47	11.61
W. S. Central	8.60	14.31	19.03	10.16	9.25	13.71	17.71	10.10	8.44	13.66	18.83	10.94	10.47	10.81	10.54
Mountain	8.92	9.87	13.54	8.86	8.80	10.00	12.98	8.97	8.66	9.17	12.24	8.53	9.40	9.36	8.97
Pacific	9.97	10.91	11.63	9.92	9.40	9.23	10.15	9.41	9.54	9.62	10.49	9.75	10.34	9.46	9.73
U.S. Average	9.96	11.97	15.53	10.45	9.67	11.56	15.18	10.64	9.80	11.59	15.74	11.17	10.80	10.72	10.92
Commercial															
New England	11.16	10.64	10.43	10.45	10.26	10.91	10.67	11.08	11.10	10.70	10.95	11.50	10.83	10.66	11.13
Middle Atlantic	9.84	9.62	8.99	9.27	8.79	7.98	7.88	9.25	9.19	9.04	8.87	10.00	9.55	8.67	9.35
E. N. Central	8.35	8.98	9.85	7.88	7.46	7.62	8.09	7.75	7.89	8.41	8.94	8.47	8.45	7.64	8.22
W. N. Central	7.92	8.44	9.49	7.61	7.21	6.79	7.96	6.95	7.24	7.28	8.65	7.46	8.05	7.13	7.42
S. Atlantic	9.80	10.87	11.13	9.77	9.31	9.37	9.60	9.76	9.64	10.04	10.46	10.69	10.13	9.53	10.14
E. S. Central	8.82	9.59	10.39	9.24	8.78	8.87	9.29	9.42	9.05	9.57	10.02	10.02	9.22	9.06	9.50
W. S. Central	7.30	8.54	8.92	7.43	7.25	6.79	7.51	7.26	7.13	7.64	8.21	7.87	7.78	7.21	7.57
Mountain	8.03	8.05	9.00	7.72	7.49	7.47	7.90	7.55	7.24	7.12	8.07	7.88	8.05	7.55	7.49
Pacific	9.13	9.19	9.75	8.88	8.60	7.57	7.65	8.07	8.35	7.75	8.22	8.63	9.17	8.08	8.28
U.S. Average	8.75	9.16	9.72	8.52	8.19	7.94	8.27	8.41	8.38	8.47	8.99	9.05	8.86	8.24	8.67
Industrial															
New England	10.67	9.82	9.20	9.21	9.55	7.99	7.85	9.09	10.00	9.07	8.73	9.72	9.84	8.80	9.52
Middle Atlantic	9.58	9.28	8.88	9.24	8.54	6.79	7.35	9.01	8.91	7.80	7.96	9.51	9.36	8.16	8.73
E. N. Central	7.39	7.19	7.28	6.64	6.70	5.68	5.76	6.21	6.54	6.17	6.24	6.66	7.15	6.22	6.47
W. N. Central	6.27	5.77	5.55	5.54	5.41	3.81	3.82	4.65	5.19	4.05	4.22	4.91	5.81	4.45	4.66
S. Atlantic	6.53	6.23	6.07	5.71	5.05	4.23	4.66	5.29	5.61	5.18	5.39	5.93	6.15	4.83	5.54
E. S. Central	5.84	5.58	5.47	5.10	4.44	3.79	4.33	4.84	5.16	4.71	4.92	5.25	5.51	4.37	5.03
W. S. Central	4.29	4.51	4.39	3.64	2.94	2.52	3.02	3.18	3.38	3. <b>4</b> 5	3.61	3.66	4.21	2.92	3.53
Mountain	6.86	6.49	6.86	6.29	6.05	5.02	5.23	5.91	6.02	5.35	5.97	6.44	6.61	5.63	5.98
Pacific	7.51	7.33	7.37	6.94	6.66	5.50	<i>5.4</i> 5	6.36	6.60	5.90	6.21	6.96	7.29	6.05	6.46
U.S. Average	5.45	5.15	4.94	4.53	4.13	3.22	3.59	4.19	4.58	4.07	4.17	4.63	5.02	3.79	4.37

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

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

Historical data: Latest data available from Energy Information Administration databases supporting the Natural Gas Monthly , DOE/EIA-0130.

 ${\it Natural gas \ Henry \ Hub\ spot\ price\ from\ Reuter's\ News\ Service\ (http://www.reuters.com)}.$ 

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

		201	11			20	12			20	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	244.7	248.7	230.7	232.1	234.9	240.3	1094.3	997.4	937.9
Appalachia	87.3	85.7	81.8	82.1	80.6	79.2	75.4	76.9	71.3	72.4	68.9	70.2	336.9	312.1	282.8
Interior	41.5	41.1	45.0	42.6	44.3	39.0	33.2	34.2	32.2	32.9	32.6	32.7	170.3	150.7	130.4
Western	144.8	136.8	147.8	157.7	141.5	119.3	136.2	137.7	127.2	126.7	133.5	137.4	587.1	534.6	524.8
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	2.3	4.1	3.9	3.6	3.6	4.4	4.0	13.1	12.4	15.7
Exports	26.6	27.0	26.0	27.7	28.6	33.1	26.3	24.1	23.6	24.8	24.3	24.0	107.3	112.2	96.7
Metallurgical Coal	17.2	17.8	16.5	18.0	17.5	20.7	16.7	16.2	16.3	17.1	16.4	16.0	69.5	71.1	65.7
Steam Coal	9.5	9.1	9.5	9.6	11.1	12.4	9.6	8.0	7.3	7.7	7.9	8.1	37.6	41.1	31.0
Total Primary Supply	255.9	239.0	253.9	259.3	240.2	207.1	226.4	228.3	216.2	209.8	216.7	217.7	1008.1	902.0	860.4
Secondary Inventory Withdrawals	8.9	0.7	20.7	-31.2	-20.3	-11.0	11.4	-5.4	5.5	-11.3	11.5	-5.5	-0.8	-25.4	0.2
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	199.3	240.9	226.0	225.1	201.7	231.3	215.4	1019.7	889.0	873.6
Consumption (million short tons)															
Coke Plants	5.2	5.4	5.4	5.4	5.3	6.4	7.1	6.9	7.1	6.8	7.5	7.1	21.4	25.6	28.4
Electric Power Sector (b)	234.8	223.5	261.5	208.6	189.9	180.4	221.7	205.9	204.9	182.0	211.4	195.0	928.6	797.9	793.3
Retail and Other Industry	13.5	11.7	11.7	12.2	11.7	11.9	12.1	13.3	13.2	12.9	12.4	13.4	49.1	49.1	51.9
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	11.3	11.3	12.1	12.0	12.1	11.6	12.1	46.3	45.7	47.8
Total Consumption	253.6	240.6	278.7	226.3	206.9	198.2	240.9	226.0	225.1	201.7	231.3	215.4	999.1	872.1	873.6
Discrepancy (c)	14.5	2.0	-0.6	4.9	15.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	20.6	17.0	0.0
End-of-period Inventories (million sho	ort 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	214.1	202.7	208.1	202.6	213.9	202.4	207.9	182.8	208.1	207.9
Electric Power Sector	166.7	165.7	144.4	175.1	196.4	206.7	194.7	199.8	195.2	205.9	193.9	199.1	175.1	199.8	199.1
Retail and General Industry	3.9	4.2	4.3	4.5	3.8	4.1	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	2.4	2.8	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	0.283	0.278	0.294	0.303	0.287	0.280	0.262	0.278	0.291
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.34	2.42	2.46	2.37	2.41	2.42	2.39	2.35	2.38	2.33	2.32	2.27	2.40	2.39	2.33

