



Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- Brent crude oil spot prices averaged \$71 per barrel (b) in May, largely unchanged from April 2019 and almost \$6/b lower than the price in May of last year. However, Brent prices fell sharply in recent weeks, reaching \$62/b on June 5. EIA forecasts Brent spot prices will average \$67/b in 2019, \$3/b lower than the forecast in last month's STEO, and remain at \$67/b in 2020. EIA's lower 2019 Brent price path reflects rising uncertainty about global oil demand growth.
- EIA forecasts global oil inventories will decline by 0.3 million barrels per day (b/d) in 2019 and then increase by 0.3 million b/d in 2020. Although global liquid fuels demand outpaces supply in 2019 in EIA's forecast, global liquid fuels supply is forecast to rise by 2.0 million b/d in 2020, with 1.4 million of that growth coming from the United States. Global oil demand rises by 1.4 million b/d in 2020 in the forecast, up from expected growth of 1.2 million b/d in 2019.
- Annual U.S. crude oil production reached a [record 11.0 million b/d in 2018](#). EIA forecasts that U.S. production will increase by 1.4 million b/d in 2019 and by 0.9 million b/d in 2020, with 2020 production averaging 13.3 million b/d. Despite EIA's expectation for slowing growth, the 2019 forecast would be the second-largest annual growth on record (following 1.6 million b/d in 2018), and the 2020 forecast would be the fifth-largest growth on record.
- For the 2019 summer driving season, which runs from April through September, EIA forecasts that U.S. regular gasoline retail prices will average \$2.76 per gallon (gal), down from an average of \$2.85/gal last summer. The lower forecast gasoline prices primarily reflect EIA's expectation of lower crude oil prices this summer.

Natural gas

- The Henry Hub natural gas spot price averaged \$2.64/million British thermal units (MMBtu) in May, almost unchanged from April. EIA expects strong growth in U.S. natural gas production to put downward pressure on prices in 2019. EIA expects Henry Hub natural gas spot prices will average \$2.77/MMBtu in 2019, down 38 cents/MMBtu from 2018. EIA expects natural gas prices in 2020 will again average \$2.77/MMBtu.

- EIA forecasts that U.S. dry natural gas production will average 90.6 billion cubic feet per day (Bcf/d) in 2019, up 7.2 Bcf/d from 2018. EIA expects natural gas production will continue to grow in 2020, albeit at a slower rate, averaging 91.8 Bcf/d next year.
- U.S. natural gas exports averaged 9.9 Bcf/d in 2018, and EIA forecasts that they will rise by 2.5 Bcf/d in 2019 and by 2.9 Bcf/d in 2020. Rising exports reflect increases in liquefied natural gas exports as new facilities come online. Rising natural gas exports are also the result of an expected increase in pipeline exports to Mexico.
- EIA estimates that natural gas inventories ended March at 1.2 trillion cubic feet (Tcf), 15% lower than levels from a year earlier and 28% lower than the five-year (2014–18) average. EIA forecasts that natural gas storage injections will outpace the previous five-year average during the 2019 April-through-October injection season and that inventories will reach almost 3.8 Tcf at the end of October, which would be 17% higher than October 2018 levels and about equal to the five-year average.

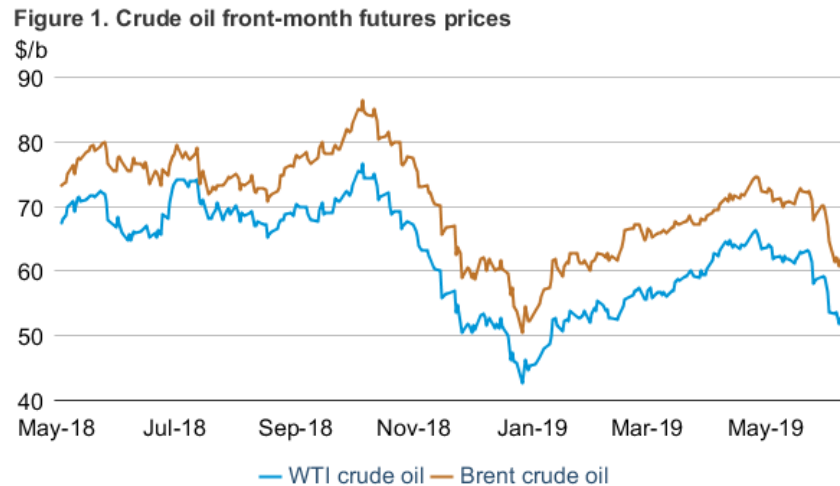
Electricity, coal, renewables, and emissions

- EIA expects the share of U.S. total utility-scale electricity generation from natural gas-fired power plants to rise from 35% in 2018 to 37% in 2019 and to 38% in 2020. EIA forecasts that the share of generation from coal will average 24% in 2019 and 23% in 2020, down from 27% in 2018. The forecast nuclear share of generation falls from 20% in 2019 to 19% in 2020, reflecting the retirement of some nuclear reactors. Hydropower averages a 7% share of total generation in the forecast for 2019 and 2020, similar to 2018. Wind, solar, and other nonhydropower renewables together provided 10% of U.S. generation in 2018. EIA expects they will provide 11% in 2019 and 13% in 2020.
- EIA forecasts that renewable fuels, including wind, solar, and hydropower, will collectively produce 18% of U.S. electricity in 2019 and almost 20% in 2020. EIA expects that annual generation from wind will surpass hydropower generation for the first time in 2019 to become the leading source of renewable electricity generation and maintain that position in 2020.
- EIA forecasts that U.S. coal consumption, which reached a 39-year low of 687 million short tons (MMst) in 2018, will fall to 602 MMst in 2019 and to 567 MMst in 2020. The falling consumption reflects lower demand for coal in the electric power sector.
- After rising by 2.7% in 2018, EIA forecasts that U.S. energy-related carbon dioxide (CO₂) emissions will decline by 2.0% in 2019 and by 0.9% in 2020. EIA expects U.S. CO₂ emissions will fall in 2019 and in 2020 because its forecast assumes that temperatures will return to near normal, and because the forecast share of electricity generated from natural gas and renewables increases while the forecast share generated from coal, which produces more CO₂ emissions, decreases. Energy-related CO₂ emissions are sensitive to weather, economic growth, energy prices, and fuel mix.

Petroleum and natural gas markets review

Crude oil

Prices: The front-month futures price for Brent crude oil settled at \$61.67 per barrel (b) on June 6, 2019, a decrease of \$10.51/b from May 1. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, decreased by \$11.01/b during the same period, settling at \$52.59/b on June 6 (**Figure 1**).



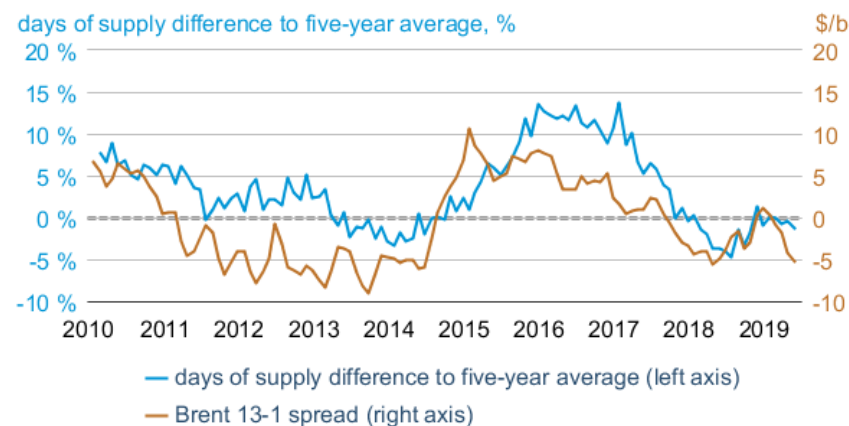
 CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

Crude oil price volatility increased in May after declining for four consecutive months and stayed at elevated levels into the first week of June. Demand-side concerns became the most salient issue during the past month and contributed to volatility and price declines for risk assets such as commodities and equities. Both China and the United States issued tariffs on each other, with the United States also announcing potential tariffs on Mexico near the end of May. In addition, expected industrial activity, as measured by the manufacturing Purchasing Managers' Index (PMI), declined across several countries in May, and the U.S. manufacturing PMI fell to its lowest level since 2009. These developments are contributing to concerns that economic growth could be lower than market participants' expectations, which would cause oil demand growth to also be lower than expected.

Declining crude oil production in Venezuela and Iran, as well as Saudi Arabian over-compliance with December 2018 Vienna agreement production cuts, pushed crude oil production among members of the Organization of the Petroleum Exporting Countries (OPEC) to 29.9 million barrels per day (b/d) in May, the lowest for any month since July 2014. In addition, production shut-ins in Russia related to contamination of the Druzhba crude oil pipeline have emerged, and the market effect of these reductions has been compounded by planned maintenance on crude oil production platforms in the North Sea, where crude oil grades are in many cases substitutable for the disrupted Russian barrels.

A weakening outlook for demand at the same time near-term oil supplies are disrupted has lowered spot prices of crude oil while increasing futures price backwardation (when near-term prices are higher than longer-dated ones). Despite the recent demand uncertainties, EIA still expects a need for inventory withdrawals to meet demand given its forecast of near-term global crude oil production. EIA forecasts that global oil inventory withdrawals in the second and third quarters of 2019 will average 0.2 million b/d and 0.6 million b/d, respectively. EIA estimates that, as of the end of May, crude oil and other petroleum inventories in the Organization for Economic Cooperation and Development (OECD) were enough to cover 61 days of demand, only 1% lower than the five-year (2014–18) average (**Figure 2**). EIA expects that inventory withdrawals in the coming months will reduce the days of coverage further.

Figure 2. Days of supply difference to five-year average and Brent 13-1 spread



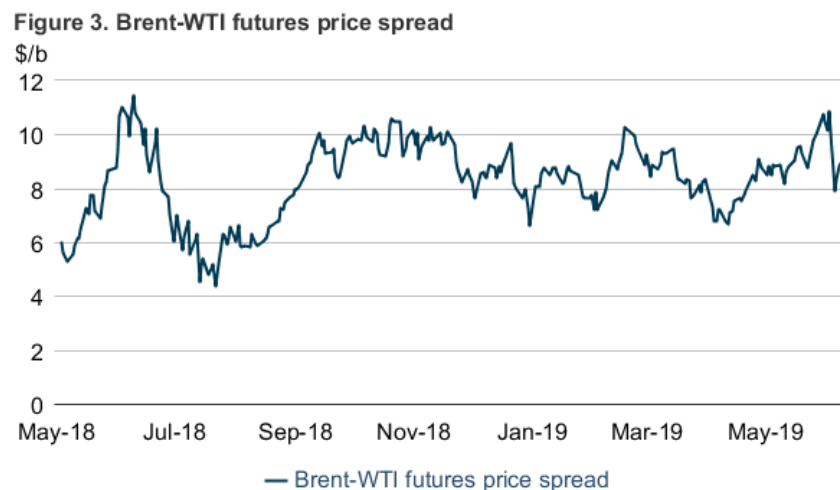
eia U.S. Energy Information Administration, Short-Term Energy Outlook, Bloomberg L.P.

EIA is reducing its 2019 Brent crude oil price forecast to \$67/b, which is \$3/b lower than in the May STEO. The lower 2019 price forecast largely reflects recent global crude oil price declines as well as the uncertainty about global oil demand growth. EIA expects global oil demand to grow by 1.2 million b/d in 2019, 0.2 million b/d lower than the May forecast. EIA's forecast for 2019 non-OECD oil-weighted GDP growth, based on forecasts from Oxford Economics, is 2.7%, which would be the lowest growth since 2009 and the second-lowest growth on record in a data set going back to 1994. However, EIA expects that crude oil prices will increase from current levels by the end of the year. EIA forecasts that Brent prices will average \$68/b in the fourth quarter of 2019 as a result of inventory withdrawals during the summer, lower OPEC crude oil production than previously forecasted, and the expected increase in demand for light sweet crude oil ahead of the [implementation of low sulfur bunker fuel regulations](#) in January 2020. EIA expects that prices will remain near that level in 2020 based on EIA's forecast of relatively balanced global oil markets next year.

Crude oil price spreads: Notwithstanding the decline in overall price levels in May, several factors specific to Brent and WTI are widening the Brent–WTI futures price spread. The Brent–WTI futures price spread settled at \$8.94/b on June 6, an increase of 45 cents/b since May 1

(Figure 3). In late April, flows on parts of the Druzhba pipeline, which supplies Russian Urals crude oil to Europe, were suspended because of contamination of the crude oil. This disruption limited availability of Urals for several refiners in Europe that are regular purchasers of the crude oil grade. By early June, some Druzhba pipeline flows had been restored, but other refineries were still waiting for the contaminated crude oil to be removed from the pipeline so that flows of uncontaminated crude oil could resume. The contaminated crude oil will have to be stored for several months and gradually blended with clean crude oil to dilute the contaminants so the oil can be refined. Certain North Sea crude oil streams can substitute for Urals, which likely contributed to some relative upward price pressure for Brent in May. In addition, planned maintenance at some North Sea fields is expected to reduce available deliveries for June, which may have also put upward price pressure on Brent prices relative to other crude oils.

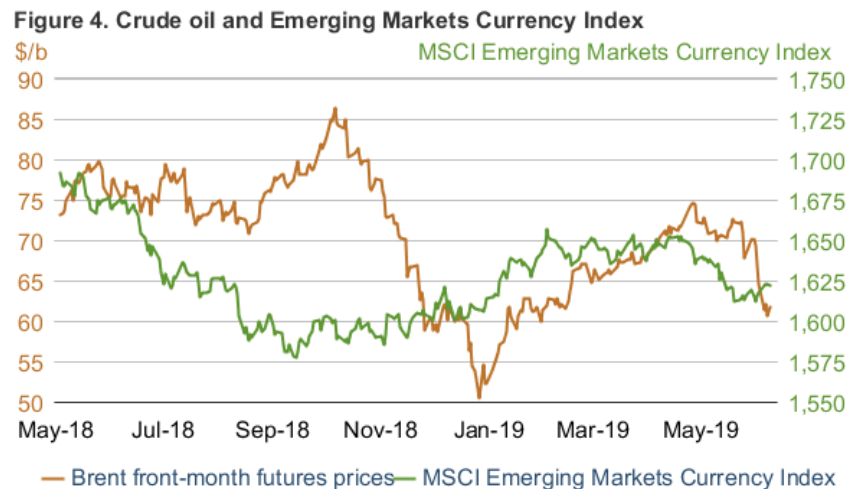
In contrast, Cushing WTI prices declined more than Brent prices in May because of logistical problems in the U.S. Midwest. Floods in the Midwest contributed to the temporary closure of several pipelines out of Cushing that provide feedstock to certain refiners. This disruption likely contributed to crude oil stocks in Cushing building by 4.8 million barrels from the [first week in May to the last week in May](#), a month in which Cushing stocks [typically draw by 2.1 million barrels](#), based on the five-year average stock change. Outside of the logistical issues in Cushing, U.S. commercial crude oil inventories increased in May. Total U.S. crude oil inventories increased by 15.7 million barrels in May, according to STEO estimates for the month, compared with a five-year average draw of 2.1 million barrels. If confirmed in monthly data, this year's stock build would be the largest for the month of May since 1991.



eia CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

Emerging market currencies: Some of the demand-side concerns affecting crude oil markets could also be reducing the value of emerging market currencies compared with the U.S. dollar. The Morgan Stanley Capital International (MSCI) Emerging Market Currency Index tracks a basket of emerging market currencies that declined 1% from May 1 through June 6 **(Figure 4)**. A lower value of the index indicates emerging market currencies are depreciating against the U.S.

dollar. The recent decline in the MSCI Emerging Market Currency index could indicate a reduction in economic activity in countries such as China or South Korea, countries with [relatively high weightings](#) in the index. The Chinese manufacturing [PMI](#) for May declined to 49.4. Any reading lower than 50 indicates a contraction in manufacturing activity. In addition, total [South Korean exports of all goods](#) declined 9.4% from May 2018 to May 2019, the sixth consecutive month of year-over-year declines.



eia Bloomberg L.P.