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

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

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

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

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

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

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

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

Table 7a. U.S. Electricity Industry Overview

		201	1			201	12			201	13			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electricity Supply (billion kilowattho	urs per da	ay)													
Electricity Generation	11.07	10.94	12.65	10.33	10.56	10.89	12.28	10.65	11.02	10.84	12.32	10.70	11.25	11.10	11.22
Electric Power Sector (a)	10.66	10.54	12.22	9.92	10.14	10.50	11.85	10.25	10.62	10.45	11.90	10.31	10.84	10.69	10.82
Industrial Sector	0.39	0.38	0.40	0.39	0.40	0.37	0.40	0.38	0.38	0.37	0.40	0.37	0.39	0.39	0.38
Commercial 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
Net Imports	0.08	0.10	0.13	0.09	0.10	0.09	0.11	0.08	0.08	0.07	0.10	0.07	0.10	0.09	0.08
Total Supply	11.15	11.04	12.78	10.42	10.66	10.99	12.39	10.73	11.10	10.91	12.43	10.77	11.35	11.19	11.30
Losses and Unaccounted for (b)	0.59	0.95	0.86	0.74	0.63	0.92	0.75	0.74	0.58	0.88	0.77	0.73	0.79	0.76	0.74
Electricity Consumption (billion kilo	watthours	per day)													
Retail Sales	10.21	9.74	11.55	9.33	9.66	9.73	11.27	9.64	10.17	9.69	11.29	9.70	10.21	10.08	10.21
Residential Sector	4.12	3.49	4.69	3.30	3.67	3.39	4.43	3.50	4.03	3.41	4.44	3.54	3.90	3.75	3.85
Commercial Sector	3.45	3.56	4.05	3.39	3.36	3.60	3.99	3.46	3.49	3.58	4.02	3.49	3.61	3.60	3.65
Industrial Sector	2.61	2.67	2.79	2.62	2.61	2.71	2.82	2.66	2.62	2.68	2.81	2.65	2.67	2.70	2.69
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 (c)	0.35	0.35	0.37	0.35	0.36	0.34	0.37	0.35	0.35	0.34	0.37	0.34	0.36	0.36	0.35
Total Consumption	10.56	10.09	11.92	9.68	10.03	10.07	11.64	9.99	10.52	10.03	11.65	10.04	10.57	10.43	10.56
Prices															
Power Generation Fuel Costs (doll	ars per mi	illion Btu)													
Coal	2.34	2.42	2.46	2.37	2.41	2.42	2.39	2.35	2.38	2.33	2.32	2.27	2.40	2.39	2.33
Natural Gas	5.02	4.92	4.76	4.13	3.31	3.01	3.23	3.76	3.96	3.65	3.75	4.17	4.71	3.31	3.87
Residual Fuel Oil	15.88	18.29	20.10	20.05	21.27	19.77	17.81	17.29	17.11	16.86	16.74	16.82	18.49	18.90	16.87
Distillate Fuel Oil	20.79	23.37	22.74	22.86	23.80	23.16	21.96	22.47	22.21	22.56	22.61	23.26	22.40	22.81	22.64
End-Use Prices (cents per kilowati	hour)														
Residential Sector	11.19	11.95	12.18	11.82	11.57	12.15	12.46	11.86	11.35	12.27	12.55	12.02	11.79	12.03	12.06
Commercial Sector	9.97	10.38	10.76	10.07	9.93	10.21	10.66	10.07	9.96	10.37	10.83	10.20	10.32	10.24	10.36
Industrial Sector	6.63	6.86	7.36	6.68	6.51	6.69	7.13	6.56	6.50	6.76	7.22	6.67	6.89	6.73	6.80

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

Prices are not adjusted for inflation.

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

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

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

<sup>(</sup>a) Electric utilities and independent power producers.