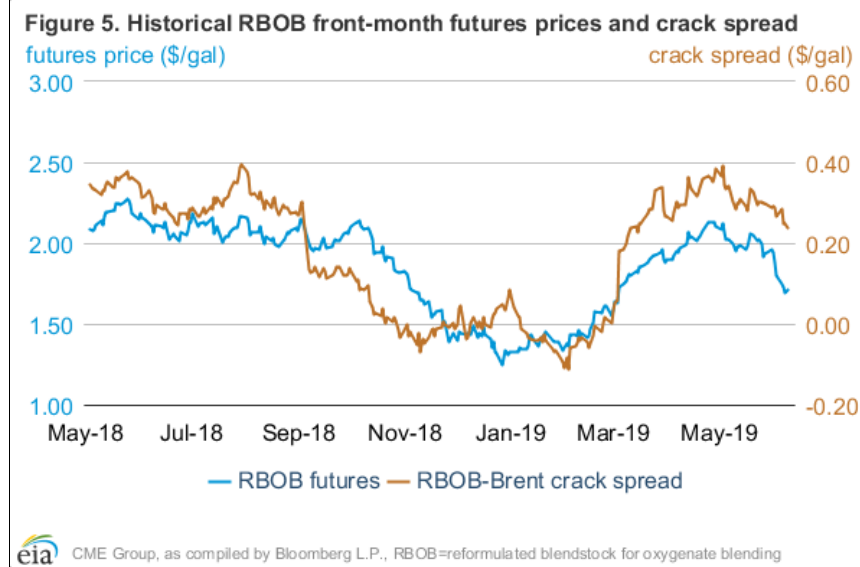
Petroleum products

Gasoline prices: The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) settled at \$1.71 per gallon (gal) on June 6, down 36 cents/gal since May 1 (**Figure 5**). The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) declined by 11 cents/gal to settle at 24 cents/gal during the same period.

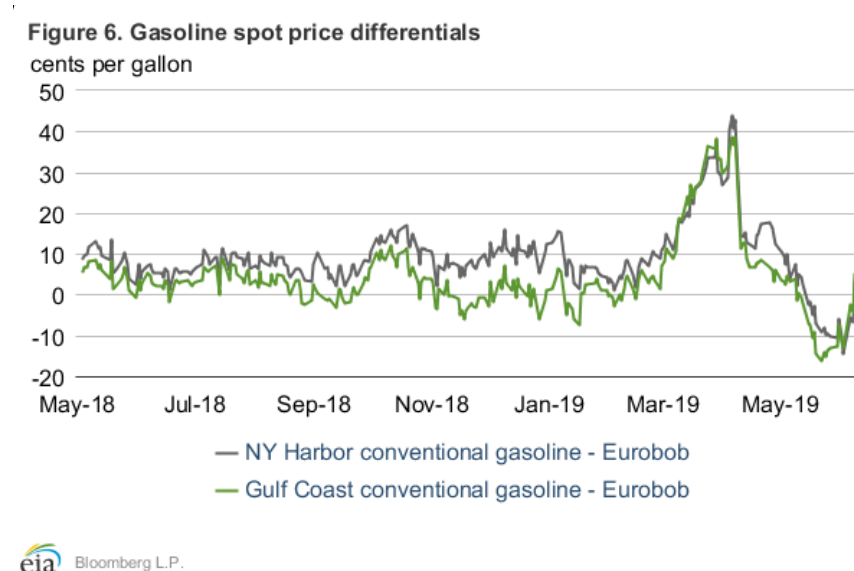
After increasing in April, the gasoline crack spread again dropped lower than the five-year (2014–18) range in May, averaging 4 cents below the previous five-year low of 35 cents for that month in 2018. Factors contributing to the smaller crack spread could include gasoline stock builds and gasoline consumption that were lower than year-ago levels. EIA estimates that U.S. gasoline consumption averaged 9.39 million barrels per day (b/d) in May, a decrease of 0.16 million b/d from the same period last year. Gasoline stocks increased during the month, ending close to the five-year average after ending April 6% lower than year-ago levels.

Flooding in the Midwest reduced [refinery operations](#) in Oklahoma and [limited crude oil](#) and product deliveries to the region’s refineries, preventing crude and product movement from the Gulf Coast to the Midwest and contributing to regional disparities in U.S. gasoline stock levels. In addition, [refinery issues on the West Coast](#) normalized mid-month, contributing to a stock build in that area. EIA estimates gasoline stocks ended May 4% higher than the five-year average on

the Gulf Coast and 6% higher than the five-year average on the West Coast, while gasoline stocks in the Midwest were 7% lower than the five-year average.

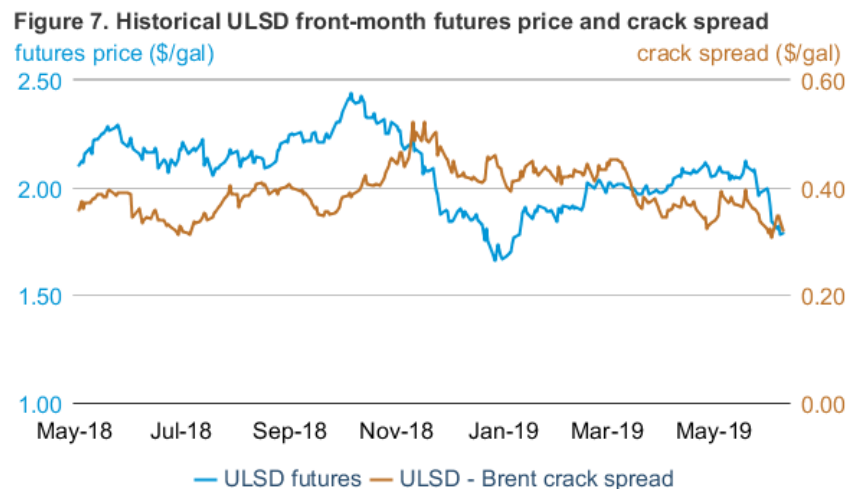


Gasoline spot price differentials: In contrast to the United States, gasoline prices increased in Northwest Europe in May (**Figure 6**). Refinery shutdowns in the region, combined with the contamination of crude oil import pipelines from Russia, contributed to reduced refinery runs and gasoline production in Europe. Northwest Europe’s gasoline–Brent spot crack spread rose higher than the five-year low for the first time in 6 months and higher than the five-year average for the first time in 17 months. On May 20, these factors contributed to the lowest Gulf Coast gasoline spot price relative to Northwest Europe since November 2015. On May 31, they contributed to the lowest New York Harbor gasoline spot price relative to Northwest Europe since August 2011.



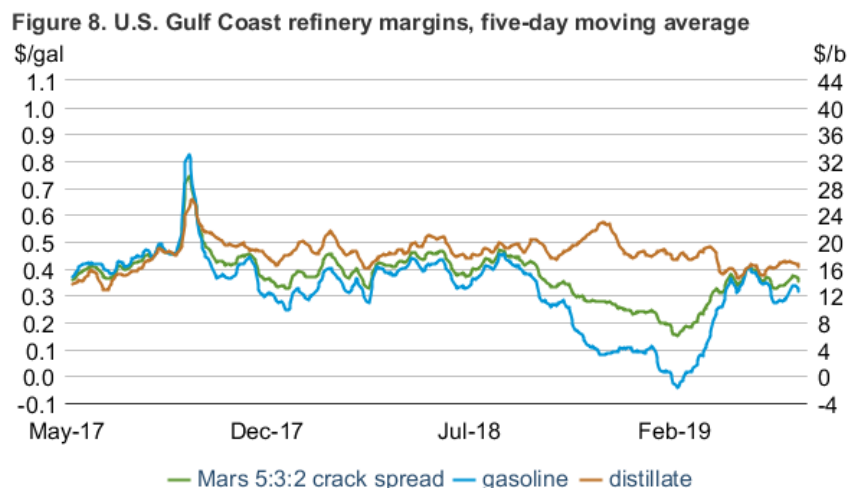
Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) front-month futures price decreased 31 cents/gal from May 1 to settle at \$1.79/gal on June 6. The ULSD–Brent crack spread (the difference between the price of ULSD and the price of Brent crude oil) declined 6 cents/gal to settle at 32 cents/gal during the same period (**Figure 7**).

EIA estimates that U.S. distillate consumption in May was 3.9 million b/d, 380,000 b/d lower than in May 2018 and 40,000 b/d lower than the five-year average. However, some of the available transportation data are mixed. The [truck tonnage data from the American Trucking Association](#) for April (most recent available) show a 7.7% year-over-year increase, whereas the [April 2019 Cass Freight Index report](#)—reflecting the volume of freight shipments via all modes of domestic freight transportation, including rail, truck, and air—shows a 3.2% contraction for the month. Despite these and other economic indicators reflecting a potential slowdown in growth, EIA estimates distillate consumption will return to year-over-year growth through the third quarter of 2019. EIA’s forecast is based on the expectation of a 2.7% growth in U.S. GDP in 2019, indicating future growth in overall diesel demand.



CME Group, as compiled by Bloomberg L.P., ULSD=ultra-low sulfur diesel

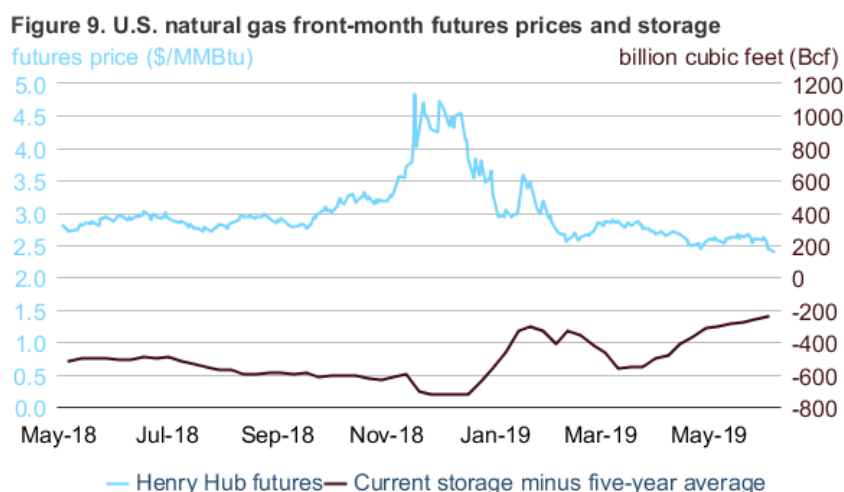
U.S. Gulf Coast refinery margins: The recent [increase](#) in medium and heavy crude oil prices that peaked in November 2018 reversed somewhat in March, April, and the first half of May 2019, before increasing again in late May. Reductions in crude oil production from Venezuela are likely increasing the price of medium and heavy crude oils compared with light crude oils. The 5:3:2 crack spread—refining three barrels of gasoline and two barrels of distillate from five barrels of Mars crude oil, which exemplifies a complex U.S. Gulf Coast refinery margin—averaged \$13.94 per barrel (b) in May, after reaching a 2019 high of \$16.95/b (40 cents/gal) on April 10 (**Figure 8**). Comparatively stable distillate crack spreads have supported total refinery margins. Although [U.S. Gulf Coast gasoline crack spreads](#) have remained positive since February, weaker crack spreads in May put downward pressure on margins from the April highs.



eia Bloomberg L.P.

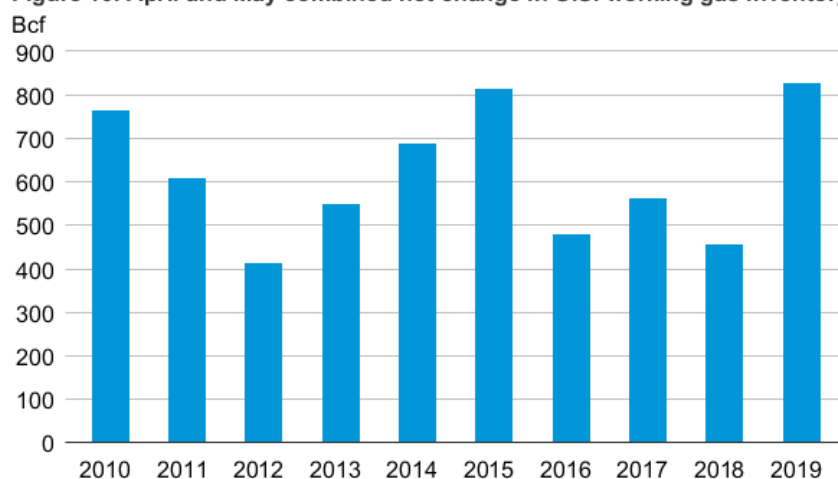
Natural Gas

Prices: The front-month natural gas futures contract for delivery at the Henry Hub settled at \$2.32/million British thermal units (MMBtu) on June 6, a decrease of 30 cents/MMBtu from May 1 (**Figure 9**). EIA estimates that U.S. natural gas production reached another record high in May. This persistent production growth contributed to injections of more than 100 billion cubic feet (Bcf) for five of the past six weeks, bringing U.S. working gas in underground storage levels closer to the five-year (2014–18) average, 9% higher than year-ago levels. Combined net injections into storage during April and May, in 2019, are estimated to be the largest on record for that two-month period at 831 Bcf (**Figure 10**), which helped to reduce futures prices even though inventories remain lower than the five-year average.



eia U.S. Energy Information Administration, CME Group, as compiled by Bloomberg L.P.

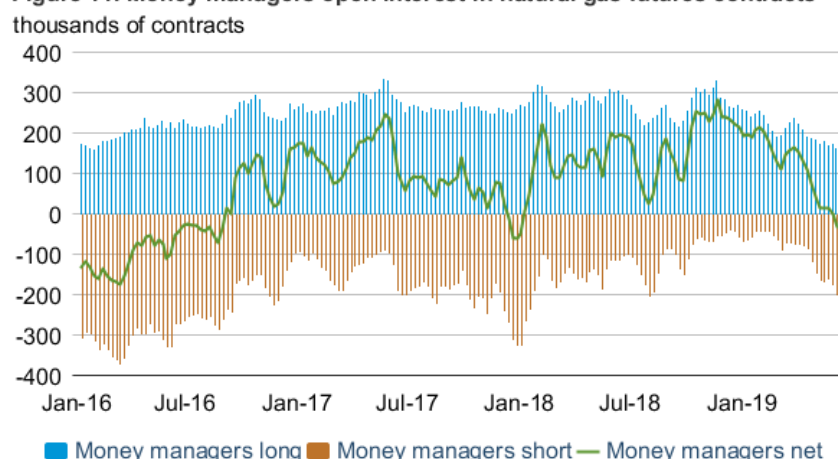
Figure 10. April and May combined net change in U.S. working gas inventory



eia U.S. Energy Information Administration, Short-Term Energy Outlook

Money manager positions: The number of futures short positions money managers reported holding for NYMEX natural gas contracts rose above long positions on May 21, 2019, for the first time since December 26, 2017 (**Figure 11**). The money manager category of the [Commitments of Traders](#) report, published weekly by the Commodity Futures Trading Commission, include fund managers that conduct organized futures trading on behalf of clients, and they are not involved in physical oil trading as their business activity. A short position indicates expectations of lower prices while a long position indicates the opposite. On November 13, 2018, money managers' net long positions reached a record high. Natural gas prices increased sharply in mid-November after colder-than-normal weather reduced natural gas inventories to about 700 Bcf lower than the five-year average. In April and May 2019, however, ongoing increases in natural gas production contributed to record injections into natural gas storage, which, combined with forecasts of below-normal temperatures for June, have lowered price expectations. The natural gas front-month futures price on June 6 of \$2.32/MMBtu was the lowest since May 2016.

Figure 11. Money managers open interest in natural gas futures contracts



eia Commodity Futures Trading Commission, Bloomberg, L.P.