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

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

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

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

U.S. Effergy informat	IOH AUHH	201	_	711-11-1111	Ellergy	<b>20</b> 1	- July ∠U Ia	12		201	12			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Residential Sector			0.0				0.0				0.0				
New England	144	115	143	116	133	112	137	126	137	114	139	127	130	127	129
Middle Atlantic	402	328	437	318	363	317	414	341	386	319	412	344	371	359	365
E. N. Central	575	455	608	457	516	436	558	486	563	437	554	491	524	499	511
W. N. Central	332	251	334	251	292	245	309	270	330	244	305	274	292	279	288
S. Atlantic	1,033	907	1,192	803	890	874	1,137	872	1,024	871	1,139	881	984	944	979
E. S. Central	372	296	408	261	312	284	398	295	360	290	390	296	334	322	334
W. S. Central	558	550	820	467	485	532	740	478	550	530	747	484	599	559	578
Mountain	248	228	334	229	237	239	332	235	251	239	339	238	260	261	267
Pacific contiguous	438	350	401	385	428	345	392	389	418	353	399	392	393	388	390
AK and HI	15	13	13	14	15	13	13	14	15	13	13	14	14	14	14
Total	4,118	3,493	4,689	3,302	3,670	3,395	4,431	3,504	4,034	3,409	4,437	3,539	3,901	3,751	3,855
Commercial Sector															
New England	123	119	133	115	118	117	132	118	123	119	133	118	123	121	123
Middle Atlantic	435	421	482	406	416	416	472	414	438	420	476	417	436	430	438
E. N. Central	496	484	551	473	476	488	539	484	508	481	543	488	501	497	505
W. N. Central	269	262	297	258	257	270	296	262	269	267	296	263	272	271	274
S. Atlantic	784	856	942	773	761	853	929	796	794	846	937	803	839	835	845
E. S. Central	217	227	265	206	207	229	264	214	219	227	264	215	229	229	231
W. S. Central	443	500	595	456	447	509	567	468	454	500	568	471	499	498	498
Mountain	238	249	287	243	233	261	289	247	240	263	292	249	254	258	261
Pacific contiguous	430	429	482	438	430	439	488	441	430	439	491	443	445	450	451
AK and HI	18	17	17	17	17	16	17	17	17	17	17	18	17	17	17
Total	3,453	3,564	4,052	3,386	3,364	3,598	3,993	3,461	3,492	3,580	4,019	3,486	3,614	3,605	3,645
Industrial Sector															
New England	75	76	81	73	73	74	79	73	71	73	78	71	76	75	73
Middle Atlantic	199	192	196	187	186	184	187	179	186	182	184	179	194	184	183
E. N. Central	540	541	567	536	546	552	565	540	546	544	568	541	546	551	550
W. N. Central	232	236	253	237	234	242	257	241	238	238	256	240	240	244	243
S. Atlantic	370	394	401	373	372	401	400	374	371	395	401	374	384	387	385
E. S. Central	342	320	336	336	345	348	351	350	347	342	346	352	334	349	347
W. S. Central	415	441	456	422	410	441	474	436	418	433	466	427	434	440	436
Mountain	204	219	239	215	206	228	246	219	208	225	249	221	219	225	226
Pacific contiguous	221	233	247	228	220	231	248	232	223	233	248	231	232	233	234
AK and HI	14	13	14	14	14	14	14	14	13	14	15	14	14	14	14
Total	2,612	2,666	2,791	2,620	2,607	2,714	2,821	2,657	2,622	2,678	2,810	2,650	2,673	2,700	2,690
Total All Sectors (a)															
New England	344	311	359	307	326	304	350	318	333	307	352	318	330	324	327
Middle Atlantic	1,048	952	1,126	921	977	927	1,086	946	1,022	934	1,086	953	1,012	984	999
E. N. Central	1,613	1,482	1,728	1,468	1,541	1,477	1,662	1,511	1,618	1,464	1,667	1,522	1,573	1,548	1,568
W. N. Central	834	749	884	746	783	<i>7</i> 57	863	772	836	749	857	776	803	794	805
S. Atlantic	2,191	2,161	2,539	1,952	2,027	2,131	2,470	2,045	2,193	2,115	2,480	2,061	2,211	2,169	2,213
E. S. Central	931	844	1,009	803	864	861	1,013	859	927	858	1,000	863	897	899	912
W. S. Central	1,417	1,491	1,871	1,346	1,342	1,482	1,782	1,382	1,422	1,463	1,781	1,382	1,532	1,498	1,513
Mountain	691	696	860	687	676	728	867	700	700	728	880	708	734	743	754
Pacific contiguous	1,090	1,015	1,132	1,054	1,081	1,017	1,130	1,065	1,074	1,027	1,140	1,069	1,073	1,073	1,078
AK and HI	46	43	44	45	45	43	44	46	46	44	<i>4</i> 5	46	45	45	45
Total	10,206	9,743	11,553	9,328	9,663	9,727	11,267	9,644	10,171	9,689	11,289	9,697	10,209	10,077	10,213

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

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

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

Regions refer to U.S. Census divisions.

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

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

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

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

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

U.S. Energy Informa	uon Aami			)	Energy		- July 20	12		004	2			Vac-	
	1st	201 2nd	1 3rd	4th	1st	201 2nd	3rd	4th	1st	201 2nd	3 3rd	4th	2011	Year 2012	2013
Residential Sector	151	ZIIU	Siu	401	151	ZIIU	Siu	4111	151	ZIIU	Siu	401	2011	2012	2013
New England	15.94	16.10	15.94	15.94	16.01	16.02	16.29	16.26	16.04	16.31	16.08	15.99	15.98	16.15	16.10
Middle Atlantic		15.98	16.48	15.76	14.94	15.58	16.46	15.60	15.22	16.52	17.37	15.96	15.86	15.68	16.29
E. N. Central	10.98	12.04	12.20	11.93	11.69	12.65	12.84	12.25	11.73	12.97	13.04	12.59	11.78	12.36	12.56
W. N. Central	9.01	10.52	11.16	9.80	9.61	10.98	11.52	9.88	9.44	11.08	11.64	10.23	10.13	10.51	10.56
S. Atlantic	10.73	11.43	11.62	11.23	11.13	11.66	11.93	11.38	10.73	11.52	11.82	11.38	11.26	11.55	11.37
E. S. Central		10.21	10.23	10.51	9.91	10.38	10.50	10.20	9.60	10.35	10.38	10.42	10.11	10.26	10.17
W. S. Central	10.01	10.76	10.79	10.53	10.31	10.69	10.75	10.40	10.03	10.72	10.71	10.29	10.55	10.57	10.46
Mountain	9.75	10.83	11.23	10.21	10.11	11.12	11.46	10.44	10.01	11.16	11.61	10.57	10.57	10.85	10.90
Pacific	12.18	12.53	13.70	12.56	12.30	12.90	14.08	12.41	12.30	12.95	14.25	12.82	12.74	12.91	13.08
U.S. Average		11.95	12.18	11.82	11.57	12.15	12.46	11.86	11.35	12.27	12.55	12.02	11.79	12.03	12.06
Commercial Sector															
New England	14.38	14.37	14.49	14.05	13.98	13.99	14.21	14.19	14.02	13.95	14.22	13.87	14.33	14.10	14.02
Middle Atlantic		13.76	14.52	13.00	12.57	13.21	14.08	12.80	12.87	13.62	14.54	13.08	13.66	13.20	13.56
E. N. Central	9.30	9.62	9.63	9.34	9.51	9.67	9.78	9.49	9.39	9.65	9.78	9.54	9.48	9.62	9.59
W. N. Central	7.60	8.47	8.96	7.77	7.89	8.53	8.98	7.83	7.67	8.53	9.10	7.93	8.23	8.33	8.33
S. Atlantic	9.40	9.51	9.62	9.53	9.48	9.51	9.65	9.52	9.49	9.58	9.81	9.74	9.52	9.54	9.66
E. S. Central		9.73	9.81	9.79	9.67	9.68	9.84	9.90	9.58	9.76	9.92	9.98	9.72	9.78	9.81
W. S. Central	8.55	8.65	8.90	8.43	8.29	8.25	8.41	8.38	8.49	8.62	8.70	8.36	8.65	8.34	8.55
Mountain	8.25	9.01	9.29	8.66	8.40	9.02	9.34	8.72	8.46	9.22	9.50	8.88	8.83	8.90	9.04
Pacific	10.89	12.29	13.71	11.46	10.83	11.99	13.61	11.41	10.78	12.10	13.64	11.54	12.14	12.01	12.07
U.S. Average	9.97	10.38	10.76	10.07	9.93	10.21	10.66	10.07	9.96	10.37	10.83	10.20	10.32	10.24	10.36
Industrial Sector															
New England	12.67	12.61	12.99	12.41	12.09	12.06	12.10	12.19	12.37	12.08	12.40	12.05	12.68	12.11	12.23
Middle Atlantic	8.46	8.21	8.34	7.67	7.53	7.82	8.20	7.67	7.82	7.95	8.15	7.63	8.17	7.81	7.89
E. N. Central	6.45	6.56	6.78	6.54	6.49	6.63	6.88	6.55	6.42	6.55	6.79	6.52	6.59	6.64	6.58
W. N. Central	5.77	6.13	6.64	5.78	5.92	6.22	6.64	5.88	5.88	6.26	6.86	5.98	6.09	6.18	6.26
S. Atlantic	6.52	6.76	7.11	6.57	6.41	6.63	7.00	6.59	6.47	6.64	7.08	6.72	6.75	6.66	6.73
E. S. Central	5.81	6.16	6.82	5.94	5.79	6.06	6.60	5.88	5.80	6.12	6.54	6.10	6.18	6.09	6.14
W. S. Central	5.78	6.03	6.63	5.77	5.47	5.39	5.83	5.31	5.35	5.67	6.14	5.57	6.07	5.51	5.70
Mountain	5.59	6.08	6.87	5.80	5.66	6.12	6.88	5.81	5.89	6.40	7.13	6.08	6.11	6.15	6.41
Pacific	7.34	7.73	8.70	7.82	7.30	7.59	8.28	7.45	7.02	7.46	8.33	7.53	7.92	7.67	7.61
U.S. Average	6.63	6.86	7.36	6.68	6.51	6.69	7.13	6.56	6.50	6.76	7.22	6.67	6.89	6.73	6.80
All Sectors (a)															
New England	14.63	14.55	14.70	14.34	14.35	14.24	14.52	14.52	14.47	14.36	14.53	14.28	14.56	14.41	14.41
Middle Atlantic	13.05	13.39	14.19	12.86	12.48	12.94	13.95	12.82	12.82	13.48	14.50	13.06	13.41	13.08	13.49
E. N. Central	8.94	9.24	9.60	9.12	9.16	9.41	9.82	9.32	9.20	9.49	9.84	9.45	9.24	9.44	9.50
W. N. Central	7.65	8.42	9.13	7.82	7.94	8.58	9.19	7.94	7.86	8.64	9.33	8.14	8.28	8.43	8.50
S. Atlantic		9.81	10.17	9.66	9.64	9.85	10.27	9.78	9.56	9.83	10.30	9.90	9.81	9.90	9.91
E. S. Central		8.54	8.99	8.42	8.20	8.45	8.98	8.37	8.17	8.51	8.93	8.55	8.55	8.52	8.55
W. S. Central	8.31	8.65	9.18	8.32	8.16	8.28	8.70	8.11	8.16	8.51	8.87	8.17	8.66	8.34	8.46
Mountain	8.00	8.68	9.37	8.28	8.17	8.80	9.46	8.39	8.25	8.99	9.64	8.57	8.63	8.75	8.91
Pacific	10.68	11.32	12.61	11.06	10.68	11.29	12.59	10.90	10.58	11.33	12.69	11.13	11.44	11.39	11.46
U.S. Average	9.61	9.98	10.52	9.74	9.63	9.90	10.49	9.76	9.62	10.04	10.61	9.90	9.98	9.97	10.06

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

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

Regions refer to U.S. Census divisions.

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.

<sup>(</sup>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. Electricity Generation by Fuel and Sector (Billion Kilowatthours per day)

U.S. Energy information Adm	iiiiotiatioi	201		Litergy	Outlook	20′2 20′		l		20	13	1		Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electric Power Sector (a)	101	Ziiu	0.4	7411	101	Zilu	0.0		101	2.1.0	0.0		2011	2012	
Coal	4.879	4.566	5.260	4.091	3.784	3.673	4.458	4.165	4.292	3.759	4.290	3.967	4.698	4.022	4.077
Natural Gas	2.062	2.377	3.360	2.386	2.781	3.246	3.913	2.761	2.676	2.944	4.028	2.924	2.550	3.176	3.146
Other Gases	0.008	0.009	0.010	0.009	0.012	0.008	0.009	0.009	0.014	0.009	0.010	0.010	0.009	0.010	0.010
Petroleum	0.082	0.071	0.078	0.057	0.053	0.055	0.068	0.061	0.071	0.069	0.076	0.066	0.072	0.059	0.070
Residual Fuel Oil	0.025	0.025	0.026	0.019	0.018	0.021	0.027	0.019	0.021	0.024	0.026	0.020	0.024	0.021	0.023
Distillate Fuel Oil	0.017	0.017	0.016	0.012	0.011	0.014	0.013	0.013	0.016	0.012	0.013	0.013	0.016	0.013	0.014
Petroleum Coke	0.037	0.027	0.035	0.023	0.022	0.017	0.026	0.027	0.030	0.030	0.034	0.030	0.030	0.023	0.031
Other Petroleum	0.003	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.002	0.003	0.003	0.002	0.002	0.003
Nuclear	2.258	1.943	2.288	2.170	2.175	2.018	2.184	2.071	2.233	2.161	2.298	2.132	2.165	2.112	2.206
Pumped Storage Hydroelectric	-0.011	-0.016	-0.021	-0.016	-0.009	-0.012	-0.020	-0.017	-0.016	-0.014	-0.020	-0.017	-0.016	-0.015	-0.017
Renewables:															
Conventional Hydroelectric	0.912	1.059	0.859	0.714	0.775	0.960	0.766	0.650	0.756	0.878	0.696	0.642	0.885	0.787	0.743
Geothermal	0.047	0.045	0.044	0.046	0.047	0.046	0.047	0.047	0.048	0.046	0.047	0.047	0.046	0.047	0.047
Solar	0.002	0.007	0.007	0.004	0.004	0.014	0.016	0.007	0.009	0.023	0.024	0.010	0.005	0.010	0.016
Wind	0.330	0.384	0.235	0.363	0.422	0.399	0.309	0.398	0.434	0.471	0.345	0.422	0.328	0.382	0.418
Wood and Wood Waste	0.030	0.026	0.032	0.027	0.029	0.024	0.032	0.031	0.034	0.030	0.036	0.036	0.029	0.029	0.034
Other Renewables	0.044	0.048	0.048	0.048	0.045	0.047	0.049	0.048	0.049	0.050	0.052	0.050	0.047	0.047	0.050
Other Fuels (b)	0.018	0.020	0.020	0.019	0.019	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.020	0.020
Subtotal Electric Power Sector	10.660	10.539	12.220	9.917	10.138	10.499	11.852	10.252	10.619	10.445	11.902	10.308	10.836	10.687	10.821
Commercial Sector (c)															
Coal	0.003	0.003	0.003	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.002
Natural Gas	0.012	0.012	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.012
Petroleum	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Renewables (d)	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Other Fuels (b)	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Subtotal Commercial Sector	0.023	0.022	0.024	0.023	0.022	0.022	0.023	0.022	0.022	0.022	0.023	0.022	0.023	0.022	0.022
Industrial Sector (c)															
Coal	0.051	0.048	0.057	0.046	0.048	0.043	0.049	0.045	0.046	0.045	0.048	0.045	0.050	0.046	0.046
Natural Gas	0.220	0.220	0.229	0.224	0.231	0.219	0.234	0.221	0.224	0.216	0.233	0.219	0.223	0.226	0.223
Other Gases	0.021	0.022	0.023	0.023	0.024	0.024	0.024	0.023	0.023	0.023	0.024	0.023	0.022	0.024	0.023
Petroleum	0.006	0.005	0.005	0.004	0.007	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.005	0.006	0.006
Renewables:															
Conventional Hydroelectric	0.005	0.006	0.004	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Wood and Wood Waste	0.072	0.071	0.074	0.073	0.071	0.066	0.071	0.067	0.068	0.066	0.071	0.066	0.072	0.069	0.068
Other Renewables (e)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Other Fuels (b)	0.009	0.009	0.009	0.009	0.008	0.008	0.009	0.008	0.008	0.008	0.009	0.008	0.009	0.008	0.008
Subtotal Industrial Sector	0.387	0.383	0.403	0.386	0.398	0.374	0.401	0.377	0.383	0.370	0.398	0.374	0.390	0.388	0.382
Total All Sectors	11.070	10.944	12.647	10.326	10.558	10.895	12.276	10.651	11.024	10.837	12.324	10.704	11.249	11.097	11.224