Notable forecast changes

- EIA forecasts Brent crude oil prices will average \$67 per barrel (b) in 2019, down about \$3/b from last month's STEO forecast. The lower 2019 price forecast largely reflects recent price declines in global crude oil prices, which lowered the starting point for EIA's forecast, and uncertainty about global oil demand growth. Forecast global liquid fuels supply and consumption were both lowered by about 0.2-0.3 million barrels per day (b/d) for 2019 and for 2020. The lower global supply growth forecast is mostly the result of lower crude oil production growth in the United States because of lower expected oil prices and an expectation of increasing crude oil production declines in Venezuela. The reduction in global demand growth reflects both a revision to historical data that carries through to the forecast and lower oil consumption growth in 2019 because of reduction in forecast 2019 oil-weighted GDP growth among countries not part of the Organization for Economic Cooperation and Development (OECD).
- For more information, see the [detailed table of STEO forecast changes](#)

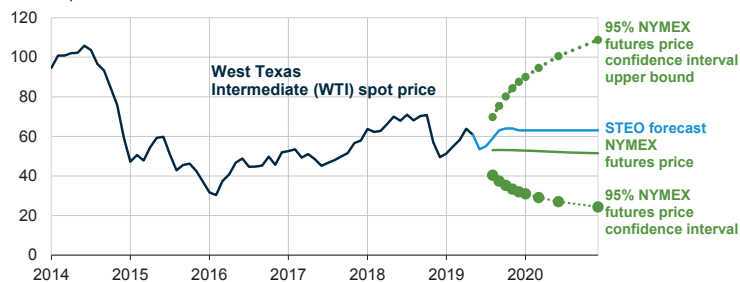
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Short-Term Energy Outlook

Chart Gallery for June 2019

West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals
dollars per barrel

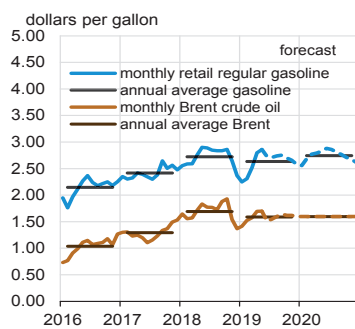


Note: Confidence interval derived from options market information for the five trading days ending Jun 6, 2019. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: Short-Term Energy Outlook, June 2019, and CME Group

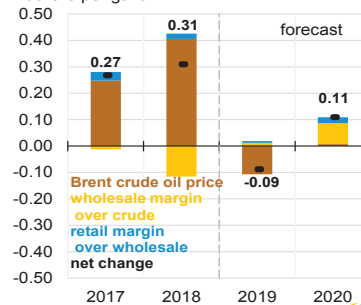


U.S. gasoline and crude oil prices

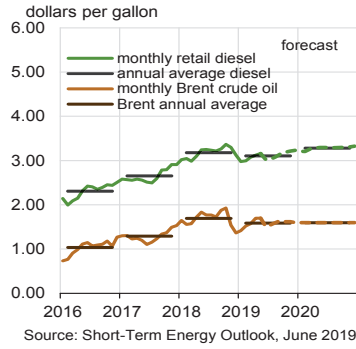


Source: Short-Term Energy Outlook, June 2019

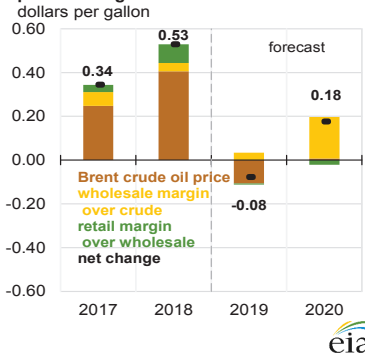
Components of annual gasoline price changes
dollars per gallon



U.S. diesel and crude oil prices

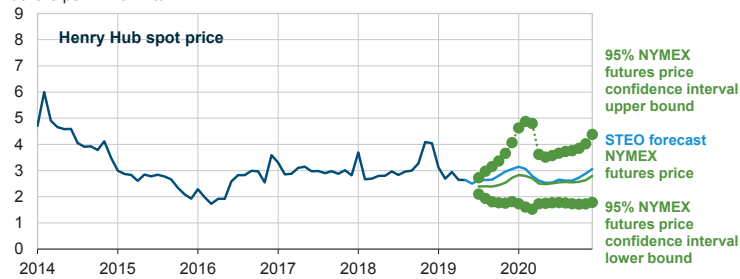


Components of annual diesel prices changes



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Henry Hub natural gas price and NYMEX confidence intervals

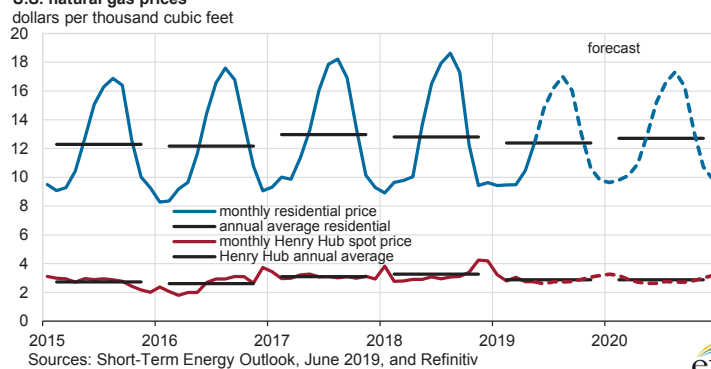


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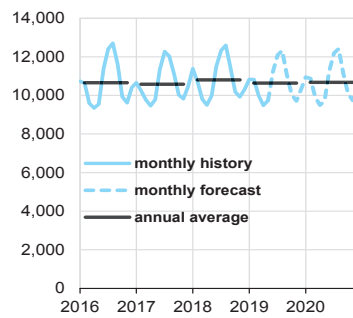
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U.S. natural gas prices



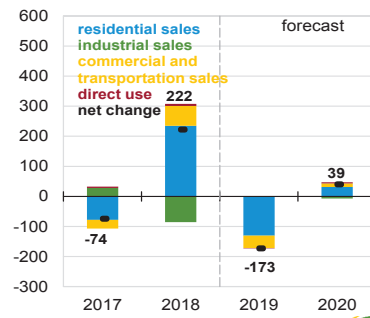
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U.S. electricity consumption
million kilowatthours per day



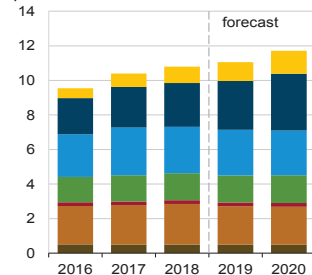
Source: Short-Term Energy Outlook, June 2019

Components of annual change
million kilowatthours per day



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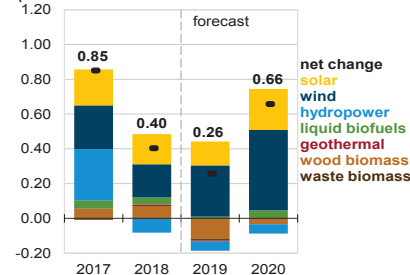
U.S. renewable energy supply
quadrillion British thermal units



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

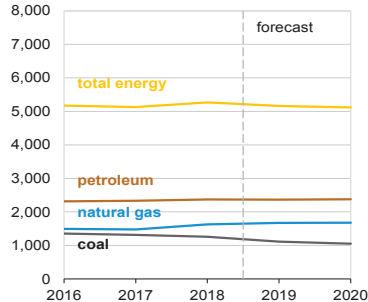
Source: Short-Term Energy Outlook, June 2019

Components of annual change
quadrillion British thermal units



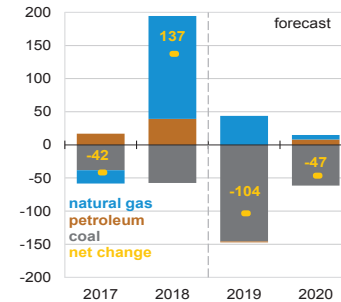
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U.S. annual carbon emissions by source
million metric tons



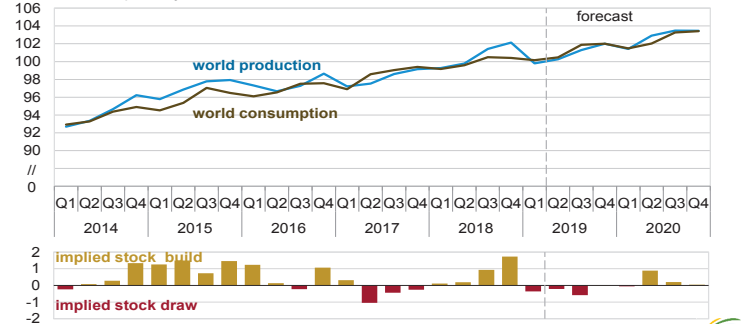
Source: Short-Term Energy Outlook, June 2019

Components of annual change
million metric tons



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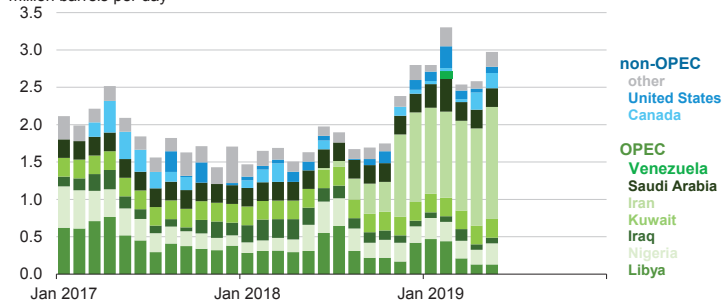
World liquid fuels production and consumption balance
million barrels per day



Source: Short-Term Energy Outlook, June 2019



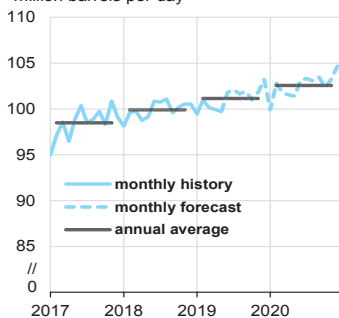
Estimated unplanned liquid fuels production outages
million barrels per day



Source: Short-Term Energy Outlook, June 2019

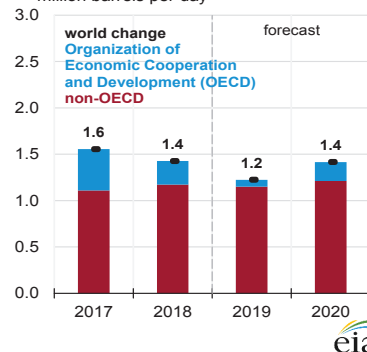


World liquid fuels consumption
million barrels per day



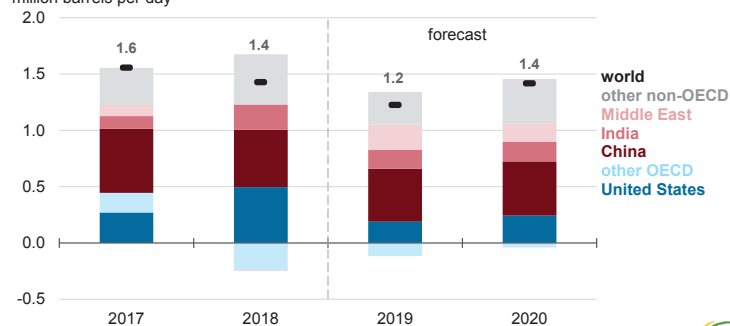
Source: Short-Term Energy Outlook, June 2019

Components of annual change
million barrels per day



Annual change in world liquid fuels consumption

million barrels per day

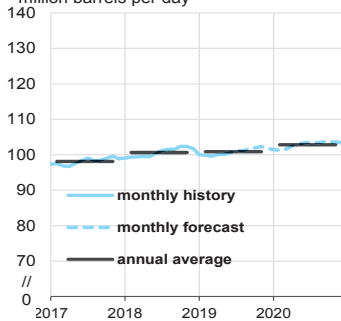


Source: Short-Term Energy Outlook, June 2019



World crude oil and liquid fuels production

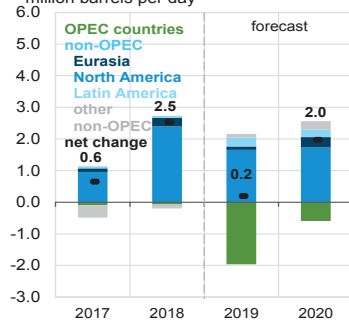
million barrels per day



Source: Short-Term Energy Outlook, June 2019

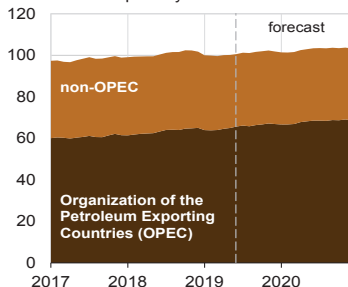
Components of annual change

million barrels per day



World liquid fuels production

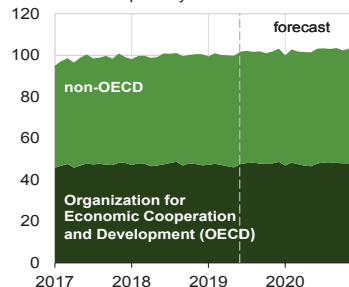
million barrels per day



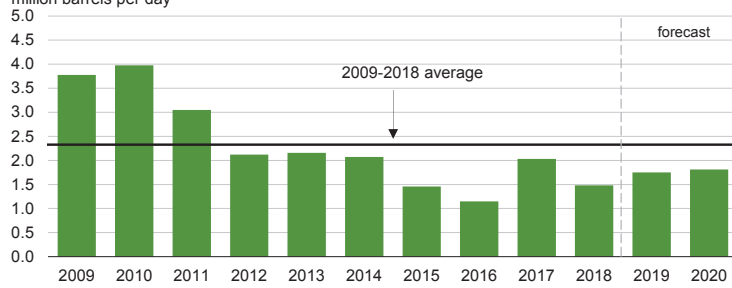
Source: Short-Term Energy Outlook, June 2019

World liquid fuels consumption

million barrels per day



Organization of the Petroleum Exporting Countries (OPEC)
surplus crude oil production capacity

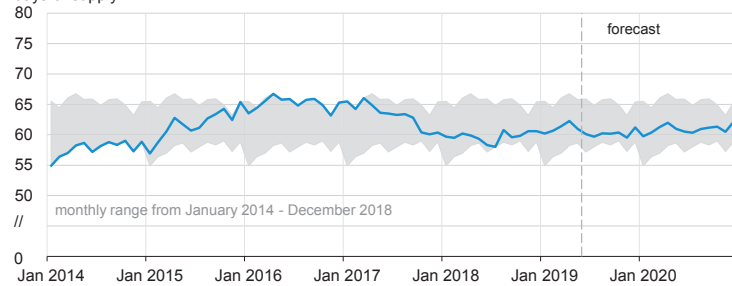


Note: Black line represents 2009-2018 average (2.3 million barrels per day).

Source: Short-Term Energy Outlook, June 2019



Organization for Economic Cooperation and Development (OECD)
commercial inventories of crude oil and other liquids



Source: Short-Term Energy Outlook, June 2019

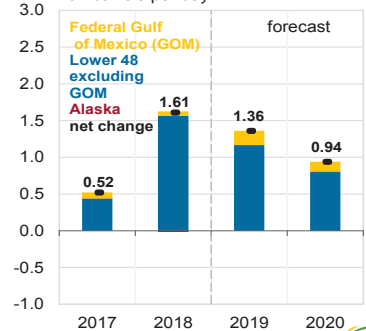


U.S. crude oil production
million barrels per day

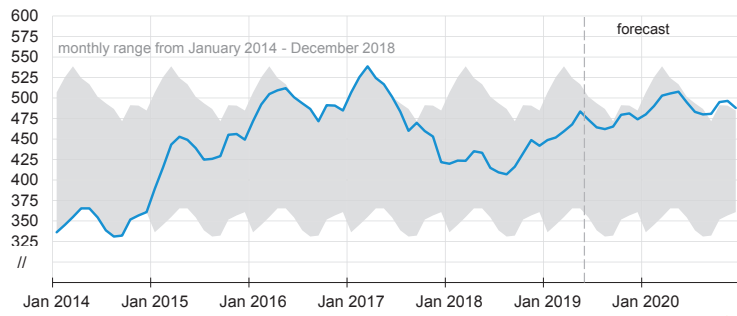


Source: Short-Term Energy Outlook, June 2019

Components of annual change
million barrels per day



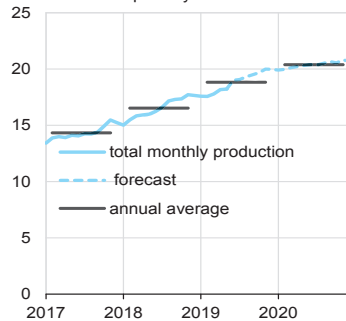
U.S. commercial crude oil inventories



Source: Short-Term Energy Outlook, June 2019

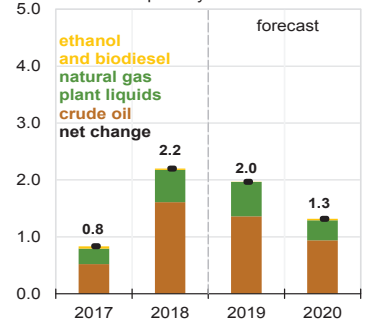


U.S. crude oil and liquid fuels production

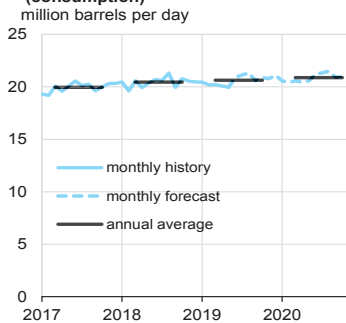


Source: Short-Term Energy Outlook, June 2019

Components of annual change

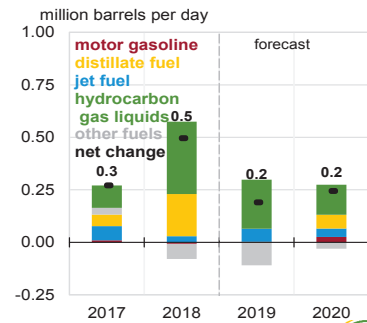


U.S. liquid fuels product supplied (consumption)