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

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

Values of 0.000 may indicate positive levels of generation that are less than 0.0005 billion kilowatthours per day.

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

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

<sup>(</sup>a) Electric utilities and independent power producers.

<sup>(</sup>b) "Other" includes non-biogenic municipal solid waste, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, tires and miscellaneous technologies.

<sup>(</sup>c) Commercial and industrial sectors include electricity output from combined heat and power (CHP) facilities and some electric-only plants.

<sup>(</sup>d) "Renewables" in commercial sector includes wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy and wind.

<sup>(</sup>e) "Other Renewables" in industrial sector includes black liquor, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy and wind.

Table 7e. U.S. Fuel Consumption for Electricity Generation by Sector

	·	201	1		·	201	2			201	3		•	Year	·
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Electric Power Sector (a)													<u> </u>		
Coal (mmst/d)	2.60	2.45	2.83	2.26	2.08	1.98	2.40	2.23	2.27	1.99	2.29	2.11	2.53	2.17	2.17
Natural Gas (bcf/d)	15.83	19.02	26.82	17.99	20.89	25.36	30.28	20.48	19.64	22.35	30.68	21.40	19.94	24.26	23.54
Petroleum (mmb/d) (b)	0.15	0.13	0.14	0.10	0.10	0.10	0.12	0.11	0.13	0.12	0.14	0.12	0.13	0.11	0.13
Residual Fuel Oil (mmb/d)	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.04	0.04	0.03	0.04	0.03	0.04
Distillate Fuel Oil (mmb/d)	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03
Petroleum Coke (mmst/d)	0.07	0.05	0.07	0.05	0.04	0.03	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.04	0.06
Other Petroleum (mmb/d)	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.01
Commercial Sector (c)															
Coal (mmst/d)	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
Natural Gas (bcf/d)	0.10	0.10	0.11	0.10	0.10	0.10	0.11	0.10	0.09	0.10	0.11	0.10	0.10	0.10	0.10
Petroleum (mmb/d) (b)	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
Industrial Sector (c)															
Coal (mmst/d)	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Natural Gas (bcf/d)	1.52	1.54	1.59	1.54	1.57	1.56	1.64	1.49	1.49	1.47	1.60	1.47	1.55	1.56	1.51
Petroleum (mmb/d) (b)	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.01
Total All Sectors															
Coal (mmst/d)	2.62	2.47	2.86	2.28	2.10	1.99	2.43	2.25	2.29	2.02	2.32	2.13	2.56	2.19	2.19
Natural Gas (bcf/d)	17.45	20.66	28.51	19.64	22.55	27.01	32.02	22.06	21.22	23.91	32.38	22.96	21.59	25.92	25.14
Petroleum (mmb/d) (b)	0.16	0.13	0.15	0.11	0.11	0.11	0.13	0.12	0.14	0.13	0.15	0.12	0.14	0.12	0.14
End-of-period Fuel Inventories He	eld by Elec	tric Powe	r Sector												
Coal (mmst)	166.7	165.7	144.4	175.1	196.4	206.7	194.7	199.8	195.2	205.9	193.9	199.1	175.1	199.8	199.1
Residual Fuel Oil (mmb)	15.4	16.4	15.7	15.5	15.3	16.7	15.9	15.3	14.5	15.7	14.9	14.3	15.5	15.3	14.3
Distillate Fuel Oil (mmb)	16.5	16.8	16.7	17.1	16.9	16.9	17.1	17.2	16.7	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	2.5	2.6	2.6	2.9	2.9	3.0	2.9	2.3	2.6	2.9

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

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

Physical Units: mmst/d = million short tons per day; mmb/d = million barrels per day; bcf/d = billion cubic feet per day; mmb = million barrels.

Values of 0.00 may indicate positive levels of fuel consumption that are less than 0.005 units per day.

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

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

<sup>(</sup>a) Electric utilities and independent power producers.

<sup>(</sup>b) Petroleum category may include petroleum coke, which is converted from short tons to barrels by multiplying by 5.

<sup>(</sup>c) Commercial and industrial sectors include electricity output from combined heat and power (CHP) facilities and some electric-only plants.

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

C.C. Energy information running		201	1	- 37	Callook	201	12			201	3			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Supply															
Hydroelectric Power (a)	0.806	0.946	0.775	0.645	0.693	0.857	0.692	0.589	0.669	0.784	0.630	0.581	3.171	2.831	2.665
Wood Biomass (b)	0.495	0.486	0.504	0.502	0.494	0.465	0.496	0.498	0.484	0.476	0.504	0.508	1.987	1.954	1.972
Waste Biomass (c)	0.116	0.118	0.121	0.123	0.117	0.118	0.125	0.121	0.120	0.122	0.129	0.123	0.477	0.481	0.494
Wind	0.290	0.341	0.211	0.326	0.375	0.355	0.277	0.357	0.381	0.418	0.309	0.379	1.168	1.364	1.488
Geothermal	0.057	0.056	0.056	0.057	0.057	0.057	0.058	0.058	0.058	0.057	0.058	0.058	0.226	0.230	0.231
Solar	0.037	0.041	0.042	0.039	0.046	0.054	0.057	0.049	0.058	0.071	0.073	0.060	0.158	0.206	0.263
Ethanol (d)	0.292	0.290	0.293	0.307	0.297	0.289	0.294	0.295	0.290	0.292	0.295	0.294	1.183	1.174	1.171
Biodiesel (d)	0.017	0.029	0.036	0.041	0.031	0.035	0.036	0.036	0.036	0.037	0.038	0.037	0.123	0.138	0.148
Total	2.110	2.308	2.038	2.039	2.110	2.237	2.035	2.003	2.096	2.257	2.036	2.041	8.495	8.386	8.431
Consumption															
Electric Power Sector															
Hydroelectric Power (a)	0.801	0.941	0.771	0.641	0.688	0.853	0.688	0.584	0.664	0.779	0.625	0.576	3.154	2.812	2.646
Wood Biomass (b)	0.046	0.040	0.047	0.042	0.045	0.036	0.049	0.049	0.051	0.047	0.057	0.056	0.175	0.179	0.210
Waste Biomass (c)	0.064	0.067	0.069	0.069	0.066	0.067	0.070	0.069	0.069	0.072	0.074	0.072	0.269	0.272	0.287
Wind	0.290	0.341	0.211	0.326	0.375	0.355	0.277	0.357	0.381	0.418	0.309	0.379	1.168	1.364	1.488
Geothermal	0.042	0.040	0.040	0.041	0.041	0.041	0.042	0.042	0.042	0.041	0.042	0.042	0.163	0.167	0.167
Solar	0.002	0.006	0.006	0.003	0.004	0.012	0.014	0.006	0.008	0.020	0.021	0.009	0.018	0.037	0.058
Subtotal	1.245	1.435	1.145	1.122	1.219	1.369	1.142	1.107	1.215	1.377	1.130	1.134	4.947	4.837	4.857
Industrial Sector															
Hydroelectric Power (a)	0.005	0.005	0.003	0.005	0.005	0.004	0.005	0.005	0.005	0.004	0.005	0.005	0.018	0.019	0.019
Wood Biomass (b)	0.325	0.322	0.331	0.334	0.325	0.305	0.321	0.326	0.313	0.309	0.324	0.330	1.311	1.277	1.276
Waste Biomass (c)	0.043	0.042	0.043	0.044	0.043	0.042	0.046	0.043	0.042	0.041	0.045	0.042	0.172	0.173	0.171
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	0.357	0.377	0.379	0.365	0.360	0.379	0.382	1.524	1.491	1.487
Commercial Sector															
Wood Biomass (b)	0.017	0.018	0.018	0.018	0.018	0.017	0.018	0.017	0.017	0.017	0.018	0.017	0.071	0.070	0.069
Waste Biomass (c)	0.009	0.008	0.009	0.010	0.009	0.009	0.009	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	0.130	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	0.040	0.040
Solar	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 (d)	0.263	0.277	0.276	0.275	0.262	0.282	0.272	0.278	0.264	0.276	0.276	0.275	1.091	1.093	1.092
Biodiesel (d)	0.013	0.026	0.035	0.038	0.023	0.034	0.035	0.036	0.035	0.037	0.038	0.037	0.113	0.128	0.147
Total Consumption	2.077	2.292	2.020	2.004	2.067	2.222	2.013	1.986	2.070	2.242	2.017	2.022	8.393	8.288	8.351

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

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

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

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

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

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

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

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

<sup>(</sup>d) Fuel ethanol and biodiesel supply represents domestic production only. 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 s