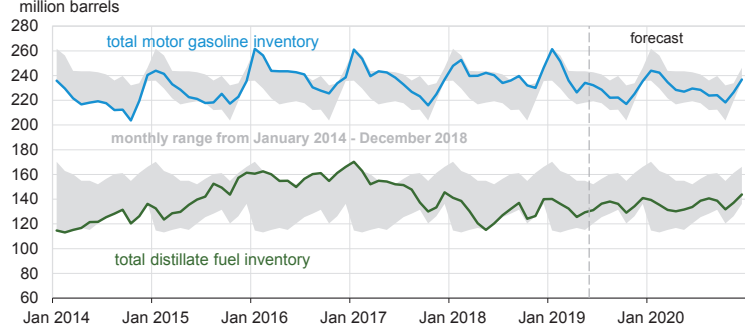


Source: Short-Term Energy Outlook, June 2019

Components of annual change



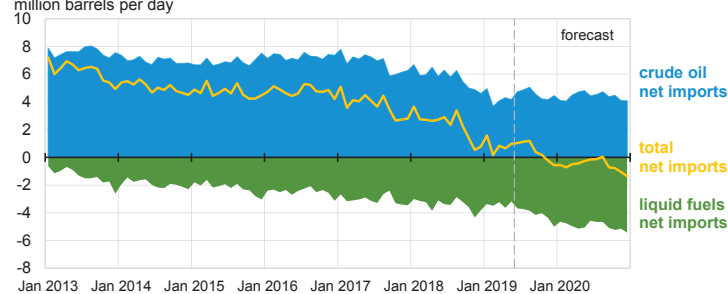
U.S. gasoline and distillate inventories



Source: Short-Term Energy Outlook, June 2019



U.S. net imports of crude oil and liquid fuels

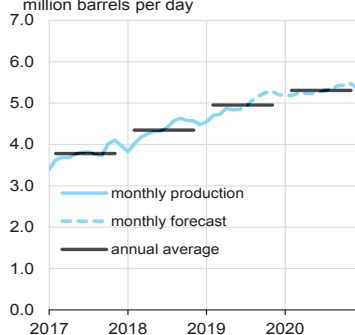


Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: Short-Term Energy Outlook, June 2019

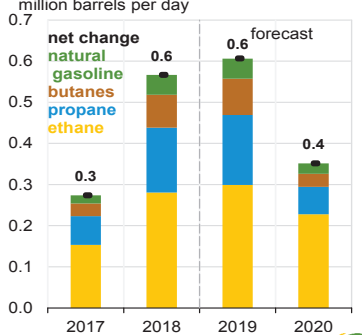


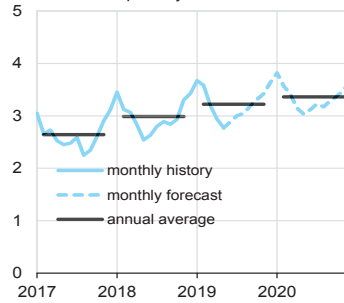
U.S. natural gas plant liquids production



Source: Short-Term Energy Outlook, June 2019

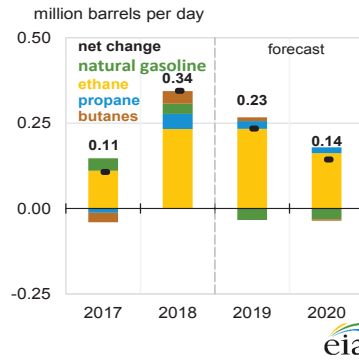
Components of annual change



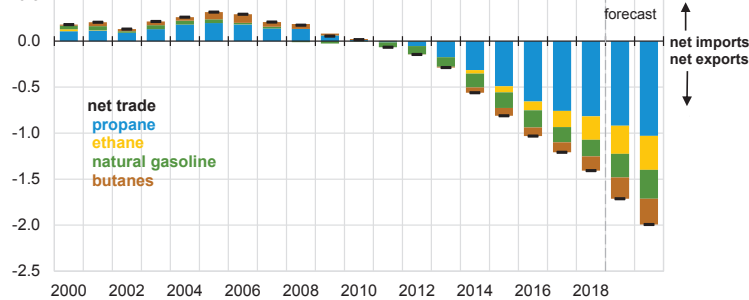


Source: Short-Term Energy Outlook, June 2019

Components of annual change

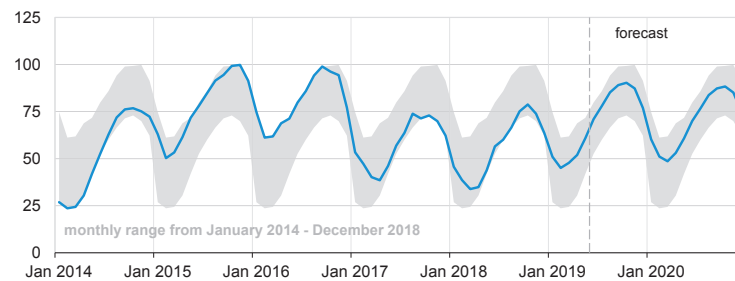


U.S. net trade of hydrocarbon gas liquids (HGL)
million barrels per day



Source: Short-Term Energy Outlook, June 2019

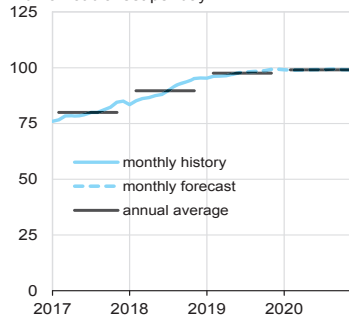
U.S. commercial propane inventories
million barrels



Source: Short-Term Energy Outlook, June 2019

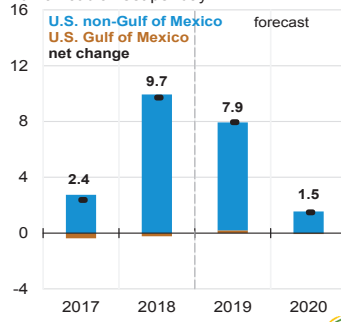


U.S. marketed natural gas production
billion cubic feet per day



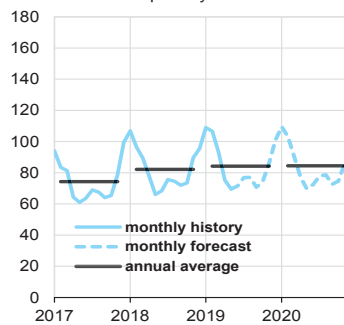
Source: Short-Term Energy Outlook, June 2019

Components of annual change
billion cubic feet per day



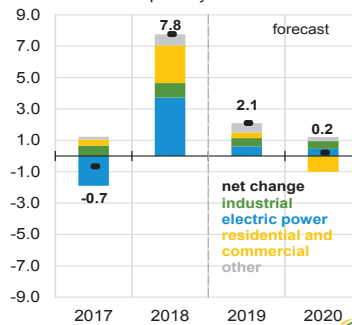
eia

U.S. natural gas consumption
billion cubic feet per day



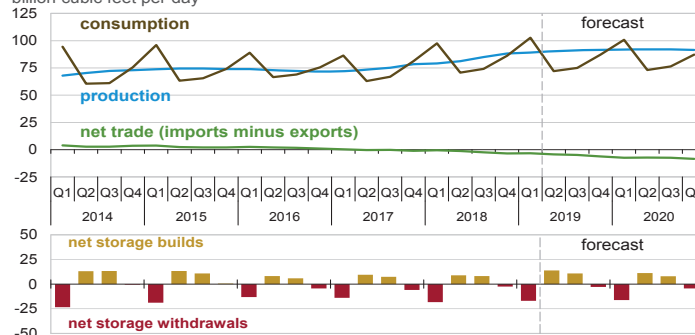
Source: Short-Term Energy Outlook, June 2019

Components of annual change
billion cubic feet per day



eia

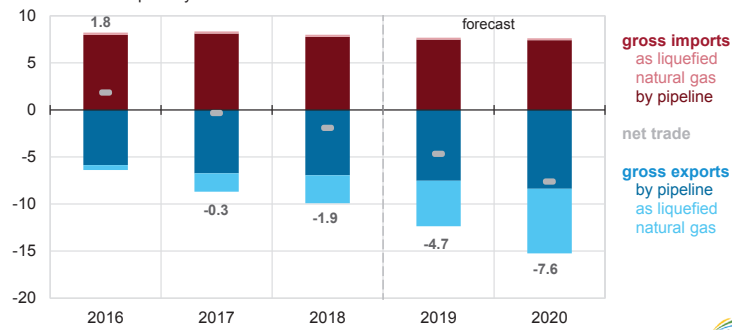
U.S. natural gas production, consumption, and net imports
billion cubic feet per day



Source: Short-Term Energy Outlook, June 2019

eia

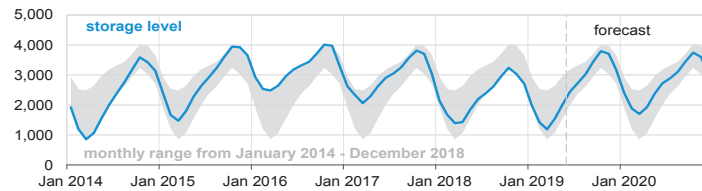
Annual natural gas trade
billion cubic feet per day



Source: Short-Term Energy Outlook, June 2019



U.S. working natural gas in storage
billion cubic feet



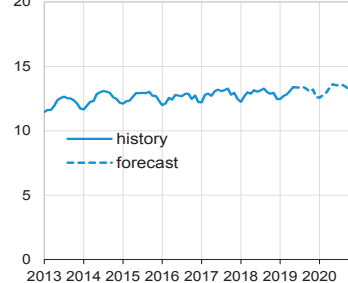
Percent deviation from 2014 - 2018 average



Source: Short-Term Energy Outlook, June 2019

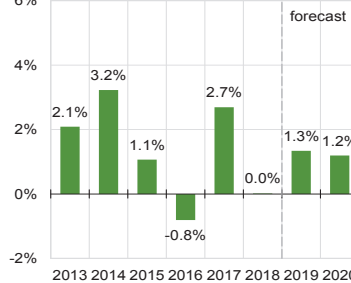


U.S. monthly residential electricity price
cents per kilowatthour

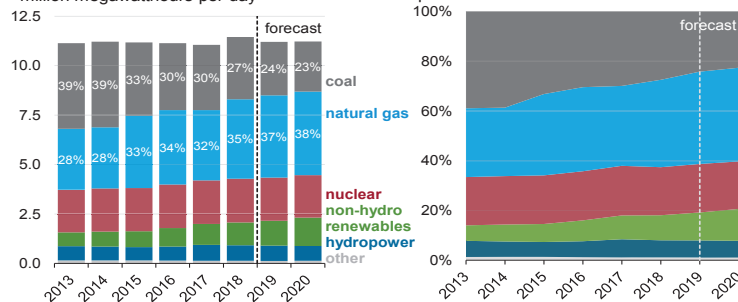


Source: Short-Term Energy Outlook, June 2019

Annual growth in residential electricity prices
percent



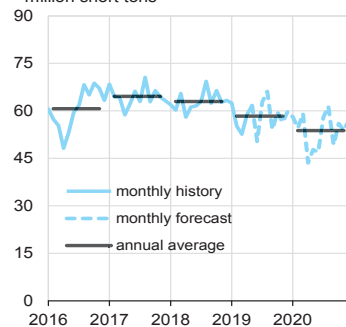
U.S. electricity generation by fuel, all sectors
million megawatthours per day



Note: Labels show percentage share of total generation provided by coal and natural gas.
Source: Short-Term Energy Outlook, June 2019

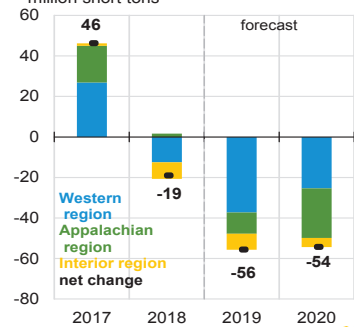


U.S. coal production
million short tons

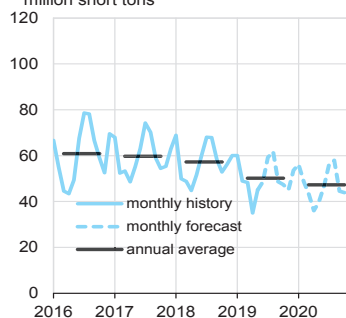


Source: Short-Term Energy Outlook, June 2019

Components of annual change
million short tons

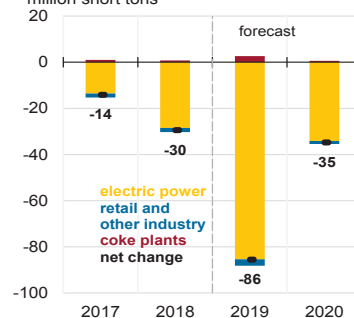


U.S. coal consumption
million short tons

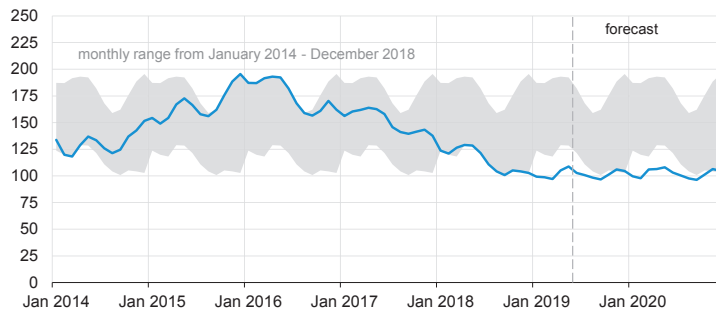


Source: Short-Term Energy Outlook, June 2019

Components of annual change
million short tons



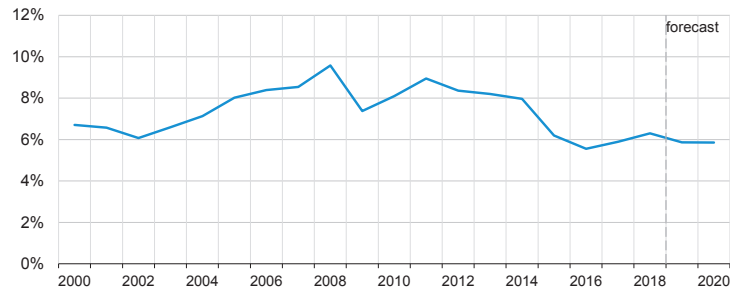
U.S. electric power coal inventories
million short tons



Source: Short-Term Energy Outlook, February 2019



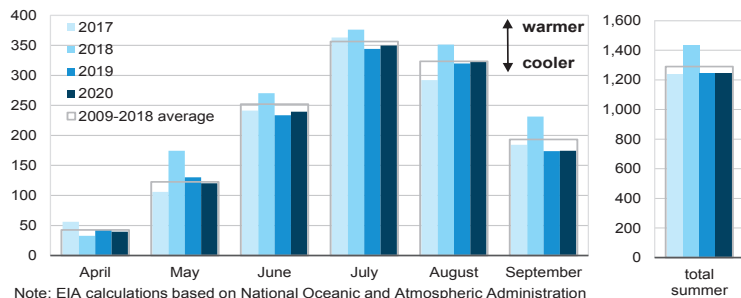
U.S. annual energy expenditures
share of gross domestic product