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

U.S. Energy Information Administration   Short-Term Energy Outlook - July 2012 2011 2012										201	3	Ī		Year	
	1st	201 2nd	3rd	4th	1st	201 2nd	2 3rd	4th	1st	201 2nd	3 3rd	4th	2011	2012	2013
Macroeconomic									•					<b>-</b>	
Real Gross Domestic Product															
(billion chained 2005 dollars - SAAR)	13,228	13,272	13,332	13,429	13,491	13,554	13,618	13,682	13,744	13,805	13,875	13,959	13,315	13,586	13,846
Real Disposable Personal Income												,			
(billion chained 2005 Dollars - SAAR)	10,183	10,170	10,189	10,193	10,204	10,255	10,325	10,368	10,401	10,451	10,495	10,560	10,184	10,288	10,477
Real Fixed Investment															
(billion chained 2005 dollars-SAAR)	1,699	1,737	1,790	1,818	1,840	1,867	1,899	1,926	1,953	1,984	2,020	2,062	1,761	1,883	2,005
Business Inventory Change															
(billion chained 2005 dollars-SAAR)	33.28	24.16	11.34	32.98	15.04	10.31	15.18	12.91	9.56	6.71	4.61	7.64	25.44	13.36	7.13
Housing Stock															
(millions)	123.5	123.5	123.5	123.5	123.6	123.6	123.6	123.6	123.7	123.7	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	133.4	133.8	134.2	134.6	135.1	135.5	131.4	133.2	134.8
Commercial Employment															
(millions)	88.7	89.2	89.5	90.0	90.5	90.8	91.2	91.6	92.0	92.3	92.7	93.0	89.4	91.0	92.5
Industrial Production Indices (Index, 2007=	:100)														
Total Industrial Production	92.6	92.9	94.2	95.3	96.6	97.3	97.6	98.0	98.5	99.0	99.6	100.3	93.7	97.4	99.4
Manufacturing	90.4	90.6	91.7	92.9	95.2	95.5	96.2	96.6	97.3	97.9	98.6	99.3	91.4	95.9	98.3
Food	99.5	100.3	100.4	101.2	102.3	102.2	102.3	102.6	102.9	103.2	103.7	104.2	100.3	102.4	103.5
Paper	87.5	86.0	85.0	85.3	85.7	86.5	86.8	86.8	86.8	87.0	87.6	88.3	86.0	86.4	87.4
Chemicals	87.2	86.2	86.6	86.8	87.6	87.8	88.3	88.4	88.5	88.9	89.5	90.1	86.7	88.0	89.3
Petroleum	94.7	96.6	100.8	102.0	102.2	101.4	101.8	101.8	102.0	102.3	102.5	102.6	98.5	101.8	102.4
Stone, Clay, Glass	69.1	71.3	72.3	71.1	72.4	72.9	73.1	73.5	74.5	76.4	78.7	81.2	71.0	73.0	77.7
Primary Metals	95.7	95.3	95.9	100.2	103.0	102.2	102.3	101.8	101.7	102.9	104.8	106.8	96.8	102.3	104.0
Resins and Synthetic Products	87.1	80.7	80.7	80.8	84.5	83.6	84.7	84.8	84.5	84.8	85.6	86.5	82.3	84.4	85.3
Agricultural Chemicals	93.6	91.4	92.8	94.6	98.4	98.4	98.7	98.6	98.5	98.9	99.6	100.1	93.1	98.5	99.3
Natural Gas-weighted (a)	89.9	88.7	89.8	90.8	92.6	92.6	93.1	93.1	93.1	93.8	94.7	95.6	89.8	92.8	94.3
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	2.30	2.31	2.31	2.32	2.34	2.35	2.25	2.29	2.33
Producer Price Index: All Commodities															
(index, 1982=1.00)	1.98	2.02	2.02	2.03	2.04	2.00	2.00	2.03	2.03	2.02	2.03	2.04	2.01	2.02	2.03
Producer Price Index: Petroleum															
(index, 1982=1.00)	2.74	3.22	3.07	2.94	3.08	3.05	2.83	2.77	2.73	2.79	2.76	2.74	2.99	2.93	2.76
GDP Implicit Price Deflator															
(index, 2005=100)	112.4	113.1	113.8	114.1	114.5	115.0	115.6	116.1	116.4	116.6	117.2	117.6	113.3	115.3	116.9
Miscellaneous															
Vehicle Miles Traveled (b)															
(million miles/day)	7,585	8,324	8,251	7,951	7,606	8,399	8,413	8,048	7,770	8,491	8,468	8,099	8,029	8,117	8,209
Air Travel Capacity															
(Available ton-miles/day, thousands)	519	549	554	527	515	553	552	528	524	553	556	533	537	537	542
Aircraft Utilization															
(Revenue ton-miles/day, thousands)	307	339	344	320	307	343	338	323	320	345	341	321	328	328	332
Airline Ticket Price Index															
(index, 1982-1984=100)	298.2	308.1	307.8	302.0	299.2	312.8	293.4	299.1	315.2	316.6	297.0	301.2	304.0	301.1	307.5
Raw Steel Production															
(million short tons per day)	0.257	0.261	0.266	0.264	0.274	0.278	0.283	0.278	0.294	0.303	0.287	0.280	0.262	0.278	0.291
Carbon Dioxide (CO <sub>2</sub> ) Emissions (million m	netric tons	s)													
Petroleum	571	575	578	575	555	565	582	576	556	571	581	577	2,299	2,279	2,285
Natural Gas	402	273	287	333	391	299	306	368	417	288	309	370	1,296	1,364	1,384
Natural Gas															
Coal	474	450	520	423	387	379	<i>4</i> 58	431	429	386	441	412	1,867	1,656	1,668

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

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

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.