Source: Short-Term Energy Outlook, June 2019



U.S. summer cooling degree days
population-weighted

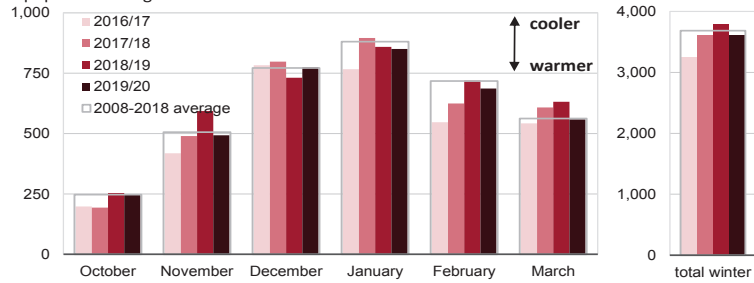


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, June 2019



U.S. winter heating degree days population-weighted

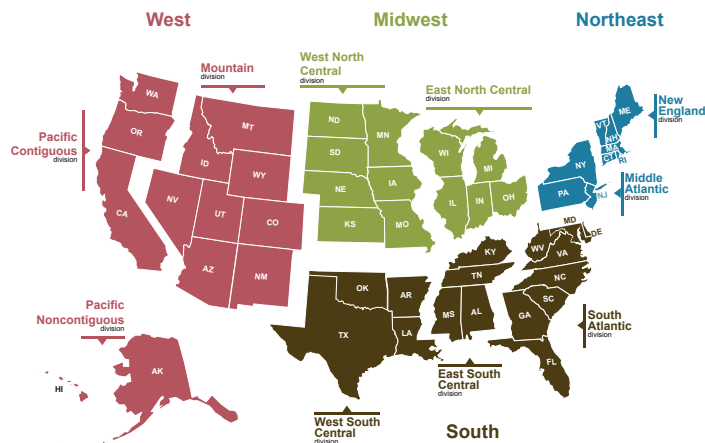


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, June 2019



U.S. Census regions and divisions



Source: U.S. Energy Information Administration, *Short-Term Energy Outlook*



Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Energy Supply															
Crude Oil Production (a) (million barrels per day)	10.23	10.54	11.24	11.81	11.81	<i>12.20</i>	<i>12.44</i>	<i>12.83</i>	<i>13.05</i>	<i>13.24</i>	<i>13.32</i>	<i>13.44</i>	10.96	<i>12.32</i>	<i>13.26</i>
Dry Natural Gas Production (billion cubic feet per day)	79.13	81.17	84.96	88.22	89.14	<i>90.14</i>	<i>91.17</i>	<i>91.93</i>	<i>91.80</i>	<i>91.84</i>	<i>91.97</i>	<i>91.54</i>	83.40	<i>90.60</i>	<i>91.79</i>
Coal Production (million short tons)	188	181	195	192	170	<i>171</i>	<i>183</i>	<i>176</i>	<i>172</i>	<i>138</i>	<i>169</i>	<i>167</i>	756	<i>700</i>	<i>645</i>
Energy Consumption															
Liquid Fuels (million barrels per day)	20.24	20.33	20.63	20.60	20.29	<i>20.33</i>	<i>21.02</i>	<i>20.92</i>	<i>20.53</i>	<i>20.75</i>	<i>21.25</i>	<i>21.01</i>	20.45	<i>20.64</i>	<i>20.89</i>
Natural Gas (billion cubic feet per day)	97.61	70.71	74.09	86.12	102.74	<i>72.07</i>	<i>74.91</i>	<i>87.22</i>	<i>100.83</i>	<i>73.10</i>	<i>76.42</i>		82.08	<i>84.17</i>	<i>84.38</i>
Coal (b) (million short tons)	168	157	194	169	157	<i>129</i>	<i>170</i>	<i>146</i>	<i>148</i>	<i>123</i>	<i>159</i>	<i>137</i>	687	<i>602</i>	<i>567</i>
Electricity (billion kilowatt hours per day)	10.62	10.33	12.14	10.14	10.54	<i>10.14</i>	<i>11.83</i>	<i>10.03</i>	<i>10.58</i>	<i>10.14</i>	<i>11.91</i>	<i>10.06</i>	10.81	<i>10.64</i>	<i>10.68</i>
Renewables (c) (quadrillion Btu)	2.92	3.10	2.72	2.74	2.86	<i>3.19</i>	<i>2.80</i>	<i>2.94</i>	<i>3.03</i>	<i>3.29</i>	<i>3.00</i>	<i>3.10</i>	11.48	<i>11.80</i>	<i>12.41</i>
Total Energy Consumption (d) (quadrillion Btu)	26.42	24.05	25.16	25.61	26.58	<i>23.47</i>	<i>24.68</i>	<i>25.27</i>	<i>26.38</i>	<i>23.55</i>	<i>24.84</i>	<i>25.26</i>	101.24	<i>100.01</i>	<i>100.03</i>
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	62.90	68.07	69.69	59.59	54.82	<i>59.58</i>	<i>58.88</i>	<i>63.67</i>	<i>63.00</i>	<i>63.00</i>	<i>63.00</i>	<i>63.00</i>	65.06	<i>59.29</i>	<i>63.00</i>
Natural Gas Henry Hub Spot (dollars per million Btu)	3.02	2.85	2.93	3.80	2.92	<i>2.60</i>	<i>2.65</i>	<i>2.94</i>	<i>3.00</i>	<i>2.56</i>	<i>2.63</i>	<i>2.89</i>	3.15	<i>2.77</i>	<i>2.77</i>
Coal (dollars per million Btu)	2.06	2.06	2.06	2.08	2.09	<i>2.13</i>	<i>2.10</i>	<i>2.11</i>	<i>2.13</i>	<i>2.14</i>	<i>2.12</i>	<i>2.12</i>	2.06	<i>2.11</i>	<i>2.13</i>
Macroeconomic															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR)	18,324	18,512	18,665	18,765	18,912	<i>19,011</i>	<i>19,125</i>	<i>19,237</i>	<i>19,345</i>	<i>19,455</i>	<i>19,547</i>	<i>19,636</i>	18,566	<i>19,071</i>	<i>19,496</i>
Percent change from prior year	2.6	2.9	3.0	3.0	3.2	<i>2.7</i>	<i>2.5</i>	<i>2.5</i>	<i>2.3</i>	<i>2.3</i>	<i>2.2</i>	<i>2.1</i>	2.9	<i>2.7</i>	<i>2.2</i>
GDP Implicit Price Deflator (Index, 2012=100)	109.3	110.2	110.7	111.1	111.4	<i>111.9</i>	<i>112.5</i>	<i>113.1</i>	<i>113.8</i>	<i>114.4</i>	<i>115.1</i>	<i>115.9</i>	110.3	<i>112.2</i>	<i>114.8</i>
Percent change from prior year	2.0	2.4	2.3	2.1	1.9	<i>1.5</i>	<i>1.6</i>	<i>1.7</i>	<i>2.2</i>	<i>2.3</i>	<i>2.3</i>	<i>2.5</i>	2.2	<i>1.7</i>	<i>2.3</i>
Real Disposable Personal Income (billion chained 2012 dollars - SAAR)	14,220	14,282	14,375	14,527	14,612	<i>14,631</i>	<i>14,698</i>	<i>14,797</i>	<i>14,917</i>	<i>15,043</i>	<i>15,147</i>	<i>15,236</i>	14,351	<i>14,685</i>	<i>15,086</i>
Percent change from prior year	2.8	2.7	2.8	3.3	2.8	<i>2.4</i>	<i>2.3</i>	<i>1.9</i>	<i>2.1</i>	<i>2.8</i>	<i>3.0</i>	<i>3.0</i>	2.9	<i>2.3</i>	<i>2.7</i>
Manufacturing Production Index (Index, 2012=100)	104.8	105.5	106.6	107.0	106.7	<i>107.2</i>	<i>107.7</i>	<i>108.3</i>	<i>108.7</i>	<i>108.9</i>	<i>109.2</i>	<i>109.4</i>	106.0	<i>107.5</i>	<i>109.1</i>
Percent change from prior year	2.4	2.2	3.6	2.6	1.8	<i>1.6</i>	<i>1.1</i>	<i>1.2</i>	<i>1.8</i>	<i>1.6</i>	<i>1.4</i>	<i>1.1</i>	2.7	<i>1.4</i>	<i>1.5</i>
Weather															
U.S. Heating Degree-Days	2,129	522	48	1,577	2,211	<i>471</i>	<i>76</i>	<i>1,514</i>	<i>2,096</i>	<i>478</i>	<i>75</i>	<i>1,512</i>	4,276	<i>4,271</i>	<i>4,161</i>
U.S. Cooling Degree-Days	52	478	959	99	46	<i>406</i>	<i>838</i>	<i>90</i>	<i>43</i>	<i>399</i>	<i>847</i>	<i>90</i>	1,587	<i>1,380</i>	<i>1,380</i>

- = no data available

Prices are not adjusted for inflation.

(a) Includes lease condensate.

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

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

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

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

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109;*Petroleum Supply Annual*, DOE/EIA-0340/2; *Weekly Petroleum Status Report*, DOE/EIA-0208; *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130;*Electric Power Monthly*, DOE/EIA-0226; *Quarterly Coal Report*, DOE/EIA-0121; and *International Petroleum Monthly*, DOE/EIA-0520.

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

Projections: EIA Regional Short-Term Energy Model. U.S. macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Weather projections from National Oceanic and Atmospheric Administration.

Table 2. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	62.90	68.07	69.69	59.59	54.82	<i>59.58</i>	<i>58.88</i>	<i>63.67</i>	<i>63.00</i>	<i>63.00</i>	<i>63.00</i>	<i>63.00</i>	65.06	<i>59.29</i>	<i>63.00</i>
Brent Spot Average	66.84	74.53	75.02	68.29	63.14	<i>68.84</i>	<i>66.94</i>	<i>67.67</i>	<i>67.00</i>	<i>67.00</i>	<i>67.00</i>	<i>67.00</i>	71.19	<i>66.69</i>	<i>67.00</i>
U.S. Imported Average	58.08	64.67	66.20	55.33	54.25	<i>59.19</i>	<i>56.89</i>	<i>59.37</i>	<i>57.56</i>	<i>57.56</i>	<i>57.56</i>	<i>57.56</i>	61.35	<i>57.44</i>	<i>57.56</i>
U.S. Refiner Average Acquisition Cost	61.89	67.29	69.03	59.39	55.71	<i>57.83</i>	<i>57.29</i>	<i>61.48</i>	<i>60.36</i>	<i>60.36</i>	<i>60.36</i>	<i>60.36</i>	64.45	<i>58.12</i>	<i>60.36</i>
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	186	213	213	178	167	<i>203</i>	<i>197</i>	<i>185</i>	<i>194</i>	<i>206</i>	<i>202</i>	<i>187</i>	198	<i>188</i>	<i>197</i>
Diesel Fuel	199	219	222	212	192	<i>204</i>	<i>210</i>	<i>218</i>	<i>221</i>	<i>228</i>	<i>227</i>	<i>227</i>	213	<i>206</i>	<i>226</i>
Heating Oil	193	205	214	201	189	<i>194</i>	<i>201</i>	<i>210</i>	<i>217</i>	<i>217</i>	<i>218</i>	<i>219</i>	200	<i>199</i>	<i>217</i>
Refiner Prices to End Users															
Jet Fuel	197	217	220	212	193	<i>201</i>	<i>207</i>	<i>215</i>	<i>219</i>	<i>224</i>	<i>223</i>	<i>222</i>	212	<i>204</i>	<i>222</i>
No. 6 Residual Fuel Oil (a)	149	162	176	175	153	<i>146</i>	<i>139</i>	<i>138</i>	<i>113</i>	<i>116</i>	<i>118</i>	<i>117</i>	166	<i>143</i>	<i>116</i>
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	258	285	284	262	236	<i>280</i>	<i>273</i>	<i>264</i>	<i>267</i>	<i>283</i>	<i>281</i>	<i>267</i>	273	<i>264</i>	<i>275</i>
Gasoline All Grades (b)	270	294	292	271	245	<i>288</i>	<i>284</i>	<i>276</i>	<i>279</i>	<i>295</i>	<i>294</i>	<i>279</i>	282	<i>274</i>	<i>287</i>
On-highway Diesel Fuel	302	320	324	327	302	<i>310</i>	<i>309</i>	<i>321</i>	<i>323</i>	<i>329</i>	<i>329</i>	<i>331</i>	318	<i>311</i>	<i>328</i>
Heating Oil	287	298	325	316	300	<i>305</i>	<i>294</i>	<i>305</i>	<i>315</i>	<i>307</i>	<i>307</i>	<i>315</i>	301	<i>302</i>	<i>313</i>
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	3.13	2.96	3.04	3.94	3.02	<i>2.69</i>	<i>2.74</i>	<i>3.05</i>	<i>3.11</i>	<i>2.66</i>	<i>2.72</i>	<i>3.00</i>	3.27	<i>2.88</i>	<i>2.87</i>
Henry Hub Spot (dollars per million Btu)	3.02	2.85	2.93	3.80	2.92	<i>2.60</i>	<i>2.65</i>	<i>2.94</i>	<i>3.00</i>	<i>2.56</i>	<i>2.63</i>	<i>2.89</i>	3.15	<i>2.77</i>	<i>2.77</i>
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	4.44	3.83	3.73	4.71	4.68	<i>3.74</i>	<i>3.61</i>	<i>4.15</i>	<i>4.54</i>	<i>3.66</i>	<i>3.60</i>	<i>4.10</i>	4.20	<i>4.06</i>	<i>4.00</i>
Commercial Sector	7.64	8.08	8.77	7.61	7.62	<i>8.00</i>	<i>8.35</i>	<i>7.68</i>	<i>7.68</i>	<i>8.09</i>	<i>8.42</i>	<i>7.68</i>	7.82	<i>7.78</i>	<i>7.83</i>
Residential Sector	9.37	11.93	17.93	9.97	9.46	<i>11.80</i>	<i>16.39</i>	<i>10.61</i>	<i>9.82</i>	<i>12.24</i>	<i>16.71</i>	<i>10.70</i>	10.49	<i>10.60</i>	<i>10.92</i>
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.06	2.06	2.06	2.08	2.09	<i>2.13</i>	<i>2.10</i>	<i>2.11</i>	<i>2.13</i>	<i>2.14</i>	<i>2.12</i>	<i>2.12</i>	2.06	<i>2.11</i>	<i>2.13</i>
Natural Gas	3.96	3.09	3.23	4.05	3.70	<i>2.77</i>	<i>2.71</i>	<i>3.28</i>	<i>3.48</i>	<i>2.71</i>	<i>2.66</i>	<i>3.21</i>	3.54	<i>3.07</i>	<i>2.98</i>
Residual Fuel Oil (c)	11.47	13.02	14.02	14.49	11.93	<i>13.79</i>	<i>12.91</i>	<i>12.73</i>	<i>12.98</i>	<i>13.72</i>	<i>13.02</i>	<i>12.79</i>	12.95	<i>12.82</i>	<i>13.10</i>
Distillate Fuel Oil	15.77	16.61	16.82	16.01	14.92	<i>15.87</i>	<i>16.05</i>	<i>16.88</i>	<i>17.13</i>	<i>17.58</i>	<i>17.49</i>	<i>17.57</i>	16.13	<i>15.94</i>	<i>17.42</i>
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.81	6.87	7.22	6.82	6.66	<i>6.88</i>	<i>7.20</i>	<i>6.78</i>	<i>6.70</i>	<i>6.93</i>	<i>7.26</i>	<i>6.83</i>	6.93	<i>6.89</i>	<i>6.94</i>
Commercial Sector	10.54	10.60	10.89	10.55	10.41	<i>10.71</i>	<i>10.97</i>	<i>10.59</i>	<i>10.42</i>	<i>10.74</i>	<i>11.02</i>	<i>10.67</i>	10.66	<i>10.68</i>	<i>10.73</i>
Residential Sector	12.59	13.03	13.15	12.75	12.66	<i>13.29</i>	<i>13.35</i>	<i>12.93</i>	<i>12.75</i>	<i>13.49</i>	<i>13.50</i>	<i>13.12</i>	12.89	<i>13.06</i>	<i>13.22</i>

- = no data available

Prices are not adjusted for inflation.

(a) Average for all sulfur contents.

(b) Average self-service cash price.

(c) Includes fuel oils No. 4, No. 5, No. 6, and topped crude.

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

Prices exclude taxes unless otherwise noted.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380;*Weekly Petroleum Status Report*, DOE/EIA-0208; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; and *Monthly Energy Review*, DOE/EIA-0035.WTI and Brent crude oils, and Henry Hub natural gas spot prices from Reuter's News Service (<http://www.reuters.com>).