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

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

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

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

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Informat	tion Admi			ort- I erm	Energy			J12							
		201				201				201				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
Real Gross State Produc	•	•													
New England	730	733	732	736	739	742	746	748	751	754	757	761	733	744	756
Middle Atlantic	2,011	2,022	2,027	2,037	2,048	2,058	2,069	2,079	2,088	2,095	2,103	2,113	2,024	2,064	2,100
E. N. Central	1,835	1,842	1,841	1,852	1,861	1,870	1,879	1,885	1,891	1,899	1,907	1,916	1,842	1,873	1,903
W. N. Central	852	854	854	865	869	874	878	881	885	888	893	897	856	875	891
S. Atlantic	2,422	2,435	2,438	2,458	2,465	2,477	2,489	2,500	2,512	2,525	2,537	2,554	2,438	2,483	2,532
E. S. Central	617	619	620	625	627	630	633	636	639	642	645	649	620	632	644
W. S. Central	1,516	1,516	1,552	1,560	1,571	1,576	1,581	1,592	1,602	1,613	1,626	1,640	1,536	1,580	1,620
Mountain	863	864	872	877	881	885	889	894	899	903	908	915	869	887	906
Pacific Manuf	2,319	2,323	2,330	2,356	2,365	2,377	2,389	2,400	2,410	2,419	2,432	2,447	2,332	2,383	2,427
Industrial Output, Manuf	• •			•	0F F	05.5	00.0	06.0	00.0	07.0	07.7	00.0	00.7	05.0	07.5
New England	92.2	91.9	92.9	93.8	95.5 93.5	95.5	96.0	96.2	96.8	97.2	97.7 96.0	98.2	92.7	95.8	97.5
Middle Atlantic	90.0 89.5	89.9 90.0	90.5 91.3	91.3 92.6	93.5 95.6	93.8 96.1	94.4 96.9	94.6 97.5	95.0 98.1	95.4 98.9		96.6	90.4 90.9	94.1 96.5	95.8
E. N. Central											99.7	100.5			99.3
W. N. Central	93.0	93.4 87.2	94.8	96.3 89.5	99.1	99.5	100.2 92.0	100.6 92.4	101.1	101.6	102.5	103.3	94.4	99.8	102.1 93.8
S. Atlantic	87.3 86.2	86.2	88.3 87.1	89.5 88.7	91.3 90.5	91.4 90.9	92.0 91.9	92.4 92.7	93.0 93.5	93.5 94.3	94.1 95.3	94.8	88.1 87.0	91.8 91.5	93.8 94.8
E. S. Central W. S. Central	93.6	94.1	95.4	97.0	99.3	90.9	100.6	92.7 101.2	93.5 101.8	94.3 102.5	95.3 103.2	96.3 104.0	95.0		94.6 102.9
	90.1	94.1	91.7	93.0	99.3 95.3	99.9 95.8	96.4				99.2	104.0	91.3	100.3	98.9
Mountain	90.1	90.2	93.2	93.0 94.1	95.3 95.9	95.8 96.1	96.4 96.6	96.9 97.0	97.7 97.7	98.4 98.2	99.2 98.9		91.3	96.1 96.4	98.9 98.6
Pacific  Real Personal Income (E			93.2	94.1	95.9	90.1	90.0	97.0	97.7	90.2	90.9	99.6	92.0	90.4	90.0
New England	649	653	649	650	651	655	660	664	667	672	674	678	650	657	673
Middle Atlantic	1,753	1,749	1,751	1,754	1,756	1,767	1,784	1,796	1,805	1,817	1,824	1,834	1,752	1,776	1.820
E. N. Central	1,604	1,601	1,605	1,604	1,608	1,707	1,784	1,790	1,642	1,653	1,658	1,665	1,604	1,770	1,655
W. N. Central	746	747	748	748	750	754	759	763	767	773	776	780	747	757	774
S. Atlantic	2,132	2,133	2,135	2,135	2,140	2,154	2,172	2,186	2,202	2,219	2,230	2,244	2,134	2,163	2,224
E. S. Central	564	565	566	2,133 566	566	569	573	577	580	585	2,230 587	590	2,134 565	2,103 571	586
W. S. Central	1,251	1,256	1,263	1,268	1,277	1,287	1,298	1,307	1,317	1,329	1,337	1,347	1,260	1,292	1,333
Mountain	740	742	743	745	746	751	758	763	769	775	780	785	743	755	777
Pacific	1,947	1,944	1,950	1,951	1,957	1,969	1,986	1,998	2,011	2,028	2,038	2,051	1,948	1,977	2,032
Households (Thousands	-	1,344	1,330	1,331	1,937	1,303	1,300	1,990	2,011	2,020	2,030	2,001	1,340	1,311	2,002
New England	5,657	5,661	5,665	5,668	5,676	5,685	5,693	5,702	5,712	5,722	5,731	5,741	5,668	5,702	5,741
Middle Atlantic	15,557	15,575	15,591	15,605	15,623	15,649	15,668	15,687	15,708	15,727	15,744	15,763	15,605	15,687	15,763
E. N. Central	18,024	18,028	18,030	18,040	18,062	18,097	18,125	18,154	18,186	18,217	18,243	18,271	18,040	18,154	18,271
W. N. Central	8,133	8,146	8,159	8,175	8,196	8,221	8,241	8,263	8,284	8,306	8,325	8.346	8,175	8,263	8.346
S. Atlantic	23,215	23,267	23,320	23,381	23,461	23,537	23,618	23,706	23,798	23,891	23,981	24,075	23,381	23,706	24,075
E. S. Central	7,215	7,226	7,238	7,250	7,270	7,282	7,299	7,317	7,338	7,358	7,377	7,397	7,250	7,317	7,397
W. S. Central	13,338	13,377	13,419	13,466	13,533	13.582	13,639	13,700	13,762	13.824	13,884	13.944	13,466	13,700	13,944
Mountain	8,290	8,307	8,326	8,352	8,386	8,425	8,461	8,499	8,540	8,580	8,617	8,657	8,352	8,499	8,657
Pacific	17,503	17,539	17,576	17,619	17,671	17,739	17,799	17,861	17,928	17,997	18,056	18,120	17,619	17,861	18,120
Total Non-farm Employn	-		,	,	,	,	,	,	,	,	,	,	,	,	,
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	18.5	18.7
E. N. Central	20.2	20.2	20.2	20.3	20.4	20.4	20.5	20.5	20.6	20.7	20.7	20.8	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	10.1	9.9	10.0	10.1
S. Atlantic	24.9	25.0	25.0	25.1	25.2	25.3	25.4	25.4	25.5	25.6	25.7	25.8	25.0	25.3	25.7
E. S. Central	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.6	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	9.2	9.4
Pacific	19.3	19.4	19.4	19.5	19.6	19.7	19.7	19.8	19.8	19.9	20.0	20.1	19.4	19.7	20.0
-															

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

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

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

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

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

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

Table 9c. U.S. Regional Weather Data

U.S. Energy Informat	ion Admir			rt- I erm	Energy (			2							
		201	1			201	2			201	3			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	769	181	2,252	3,155	912	171	2,251	6,135	5,861	6,489
Middle Atlantic	3,023	609	67	1,715	2,360	590	120	2,047	2,899	727	113	2,044	5,414	5,117	5,783
E. N. Central	3,306	755	182	1,943	2,468	625	139	2,280	3,138	764	152	2,298	6,186	5,512	6,352
W. N. Central	3,517	769	200	2,155	2,525	530	169	2,463	3,259	712	180	2,495	6,641	5,687	6,646
South Atlantic	1,501	179	18	900	1,120	187	23	1,054	1,507	236	23	1,039	2,598	2,384	2,805
E. S. Central	1,866	247	44	1,230	1,321	198	28	1,371	1,874	281	31	1,359	3,387	2,918	3,545
W. S. Central	1,273	101	9	839	888	54	8	890	1,262	105	9	878	2,222	1,840	2,254
Mountain	2,338	773	71	1,938	2,099	526	163	1,931	2,310	723	165	1,939	5,120	4,719	5,137
Pacific	1,481	675	52	1,171	1,416	477	106	1,144	1,419	556	107	1,117	3,379	3,143	3, 199
U.S. Average	2,285	517	77	1,441	1,782	421	93	1,622	2,204	527	95	1,617	4,320	3,918	4,443
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	142	356	0	0	73	372	1	608	498	446
Middle Atlantic	0	216	670	1	0	229	523	5	0	147	538	5	887	757	690
E. N. Central	0	227	668	2	17	294	541	9	1	206	509	8	897	861	724
W. N. Central	1	294	810	13	13	380	693	13	3	270	657	15	1,118	1,099	945
South Atlantic	99	789	1,262	182	154	684	1,096	209	113	580	1,104	223	2,332	2,143	2,020
E. S. Central	9	653	1,134	21	52	613	1,039	64	31	475	1,019	66	1,817	1,768	1,591
W. S. Central	113	1,091	1,767	201	146	1,009	1,460	178	81	794	1,431	190	3,172	2,793	2,496
Mountain	11	316	971	70	9	469	868	70	15	383	853	78	1,368	1,416	1,329
Pacific	2	68	606	41	0	128	513	41	7	151	510	55	717	682	723
U.S. Average	33	432	942	70	53	439	793	78	35	350	783	83	1,477	1,363	1,251
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

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

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

Regions refer to U.S. Census divisions.

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

Historical data: Latest data available from U.S. Department of Commerce, 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.

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