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (million barrels per day) (a)															
OECD	29.13	29.31	30.46	31.20	30.61	31.21	31.85	32.75	33.13	33.49	33.66	34.18	30.03	31.61	33.62
U.S. (50 States)	16.77	17.39	18.40	18.96	18.91	19.63	20.06	20.70	20.87	21.22	21.40	21.61	17.89	19.83	21.28
Canada	5.32	5.10	5.33	5.42	5.01	4.86	5.17	5.21	5.36	5.36	5.40	5.46	5.30	5.06	5.40
Mexico	2.17	2.13	2.09	1.95	1.92	2.08	2.06	2.03	2.01	1.99	1.97	1.95	2.08	2.02	1.98
Other OECD	4.88	4.68	4.64	4.86	4.77	4.64	4.57	4.80	4.89	4.92	4.88	5.17	4.76	4.69	4.96
Non-OECD	70.14	70.47	70.96	70.95	69.20	69.05	69.45	69.27	68.29	69.43	69.82	69.28	70.63	69.24	69.21
OPEC	37.46	37.07	37.34	37.29	35.86	35.17	35.19	35.10	34.66	34.74	34.89	34.65	37.29	35.33	34.73
Crude Oil Portion	32.10	31.78	32.02	31.94	30.47	29.89	30.19	30.08	29.66	29.72	29.87	29.60	31.96	30.15	29.71
Other Liquids (b)	5.36	5.29	5.33	5.36	5.39	5.28	5.00	5.02	5.01	5.01	5.02	5.05	5.33	5.17	5.02
Eurasia	14.44	14.44	14.63	14.89	14.83	14.48	14.67	14.87	14.95	15.02	15.04	15.11	14.60	14.72	15.03
China	4.79	4.84	4.78	4.86	4.92	4.89	4.87	4.91	4.89	4.92	4.92	4.97	4.82	4.90	4.93
Other Non-OECD	13.45	14.12	14.20	13.90	13.59	14.51	14.72	14.38	13.80	14.75	14.97	14.55	13.92	14.30	14.52
Total World Supply	99.27	99.78	101.42	102.14	99.81	100.26	101.30	102.01	101.42	102.92	103.47	103.46	100.66	100.85	102.82
Non-OPEC Supply	61.81	62.71	64.08	64.85	63.95	65.09	66.11	66.91	66.76	68.18	68.59	68.81	63.37	65.53	68.09
Consumption (million barrels per day) (c)															
OECD	47.62	46.99	47.93	47.52	47.39	46.69	48.09	48.17	47.56	47.07	48.30	48.23	47.52	47.59	47.79
U.S. (50 States)	20.24	20.33	20.63	20.60	20.29	20.33	21.02	20.92	20.53	20.75	21.25	21.01	20.45	20.64	20.89
U.S. Territories	0.10	0.08	0.09	0.11	0.12	0.11	0.12	0.13	0.12	0.11	0.12	0.13	0.10	0.12	0.12
Canada	2.32	2.34	2.56	2.49	2.33	2.37	2.48	2.45	2.41	2.35	2.45	2.43	2.43	2.41	2.41
Europe	14.09	14.23	14.69	14.12	14.02	14.14	14.64	14.34	13.99	14.19	14.70	14.40	14.28	14.28	14.32
Japan	4.27	3.43	3.53	3.89	4.11	3.37	3.44	3.76	3.98	3.26	3.34	3.67	3.78	3.67	3.56
Other OECD	6.60	6.57	6.42	6.32	6.53	6.38	6.41	6.56	6.54	6.41	6.44	6.59	6.48	6.47	6.50
Non-OECD	51.54	52.59	52.56	52.89	52.78	53.78	53.79	53.84	53.91	54.96	54.98	55.19	52.40	53.55	54.76
Eurasia	4.78	4.83	5.11	4.98	4.80	4.87	5.24	5.09	4.90	4.99	5.37	5.27	4.93	5.00	5.13
Europe	0.75	0.74	0.76	0.76	0.75	0.75	0.77	0.77	0.76	0.76	0.78	0.78	0.75	0.76	0.77
China	13.80	14.00	13.73	13.95	14.28	14.47	14.20	14.41	14.76	14.95	14.67	14.90	13.87	14.34	14.82
Other Asia	13.77	14.02	13.60	14.00	14.16	14.30	13.93	14.28	14.46	14.62	14.19	14.55	13.85	14.17	14.46
Other Non-OECD	18.44	19.00	19.36	19.20	18.78	19.38	19.66	19.29	19.04	19.63	19.97	19.70	19.00	19.28	19.58
Total World Consumption	99.16	99.58	100.49	100.42	100.17	100.47	101.89	102.01	101.48	102.03	103.28	103.43	99.92	101.14	102.56
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	0.36	-0.06	-0.70	0.22	0.15	-0.63	-0.16	0.27	0.05	-0.37	-0.10	0.32	-0.05	-0.09	-0.03
Other OECD	-0.01	0.12	0.18	-0.08	-0.14	0.28	0.25	-0.09	0.00	-0.17	-0.03	-0.12	0.05	0.07	-0.08
Other Stock Draws and Balance	-0.46	-0.25	-0.41	-1.87	0.35	0.57	0.49	-0.18	0.00	-0.35	-0.06	-0.24	-0.75	0.31	-0.16
Total Stock Draw	-0.11	-0.19	-0.93	-1.73	0.36	0.21	0.58	-0.01	0.05	-0.89	-0.19	-0.04	-0.74	0.29	-0.27
End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)															
U.S. Commercial Inventory	1,196	1,207	1,272	1,262	1,249	1,310	1,325	1,304	1,303	1,340	1,351	1,324	1,262	1,304	1,324
OECD Commercial Inventory	2,804	2,804	2,857	2,861	2,856	2,892	2,884	2,871	2,870	2,922	2,936	2,920	2,861	2,871	2,920

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, the United Arab Emirates, Venezuela.

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

(b) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

(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.

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

Projections: EIA Regional Short-Term Energy Model.

Table 3b. Non-OPEC Petroleum and Other Liquids Supply (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
North America	24.25	24.63	25.82	26.33	<i>25.84</i>	<i>26.57</i>	<i>27.28</i>	<i>27.95</i>	<i>28.24</i>	<i>28.57</i>	<i>28.78</i>	<i>29.02</i>	25.27	<i>26.92</i>	<i>28.65</i>
Canada	5.32	5.10	5.33	5.42	<i>5.01</i>	<i>4.86</i>	<i>5.17</i>	<i>5.21</i>	<i>5.36</i>	<i>5.36</i>	<i>5.40</i>	<i>5.46</i>	5.30	<i>5.06</i>	<i>5.40</i>
Mexico	2.17	2.13	2.09	1.95	<i>1.92</i>	<i>2.08</i>	<i>2.06</i>	<i>2.03</i>	<i>2.01</i>	<i>1.99</i>	<i>1.97</i>	<i>1.95</i>	2.08	<i>2.02</i>	<i>1.98</i>
United States	16.77	17.39	18.40	18.96	<i>18.91</i>	<i>19.63</i>	<i>20.06</i>	<i>20.70</i>	<i>20.87</i>	<i>21.22</i>	<i>21.40</i>	<i>21.61</i>	17.89	<i>19.83</i>	<i>21.28</i>
Central and South America	4.90	5.65	5.72	5.37	<i>5.00</i>	<i>5.88</i>	<i>6.14</i>	<i>5.75</i>	<i>5.18</i>	<i>6.16</i>	<i>6.40</i>	<i>6.00</i>	5.41	<i>5.70</i>	<i>5.94</i>
Argentina	0.67	0.69	0.68	0.68	<i>0.68</i>	<i>0.68</i>	<i>0.67</i>	<i>0.67</i>	<i>0.69</i>	<i>0.69</i>	<i>0.69</i>	<i>0.69</i>	0.68	<i>0.68</i>	<i>0.69</i>
Brazil	2.95	3.64	3.75	3.36	<i>2.99</i>	<i>3.91</i>	<i>4.19</i>	<i>3.77</i>	<i>3.18</i>	<i>4.18</i>	<i>4.44</i>	<i>4.01</i>	3.43	<i>3.72</i>	<i>3.96</i>
Colombia	0.86	0.89	0.89	0.91	<i>0.92</i>	<i>0.89</i>	<i>0.89</i>	<i>0.90</i>	<i>0.91</i>	<i>0.88</i>	<i>0.88</i>	<i>0.90</i>	0.89	<i>0.90</i>	<i>0.89</i>
Other Central and S. America	0.42	0.43	0.40	0.41	<i>0.42</i>	<i>0.41</i>	<i>0.39</i>	<i>0.40</i>	<i>0.40</i>	<i>0.40</i>	<i>0.39</i>	<i>0.40</i>	0.41	<i>0.40</i>	<i>0.40</i>
Europe	4.37	4.20	4.12	4.32	<i>4.26</i>	<i>4.16</i>	<i>4.06</i>	<i>4.27</i>	<i>4.33</i>	<i>4.35</i>	<i>4.30</i>	<i>4.59</i>	4.25	<i>4.18</i>	<i>4.39</i>
Norway	1.97	1.80	1.81	1.87	<i>1.79</i>	<i>1.68</i>	<i>1.70</i>	<i>1.74</i>	<i>1.80</i>	<i>1.83</i>	<i>1.89</i>	<i>2.07</i>	1.86	<i>1.73</i>	<i>1.90</i>
United Kingdom	1.16	1.17	1.10	1.22	<i>1.25</i>	<i>1.28</i>	<i>1.17</i>	<i>1.29</i>	<i>1.31</i>	<i>1.31</i>	<i>1.20</i>	<i>1.29</i>	1.16	<i>1.25</i>	<i>1.28</i>
Eurasia	14.44	14.44	14.63	14.89	<i>14.83</i>	<i>14.48</i>	<i>14.67</i>	<i>14.87</i>	<i>14.95</i>	<i>15.02</i>	<i>15.04</i>	<i>15.11</i>	14.60	<i>14.72</i>	<i>15.03</i>
Azerbaijan	0.81	0.81	0.80	0.81	<i>0.82</i>	<i>0.79</i>	<i>0.76</i>	<i>0.78</i>	<i>0.76</i>	<i>0.76</i>	<i>0.75</i>	<i>0.75</i>	0.81	<i>0.79</i>	<i>0.76</i>
Kazakhstan	1.98	1.96	1.90	2.00	<i>2.04</i>	<i>1.88</i>	<i>1.99</i>	<i>2.13</i>	<i>2.15</i>	<i>2.08</i>	<i>2.08</i>	<i>2.13</i>	1.96	<i>2.01</i>	<i>2.11</i>
Russia	11.20	11.24	11.50	11.66	<i>11.57</i>	<i>11.40</i>	<i>11.50</i>	<i>11.55</i>	<i>11.64</i>	<i>11.79</i>	<i>11.82</i>	<i>11.85</i>	11.40	<i>11.51</i>	<i>11.78</i>
Turkmenistan	0.30	0.28	0.28	0.27	<i>0.25</i>	<i>0.26</i>	<i>0.26</i>	<i>0.26</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	0.28	<i>0.26</i>	<i>0.24</i>
Other Eurasia	0.15	0.15	0.15	0.15	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	0.15	<i>0.16</i>	<i>0.15</i>
Middle East	3.02	3.03	3.04	3.05	<i>3.09</i>	<i>3.11</i>	<i>3.11</i>	<i>3.11</i>	<i>3.17</i>	<i>3.18</i>	<i>3.18</i>	<i>3.18</i>	3.04	<i>3.10</i>	<i>3.18</i>
Oman	0.98	0.98	0.99	1.01	<i>0.98</i>	<i>0.99</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	<i>1.01</i>	0.99	<i>0.99</i>	<i>1.01</i>
Qatar	1.94	1.94	1.95	1.94	<i>1.99</i>	<i>2.00</i>	<i>2.00</i>	<i>2.00</i>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	1.94	<i>2.00</i>	<i>2.06</i>
Asia and Oceania	9.31	9.25	9.19	9.33	<i>9.38</i>	<i>9.34</i>	<i>9.30</i>	<i>9.41</i>	<i>9.38</i>	<i>9.40</i>	<i>9.39</i>	<i>9.41</i>	9.27	<i>9.36</i>	<i>9.40</i>
Australia	0.36	0.33	0.37	0.39	<i>0.39</i>	<i>0.43</i>	<i>0.46</i>	<i>0.48</i>	<i>0.50</i>	<i>0.52</i>	<i>0.53</i>	<i>0.53</i>	0.36	<i>0.44</i>	<i>0.52</i>
China	4.79	4.84	4.78	4.86	<i>4.92</i>	<i>4.89</i>	<i>4.87</i>	<i>4.91</i>	<i>4.89</i>	<i>4.92</i>	<i>4.92</i>	<i>4.97</i>	4.82	<i>4.90</i>	<i>4.93</i>
India	1.03	1.02	1.01	1.00	<i>0.99</i>	<i>0.97</i>	<i>0.97</i>	<i>0.97</i>	<i>0.97</i>	<i>0.98</i>	<i>0.98</i>	<i>0.98</i>	1.01	<i>0.97</i>	<i>0.98</i>
Indonesia	0.90	0.90	0.88	0.89	<i>0.88</i>	<i>0.87</i>	<i>0.86</i>	<i>0.85</i>	<i>0.83</i>	<i>0.82</i>	<i>0.81</i>	<i>0.79</i>	0.89	<i>0.86</i>	<i>0.81</i>
Malaysia	0.77	0.75	0.73	0.75	<i>0.75</i>	<i>0.72</i>	<i>0.70</i>	<i>0.74</i>	<i>0.72</i>	<i>0.71</i>	<i>0.70</i>	<i>0.69</i>	0.75	<i>0.73</i>	<i>0.71</i>
Vietnam	0.27	0.25	0.25	0.25	<i>0.25</i>	<i>0.24</i>	<i>0.24</i>	<i>0.25</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	0.25	<i>0.24</i>	<i>0.24</i>
Africa	1.52	1.51	1.55	1.56	<i>1.55</i>	<i>1.54</i>	<i>1.54</i>	<i>1.55</i>	<i>1.51</i>	<i>1.51</i>	<i>1.51</i>	<i>1.51</i>	1.53	<i>1.55</i>	<i>1.51</i>
Egypt	0.67	0.66	0.67	0.67	<i>0.63</i>	<i>0.62</i>	<i>0.62</i>	<i>0.62</i>	<i>0.59</i>	<i>0.59</i>	<i>0.59</i>	<i>0.59</i>	0.67	<i>0.62</i>	<i>0.59</i>
South Sudan	0.12	0.12	0.12	0.14	<i>0.17</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	0.13	<i>0.18</i>	<i>0.18</i>
Total non-OPEC liquids	61.81	62.71	64.08	64.85	<i>63.95</i>	<i>65.09</i>	<i>66.11</i>	<i>66.91</i>	<i>66.76</i>	<i>68.18</i>	<i>68.59</i>	<i>68.81</i>	63.37	<i>65.53</i>	<i>68.09</i>
OPEC non-crude liquids	5.36	5.29	5.33	5.36	<i>5.39</i>	<i>5.28</i>	<i>5.00</i>	<i>5.02</i>	<i>5.01</i>	<i>5.01</i>	<i>5.02</i>	<i>5.05</i>	5.33	<i>5.17</i>	<i>5.02</i>
Non-OPEC + OPEC non-crude	67.17	67.99	69.40	70.20	<i>69.34</i>	<i>70.37</i>	<i>71.12</i>	<i>71.93</i>	<i>71.77</i>	<i>73.20</i>	<i>73.61</i>	<i>73.87</i>	68.70	<i>70.70</i>	<i>73.11</i>
Unplanned non-OPEC Production Outages	0.40	0.27	0.17	0.31	<i>0.35</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	0.29	<i>n/a</i>	<i>n/a</i>

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, the United Arab Emirates, Venezuela.

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

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

Not all countries are shown in each region and sum of reported country volumes may not equal regional volumes.

Historical data: Latest data available from Energy Information Administration international energy statistics.

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Crude Oil															
Algeria	1.02	1.02	1.03	1.00	<i>1.01</i>	-	-	-	-	-	-	-	1.02	-	-
Angola	1.59	1.56	1.56	1.57	<i>1.50</i>	-	-	-	-	-	-	-	1.57	-	-
Congo (Brazzaville)	0.34	0.35	0.33	0.31	<i>0.33</i>	-	-	-	-	-	-	-	0.33	-	-
Ecuador	0.51	0.52	0.52	0.52	<i>0.53</i>	-	-	-	-	-	-	-	0.52	-	-
Equatorial Guinea	0.14	0.13	0.14	0.12	<i>0.11</i>	-	-	-	-	-	-	-	0.13	-	-
Gabon	0.20	0.20	0.19	0.19	<i>0.20</i>	-	-	-	-	-	-	-	0.20	-	-
Iran	3.83	3.80	3.55	2.90	<i>2.63</i>	-	-	-	-	-	-	-	3.52	-	-
Iraq	4.46	4.50	4.66	4.77	<i>4.75</i>	-	-	-	-	-	-	-	4.60	-	-
Kuwait	2.71	2.71	2.80	2.80	<i>2.74</i>	-	-	-	-	-	-	-	2.76	-	-
Libya	1.00	0.92	0.91	1.03	<i>0.93</i>	-	-	-	-	-	-	-	0.96	-	-
Nigeria	1.72	1.53	1.55	1.61	<i>1.58</i>	-	-	-	-	-	-	-	1.60	-	-
Saudi Arabia	10.10	10.20	10.47	10.74	<i>10.00</i>	-	-	-	-	-	-	-	10.38	-	-
United Arab Emirates	2.88	2.86	2.94	3.11	<i>3.12</i>	-	-	-	-	-	-	-	2.95	-	-
Venezuela	1.60	1.49	1.36	1.27	<i>1.05</i>	-	-	-	-	-	-	-	1.43	-	-
OPEC Total	32.10	31.78	32.02	31.94	<i>30.47</i>	<i>29.89</i>	<i>30.19</i>	<i>30.08</i>	<i>29.66</i>	<i>29.72</i>	<i>29.87</i>	<i>29.60</i>	31.96	<i>30.15</i>	<i>29.71</i>
Other Liquids (a)	5.36	5.29	5.33	5.36	<i>5.39</i>	<i>5.28</i>	<i>5.00</i>	<i>5.02</i>	<i>5.01</i>	<i>5.01</i>	<i>5.02</i>	<i>5.05</i>	5.33	<i>5.17</i>	<i>5.02</i>
Total OPEC Supply	37.46	37.07	37.34	37.29	<i>35.86</i>	<i>35.17</i>	<i>35.19</i>	<i>35.10</i>	<i>34.66</i>	<i>34.74</i>	<i>34.89</i>	<i>34.65</i>	37.29	<i>35.33</i>	<i>34.73</i>
Crude Oil Production Capacity															
Africa	6.00	5.70	5.71	5.84	<i>5.66</i>	<i>5.80</i>	<i>5.76</i>	<i>5.81</i>	<i>5.87</i>	<i>5.89</i>	<i>5.91</i>	<i>5.91</i>	5.81	<i>5.76</i>	<i>5.89</i>
Middle East	25.84	25.85	25.76	25.29	<i>25.28</i>	<i>24.93</i>	<i>24.70</i>	<i>24.70</i>	<i>24.72</i>	<i>24.76</i>	<i>24.77</i>	<i>24.78</i>	25.68	<i>24.90</i>	<i>24.76</i>
South America	2.11	2.01	1.89	1.79	<i>1.58</i>	<i>1.28</i>	<i>1.12</i>	<i>1.03</i>	<i>0.96</i>	<i>0.90</i>	<i>0.85</i>	<i>0.80</i>	1.95	<i>1.25</i>	<i>0.87</i>
OPEC Total	33.95	33.56	33.36	32.91	<i>32.52</i>	<i>32.02</i>	<i>31.57</i>	<i>31.54</i>	<i>31.54</i>	<i>31.54</i>	<i>31.52</i>	<i>31.48</i>	33.44	<i>31.91</i>	<i>31.52</i>
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
Middle East	1.86	1.78	1.34	0.97	<i>2.05</i>	<i>2.13</i>	<i>1.39</i>	<i>1.45</i>	<i>1.89</i>	<i>1.82</i>	<i>1.65</i>	<i>1.89</i>	1.48	<i>1.75</i>	<i>1.81</i>
South America	0.00	0.00	0.00	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
OPEC Total	1.86	1.78	1.34	0.97	<i>2.05</i>	<i>2.13</i>	<i>1.39</i>	<i>1.45</i>	<i>1.89</i>	<i>1.82</i>	<i>1.65</i>	<i>1.89</i>	1.48	<i>1.75</i>	<i>1.81</i>
Unplanned OPEC Production Outages	1.21	1.43	1.59	2.01	<i>2.51</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	1.56	<i>n/a</i>	<i>n/a</i>

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Equatorial Guinea, Gabon, Libya, and Nigeria (Africa); Ecuador and Venezuela (South America); Iran, Iraq, Kuwait, Saudi Arabia, and the United Arab Emirates (Middle East).

(a) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

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.

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
North America	24.56	24.71	25.17	24.98	<i>24.60</i>	<i>24.68</i>	<i>25.48</i>	<i>25.39</i>	<i>24.90</i>	<i>25.10</i>	<i>25.70</i>	<i>25.46</i>	24.86	<i>25.04</i>	<i>25.29</i>
Canada	2.32	2.34	2.56	2.49	<i>2.33</i>	<i>2.37</i>	<i>2.48</i>	<i>2.45</i>	<i>2.41</i>	<i>2.35</i>	<i>2.45</i>	<i>2.43</i>	2.43	<i>2.41</i>	<i>2.41</i>
Mexico	1.99	2.02	1.97	1.88	<i>1.97</i>	<i>1.97</i>	<i>1.97</i>	<i>2.00</i>	<i>1.96</i>	<i>1.99</i>	<i>1.99</i>	<i>2.00</i>	1.97	<i>1.98</i>	<i>1.98</i>
United States	20.24	20.33	20.63	20.60	<i>20.29</i>	<i>20.33</i>	<i>21.02</i>	<i>20.92</i>	<i>20.53</i>	<i>20.75</i>	<i>21.25</i>	<i>21.01</i>	20.45	<i>20.64</i>	<i>20.89</i>
Central and South America	6.72	6.76	6.94	6.95	<i>6.72</i>	<i>6.81</i>	<i>6.91</i>	<i>6.90</i>	<i>6.69</i>	<i>6.83</i>	<i>6.96</i>	<i>6.98</i>	6.84	<i>6.83</i>	<i>6.87</i>
Brazil	2.98	2.95	3.11	3.11	<i>3.02</i>	<i>3.04</i>	<i>3.11</i>	<i>3.10</i>	<i>3.01</i>	<i>3.08</i>	<i>3.17</i>	<i>3.17</i>	3.04	<i>3.07</i>	<i>3.11</i>
Europe	14.84	14.98	15.44	14.88	<i>14.77</i>	<i>14.89</i>	<i>15.41</i>	<i>15.12</i>	<i>14.75</i>	<i>14.96</i>	<i>15.48</i>	<i>15.19</i>	15.04	<i>15.05</i>	<i>15.10</i>
Eurasia	4.78	4.83	5.11	4.98	<i>4.80</i>	<i>4.87</i>	<i>5.24</i>	<i>5.09</i>	<i>4.90</i>	<i>4.99</i>	<i>5.37</i>	<i>5.27</i>	4.93	<i>5.00</i>	<i>5.13</i>
Russia	3.63	3.70	3.91	3.78	<i>3.64</i>	<i>3.73</i>	<i>4.04</i>	<i>3.88</i>	<i>3.72</i>	<i>3.84</i>	<i>4.16</i>	<i>4.05</i>	3.75	<i>3.82</i>	<i>3.95</i>
Middle East	8.00	8.53	8.79	8.43	<i>8.29</i>	<i>8.79</i>	<i>9.06</i>	<i>8.50</i>	<i>8.46</i>	<i>8.90</i>	<i>9.22</i>	<i>8.73</i>	8.44	<i>8.66</i>	<i>8.83</i>
Asia and Oceania	35.88	35.40	34.74	35.71	<i>36.52</i>	<i>35.98</i>	<i>35.41</i>	<i>36.45</i>	<i>37.21</i>	<i>36.68</i>	<i>36.06</i>	<i>37.13</i>	35.43	<i>36.09</i>	<i>36.77</i>
China	13.80	14.00	13.73	13.95	<i>14.28</i>	<i>14.47</i>	<i>14.20</i>	<i>14.41</i>	<i>14.76</i>	<i>14.95</i>	<i>14.67</i>	<i>14.90</i>	13.87	<i>14.34</i>	<i>14.82</i>
Japan	4.27	3.43	3.53	3.89	<i>4.11</i>	<i>3.37</i>	<i>3.44</i>	<i>3.76</i>	<i>3.98</i>	<i>3.26</i>	<i>3.34</i>	<i>3.67</i>	3.78	<i>3.67</i>	<i>3.56</i>
India	4.73	4.89	4.57	4.92	<i>4.99</i>	<i>5.03</i>	<i>4.74</i>	<i>5.03</i>	<i>5.17</i>	<i>5.23</i>	<i>4.89</i>	<i>5.20</i>	4.78	<i>4.95</i>	<i>5.12</i>
Africa	4.38	4.38	4.28	4.49	<i>4.45</i>	<i>4.45</i>	<i>4.38</i>	<i>4.57</i>	<i>4.57</i>	<i>4.57</i>	<i>4.49</i>	<i>4.68</i>	4.38	<i>4.46</i>	<i>4.58</i>
Total OECD Liquid Fuels Consumption	47.62	46.99	47.93	47.52	<i>47.39</i>	<i>46.69</i>	<i>48.09</i>	<i>48.17</i>	<i>47.56</i>	<i>47.07</i>	<i>48.30</i>	<i>48.23</i>	47.52	<i>47.59</i>	<i>47.79</i>
Total non-OECD Liquid Fuels Consumption	51.54	52.59	52.56	52.89	<i>52.78</i>	<i>53.78</i>	<i>53.79</i>	<i>53.84</i>	<i>53.91</i>	<i>54.96</i>	<i>54.98</i>	<i>55.19</i>	52.40	<i>53.55</i>	<i>54.76</i>
Total World Liquid Fuels Consumption	99.16	99.58	100.49	100.42	<i>100.17</i>	<i>100.47</i>	<i>101.89</i>	<i>102.01</i>	<i>101.48</i>	<i>102.03</i>	<i>103.28</i>	<i>103.43</i>	99.92	<i>101.14</i>	<i>102.56</i>
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2015 Q1 = 100	109.3	110.0	110.6	111.3	<i>112.0</i>	<i>112.4</i>	<i>113.1</i>	<i>113.8</i>	<i>114.1</i>	<i>115.8</i>	<i>116.5</i>	<i>117.5</i>	110.3	<i>112.8</i>	<i>116.0</i>
Percent change from prior year	3.3	3.2	3.0	2.8	<i>2.4</i>	<i>2.2</i>	<i>2.2</i>	<i>2.2</i>	<i>1.9</i>	<i>2.9</i>	<i>3.0</i>	<i>3.3</i>	3.1	<i>2.3</i>	<i>2.8</i>
OECD Index, 2015 Q1 = 100	106.5	107.1	107.5	108.0	<i>108.7</i>	<i>109.0</i>	<i>109.5</i>	<i>109.9</i>	<i>109.5</i>	<i>111.1</i>	<i>111.4</i>	<i>112.0</i>	107.3	<i>109.3</i>	<i>111.0</i>
Percent change from prior year	2.5	2.5	2.3	2.1	<i>2.1</i>	<i>1.8</i>	<i>1.8</i>	<i>1.7</i>	<i>0.7</i>	<i>1.9</i>	<i>1.8</i>	<i>1.9</i>	2.3	<i>1.9</i>	<i>1.6</i>
Non-OECD Index, 2015 Q1 = 100	112.0	112.8	113.6	114.5	<i>115.1</i>	<i>115.8</i>	<i>116.5</i>	<i>117.5</i>	<i>118.5</i>	<i>120.3</i>	<i>121.5</i>	<i>122.9</i>	113.2	<i>116.2</i>	<i>120.8</i>
Percent change from prior year	4.1	3.9	3.6	3.5	<i>2.7</i>	<i>2.7</i>	<i>2.6</i>	<i>2.7</i>	<i>2.9</i>	<i>3.9</i>	<i>4.2</i>	<i>4.6</i>	3.8	<i>2.7</i>	<i>3.9</i>
Real U.S. Dollar Exchange Rate (a)															
Index, 2015 Q1 = 100	100.73	102.80	105.52	106.17	<i>105.11</i>	<i>105.81</i>	<i>105.66</i>	<i>104.71</i>	<i>103.76</i>	<i>102.95</i>	<i>102.27</i>	<i>101.72</i>	103.81	<i>105.32</i>	<i>102.67</i>
Percent change from prior year	-4.0	-0.7	3.4	3.7	<i>4.3</i>	<i>2.9</i>	<i>0.1</i>	<i>-1.4</i>	<i>-1.3</i>	<i>-2.7</i>	<i>-3.2</i>	<i>-2.9</i>	0.6	<i>1.5</i>	<i>-2.5</i>

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

(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. GDP and exchange rate data are from Oxford Economics, and oil consumption data are from EIA.

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.

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	10.23	10.54	11.24	11.81	11.81	12.20	12.44	12.83	13.05	13.24	13.32	13.44	10.96	12.32	13.26
Alaska	0.51	0.48	0.43	0.49	0.49	0.49	0.45	0.49	0.51	0.50	0.46	0.49	0.48	0.48	0.49
Federal Gulf of Mexico (b)	1.67	1.58	1.85	1.86	1.85	1.94	1.91	2.02	2.11	2.10	2.03	2.03	1.74	1.93	2.06
Lower 48 States (excl GOM)	8.05	8.47	8.96	9.46	9.48	9.76	10.07	10.31	10.43	10.64	10.83	10.92	8.74	9.91	10.71
Crude Oil Net Imports (c)	6.18	6.19	5.84	4.82	4.25	4.39	4.82	4.26	4.21	4.64	4.54	4.21	5.75	4.43	4.40
SPR Net Withdrawals	-0.03	0.06	0.00	0.12	0.00	0.05	0.00	0.04	0.04	0.04	0.01	0.03	0.04	0.02	0.03
Commercial Inventory Net Withdrawals	-0.02	0.09	-0.01	-0.28	-0.19	-0.15	0.09	-0.09	-0.32	0.09	0.15	-0.08	-0.06	-0.09	-0.04
Crude Oil Adjustment (d)	0.05	0.26	0.25	0.52	0.33	0.43	0.21	0.15	0.19	0.19	0.21	0.15	0.27	0.28	0.19
Total Crude Oil Input to Refineries	16.41	17.14	17.32	16.99	16.20	16.91	17.56	17.19	17.17	18.20	18.23	17.76	16.97	16.97	17.84
Other Supply															
Refinery Processing Gain	1.11	1.12	1.17	1.16	1.06	1.13	1.14	1.19	1.20	1.25	1.27	1.28	1.14	1.13	1.25
Natural Gas Plant Liquids Production	4.01	4.30	4.54	4.54	4.66	4.86	5.05	5.25	5.20	5.25	5.35	5.42	4.35	4.96	5.31
Renewables and Oxygenate Production (e)	1.21	1.22	1.25	1.22	1.18	1.23	1.20	1.21	1.19	1.24	1.23	1.23	1.23	1.20	1.22
Fuel Ethanol Production	1.05	1.04	1.06	1.04	1.01	1.05	1.04	1.04	1.04	1.06	1.05	1.05	1.05	1.04	1.05
Petroleum Products Adjustment (f)	0.21	0.21	0.21	0.22	0.20	0.22	0.22	0.23	0.22	0.24	0.24	0.24	0.21	0.22	0.23
Product Net Imports (c)	-3.13	-3.44	-3.17	-3.91	-3.35	-3.50	-3.91	-4.46	-4.79	-4.93	-4.80	-5.28	-3.41	-3.81	-4.95
Hydrocarbon Gas Liquids	-1.22	-1.53	-1.49	-1.38	-1.33	-1.77	-1.81	-1.93	-1.98	-1.98	-1.98	-2.07	-1.41	-1.71	-1.99
Unfinished Oils	0.39	0.32	0.35	0.28	0.21	0.36	0.38	0.35	0.50	0.62	0.61	0.51	0.33	0.33	0.56
Other HC/Oxygenates	-0.18	-0.15	-0.13	-0.15	-0.13	-0.12	-0.12	-0.10	-0.13	-0.12	-0.12	-0.12	-0.15	-0.12	-0.12
Motor Gasoline Blend Comp.	0.50	0.78	0.66	0.37	0.43	0.69	0.45	0.45	0.44	0.65	0.49	0.45	0.58	0.50	0.51
Finished Motor Gasoline	-0.94	-0.71	-0.72	-1.00	-0.82	-0.59	-0.67	-1.02	-1.15	-1.03	-0.89	-1.29	-0.84	-0.78	-1.09
Jet Fuel	-0.10	-0.10	-0.06	-0.13	-0.08	-0.02	-0.04	-0.03	-0.03	-0.08	-0.09	-0.08	-0.10	-0.04	-0.07
Distillate Fuel Oil	-0.87	-1.30	-1.14	-1.19	-0.91	-1.38	-1.35	-1.31	-1.51	-1.92	-1.87	-1.63	-1.13	-1.24	-1.73
Residual Fuel Oil	-0.10	-0.14	-0.10	-0.09	-0.08	-0.07	-0.02	-0.03	-0.03	-0.13	-0.03	-0.06	-0.11	-0.05	-0.06
Other Oils (g)	-0.62	-0.61	-0.53	-0.61	-0.64	-0.59	-0.74	-0.84	-0.95	-0.94	-0.92	-0.99	-0.59	-0.70	-0.95
Product Inventory Net Withdrawals	0.41	-0.21	-0.69	0.38	0.34	-0.52	-0.25	0.33	0.33	-0.50	-0.27	0.36	-0.03	-0.03	-0.02
Total Supply	20.23	20.33	20.63	20.60	20.29	20.33	21.02	20.92	20.53	20.75	21.25	21.01	20.45	20.64	20.89
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	3.22	2.67	2.85	3.22	3.48	2.86	3.08	3.46	3.60	3.10	3.23	3.52	2.99	3.22	3.36
Unfinished Oils	0.13	-0.04	-0.10	0.00	-0.03	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00
Motor Gasoline	9.01	9.51	9.51	9.25	8.96	9.54	9.53	9.25	9.00	9.56	9.59	9.24	9.32	9.32	9.35
Fuel Ethanol blended into Motor Gasoline	0.91	0.94	0.96	0.94	0.91	0.98	0.96	0.95	0.91	0.98	0.98	0.95	0.94	0.95	0.95
Jet Fuel	1.64	1.73	1.78	1.70	1.65	1.79	1.84	1.81	1.74	1.81	1.86	1.83	1.71	1.77	1.81
Distillate Fuel Oil	4.18	4.13	4.05	4.18	4.28	3.92	4.11	4.22	4.22	4.11	4.19	4.27	4.13	4.13	4.20
Residual Fuel Oil	0.28	0.32	0.34	0.34	0.27	0.28	0.35	0.31	0.28	0.23	0.31	0.27	0.32	0.30	0.27
Other Oils (g)	1.78	2.01	2.22	1.91	1.68	1.95	2.11	1.88	1.69	1.94	2.07	1.87	1.98	1.90	1.89
Total Consumption	20.24	20.33	20.63	20.60	20.29	20.33	21.02	20.92	20.53	20.75	21.25	21.01	20.45	20.64	20.89
Total Petroleum and Other Liquids Net Imports	3.05	2.75	2.67	0.91	0.89	0.89	0.91	-0.20	-0.58	-0.28	-0.26	-1.07	2.34	0.62	-0.55
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	423.4	414.8	416.1	441.8	459.3	473.4	465.2	473.9	502.9	494.7	480.8	487.8	441.8	473.9	487.8
Hydrocarbon Gas Liquids	139.3	180.8	224.8	188.5	163.0	215.8	252.2	208.7	168.4	217.4	252.6	207.9	188.5	208.7	207.9
Unfinished Oils	98.3	92.6	92.0	85.9	92.0	95.4	89.4	81.9	92.5	92.5	89.2	82.3	85.9	81.9	82.3
Other HC/Oxygenates	30.5	28.8	30.5	31.4	32.8	31.8	31.0	31.7	33.4	32.4	31.7	32.3	31.4	31.7	32.3
Total Motor Gasoline	239.6	240.3	239.7	246.3	236.1	232.3	222.3	235.5	234.5	229.5	224.1	236.9	246.3	235.5	236.9
Finished Motor Gasoline	23.1	24.7	24.8	25.7	21.7	23.3	23.6	24.3	23.9	22.7	23.6	23.9	25.7	24.3	23.9
Motor Gasoline Blend Comp.	216.5	215.6	214.9	220.5	214.4	209.0	198.6	211.2	210.6	206.8	200.5	213.0	220.5	211.2	213.0
Jet Fuel	40.4	40.8	46.9	41.6	41.6	38.8	41.2	39.8	40.2	41.9	43.4	41.6	41.6	39.8	41.6
Distillate Fuel Oil	130.4	120.4	137.1	140.0	132.4	131.2	136.3	141.0	131.3	133.7	138.8	143.8	140.0	141.0	143.8
Residual Fuel Oil	35.0	30.0	28.6	28.3	28.7	30.4	32.3	34.3	37.0	37.1	35.3	35.1	28.3	34.3	35.1
Other Oils (g)	59.3	58.8	56.1	58.7	63.2	61.4	55.1	57.0	62.3	60.7	54.7	56.7	58.7	57.0	56.7
Total Commercial Inventory	1,196	1,207	1,272	1,262	1,249	1,310	1,325	1,304	1,303	1,340	1,351	1,324	1,262	1,304	1,324
Crude Oil in SPR	665	660	660	649	649	645	645	641	638	634	633	630	649	641	630

- = no data available

(a) Includes lease condensate.

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

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

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

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

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

(g) "Other Oils" 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.

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.

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
HGL Production															
Natural Gas Processing Plants															
Ethane	1.59	1.70	1.76	1.77	1.87	1.94	2.02	2.18	2.22	2.19	2.22	2.31	1.71	2.01	2.23
Propane	1.29	1.37	1.44	1.47	1.50	1.54	1.59	1.62	1.60	1.62	1.65	1.65	1.39	1.56	1.63
Butanes	0.69	0.74	0.78	0.79	0.79	0.83	0.85	0.87	0.84	0.87	0.88	0.88	0.75	0.84	0.87
Natural Gasoline (Pentanes Plus)	0.44	0.50	0.55	0.51	0.49	0.55	0.58	0.57	0.54	0.58	0.60	0.58	0.50	0.55	0.58
Refinery and Blender Net Production															
Ethane/Ethylene	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Propane	0.30	0.31	0.31	0.29	0.28	0.31	0.30	0.29	0.29	0.32	0.31	0.30	0.30	0.30	0.30
Propylene (refinery-grade)	0.28	0.29	0.29	0.31	0.28	0.29	0.28	0.29	0.28	0.29	0.29	0.30	0.29	0.28	0.29
Butanes/Butylenes	-0.11	0.24	0.19	-0.20	-0.09	0.26	0.19	-0.20	-0.08	0.26	0.19	-0.20	0.03	0.04	0.04
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
HGL Net Imports															
Ethane	-0.22	-0.29	-0.26	-0.25	-0.27	-0.31	-0.31	-0.34	-0.36	-0.36	-0.36	-0.40	-0.26	-0.31	-0.37
Propane/Propylene	-0.72	-0.81	-0.87	-0.86	-0.75	-0.94	-0.95	-1.04	-1.00	-1.02	-1.01	-1.09	-0.82	-0.92	-1.03
Butanes/Butylenes	-0.10	-0.20	-0.19	-0.13	-0.14	-0.25	-0.26	-0.26	-0.27	-0.30	-0.28	-0.27	-0.15	-0.23	-0.28
Natural Gasoline (Pentanes Plus)	-0.18	-0.23	-0.17	-0.14	-0.17	-0.26	-0.30	-0.30	-0.30	-0.31	-0.33	-0.32	-0.18	-0.26	-0.31
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.45	0.30	0.32	0.55	0.46	0.31	0.33	0.52	0.43	0.32	0.34	0.53	0.41	0.40	0.40
Natural Gasoline (Pentanes Plus)	0.15	0.16	0.18	0.17	0.14	0.18	0.18	0.18	0.16	0.17	0.17	0.17	0.17	0.17	0.17
HGL Consumption															
Ethane/Ethylene	1.44	1.45	1.51	1.50	1.61	1.61	1.74	1.87	1.85	1.81	1.89	1.94	1.47	1.71	1.87
Propane	1.16	0.60	0.65	1.01	1.20	0.62	0.73	1.00	1.18	0.66	0.73	0.99	0.86	0.89	0.89
Propylene (refinery-grade)	0.32	0.31	0.31	0.29	0.28	0.31	0.30	0.29	0.31	0.32	0.31	0.30	0.30	0.30	0.31
Butanes/Butylenes	0.20	0.21	0.21	0.25	0.20	0.26	0.25	0.22	0.19	0.26	0.24	0.22	0.22	0.23	0.23
Natural Gasoline (Pentanes Plus)	0.10	0.09	0.16	0.18	0.20	0.06	0.06	0.08	0.08	0.06	0.06	0.08	0.13	0.10	0.07
HGL Inventories (million barrels)															
Ethane	51.41	47.90	46.07	50.15	48.14	52.13	50.25	49.79	48.21	51.39	49.51	49.05	48.87	50.08	49.54
Propane	33.83	56.51	75.16	63.67	47.77	70.92	89.02	76.84	48.62	69.99	87.25	74.54	63.67	76.84	74.54
Propylene (refinery-grade)	3.82	3.64	3.86	6.93	7.82	7.77	7.74	8.86	8.92	8.52	8.58	9.38	6.93	8.86	9.38
Butanes/Butylenes	32.02	55.37	78.52	47.44	39.30	64.19	82.63	52.01	40.21	63.89	82.33	51.70	47.44	52.01	51.70
Natural Gasoline (Pentanes Plus)	19.36	18.59	20.34	20.84	18.12	20.74	22.60	22.68	21.42	23.59	24.99	24.80	20.84	22.68	24.80
Refinery and Blender Net Inputs															
Crude Oil	16.41	17.14	17.32	16.99	16.20	16.91	17.56	17.19	17.17	18.20	18.23	17.76	16.97	16.97	17.84
Hydrocarbon Gas Liquids	0.61	0.47	0.50	0.72	0.59	0.48	0.52	0.69	0.59	0.49	0.52	0.70	0.57	0.57	0.57
Other Hydrocarbons/Oxygenates	1.16	1.23	1.22	1.20	1.16	1.27	1.24	1.25	1.22	1.30	1.27	1.26	1.20	1.23	1.26
Unfinished Oils	0.12	0.42	0.45	0.34	0.18	0.33	0.45	0.43	0.39	0.62	0.65	0.59	0.33	0.35	0.56
Motor Gasoline Blend Components	0.34	0.70	0.58	0.26	0.63	0.91	0.67	0.49	0.57	0.84	0.66	0.49	0.47	0.67	0.64
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	18.63	19.96	20.08	19.51	18.76	19.90	20.42	20.06	19.94	21.43	21.33	20.79	19.55	19.79	20.87
Refinery Processing Gain															
.....	1.11	1.12	1.17	1.16	1.06	1.13	1.14	1.19	1.20	1.25	1.27	1.28	1.14	1.13	1.25
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.48	0.84	0.80	0.41	0.48	0.86	0.77	0.39	0.50	0.88	0.78	0.40	0.63	0.63	0.64
Finished Motor Gasoline	9.79	10.14	10.11	10.19	9.84	10.28	10.29	10.43	10.24	10.69	10.56	10.68	10.06	10.21	10.54
Jet Fuel	1.72	1.83	1.90	1.77	1.73	1.78	1.91	1.82	1.78	1.92	1.97	1.89	1.81	1.81	1.89
Distillate Fuel	4.81	5.25	5.29	5.32	5.05	5.22	5.43	5.50	5.59	5.99	6.04	5.89	5.17	5.30	5.88
Residual Fuel	0.44	0.40	0.42	0.43	0.36	0.37	0.39	0.36	0.33	0.36	0.32	0.33	0.42	0.37	0.33
Other Oils (a)	2.49	2.61	2.72	2.55	2.37	2.52	2.78	2.74	2.70	2.86	2.92	2.88	2.59	2.60	2.84
Total Refinery and Blender Net Production	19.74	21.08	21.25	20.67	19.82	21.03	21.57	21.24	21.14	22.69	22.60	22.07	20.69	20.92	22.12
Refinery Distillation Inputs															
.....	16.76	17.50	17.69	17.33	16.48	17.15	17.72	17.35	17.18	18.09	18.19	17.75	17.32	17.18	17.80
Refinery Operable Distillation Capacity															
.....	18.57	18.60	18.60	18.60	18.78	18.81	18.81	18.82	18.83	18.83	18.83	18.86	18.59	18.81	18.83
Refinery Distillation Utilization Factor															
.....	0.90	0.94	0.95	0.93	0.88	0.91	0.94	0.92	0.91	0.96	0.97	0.94	0.93	0.91	0.95

- = no data available

(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.**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.

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Prices (cents per gallon)															
Refiner Wholesale Price	186	213	213	178	167	203	197	185	194	206	202	187	198	188	197
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	255	279	278	257	233	270	269	267	267	278	277	268	268	260	273
PADD 2	246	274	276	245	223	270	268	257	261	275	273	259	261	255	267
PADD 3	230	261	258	231	206	248	245	236	242	256	251	237	245	235	247
PADD 4	247	288	297	281	226	279	274	262	251	275	282	264	279	261	268
PADD 5	312	342	335	333	297	349	318	301	305	335	331	306	330	317	319
U.S. Average	258	285	284	262	236	280	273	264	267	283	281	267	273	264	275
Gasoline All Grades Including Taxes	270	294	292	271	245	288	284	276	279	295	294	279	282	274	287
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	58.4	66.5	70.2	62.9	62.4	63.6	57.2	61.0	60.3	61.0	58.5	62.0	62.9	61.0	62.0
PADD 2	57.3	53.5	53.1	56.1	53.9	48.6	48.0	50.3	53.0	50.0	48.8	50.9	56.1	50.3	50.9
PADD 3	84.2	82.3	80.5	90.6	82.5	82.3	80.8	84.7	83.5	82.4	81.0	84.8	90.6	84.7	84.8
PADD 4	7.7	7.3	7.0	7.3	6.9	7.5	7.0	7.5	7.3	7.3	6.8	7.2	7.3	7.5	7.2
PADD 5	32.0	30.7	28.8	29.4	30.4	30.4	29.3	32.0	30.4	28.8	29.1	32.0	29.4	32.0	32.0
U.S. Total	239.6	240.3	239.7	246.3	236.1	232.3	222.3	235.5	234.5	229.5	224.1	236.9	246.3	235.5	236.9
Finished Gasoline Inventories															
U.S. Total	23.1	24.7	24.8	25.7	21.7	23.3	23.6	24.3	23.9	22.7	23.6	23.9	25.7	24.3	23.9
Gasoline Blending Components Inventories															
U.S. Total	216.5	215.6	214.9	220.5	214.4	209.0	198.6	211.2	210.6	206.8	200.5	213.0	220.5	211.2	213.0

- = 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.

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (billion cubic feet per day)															
Total Marketed Production	84.93	87.39	91.50	94.79	95.89	<i>97.05</i>	<i>98.22</i>	<i>99.09</i>	<i>99.01</i>	<i>99.11</i>	<i>99.30</i>	<i>98.88</i>	89.69	<i>97.57</i>	<i>99.07</i>
Alaska	1.00	0.92	0.86	0.96	0.96	<i>0.85</i>	<i>0.78</i>	<i>0.95</i>	<i>1.00</i>	<i>0.87</i>	<i>0.79</i>	<i>0.95</i>	0.94	<i>0.89</i>	<i>0.90</i>
Federal GOM (a)	2.57	2.48	2.86	2.77	2.81	<i>2.97</i>	<i>2.85</i>	<i>2.83</i>	<i>2.90</i>	<i>2.85</i>	<i>2.72</i>	<i>2.69</i>	2.67	<i>2.86</i>	<i>2.79</i>
Lower 48 States (excl GOM)	81.37	83.98	87.79	91.05	92.12	<i>93.23</i>	<i>94.59</i>	<i>95.32</i>	<i>95.10</i>	<i>95.39</i>	<i>95.79</i>	<i>95.25</i>	86.08	<i>93.83</i>	<i>95.38</i>
Total Dry Gas Production	79.13	81.17	84.96	88.22	89.14	<i>90.14</i>	<i>91.17</i>	<i>91.93</i>	<i>91.80</i>	<i>91.84</i>	<i>91.97</i>	<i>91.54</i>	83.40	<i>90.60</i>	<i>91.79</i>
LNG Gross Imports	0.33	0.10	0.15	0.26	0.28	<i>0.17</i>	<i>0.17</i>	<i>0.21</i>	<i>0.32</i>	<i>0.18</i>	<i>0.18</i>	<i>0.20</i>	0.21	<i>0.21</i>	<i>0.22</i>
LNG Gross Exports	2.64	2.79	2.95	3.48	4.01	<i>4.44</i>	<i>4.82</i>	<i>6.08</i>	<i>6.61</i>	<i>6.14</i>	<i>6.75</i>	<i>7.91</i>	2.97	<i>4.84</i>	<i>6.86</i>
Pipeline Gross Imports	8.76	7.63	7.50	7.22	8.35	<i>7.11</i>	<i>6.94</i>	<i>7.53</i>	<i>8.36</i>	<i>6.85</i>	<i>6.96</i>	<i>7.46</i>	7.77	<i>7.48</i>	<i>7.41</i>
Pipeline Gross Exports	7.02	6.16	7.07	7.48	7.84	<i>7.20</i>	<i>7.12</i>	<i>7.89</i>	<i>9.43</i>	<i>8.12</i>	<i>7.73</i>	<i>8.26</i>	6.93	<i>7.51</i>	<i>8.38</i>
Supplemental Gaseous Fuels	0.21	0.17	0.19	0.18	0.19	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	<i>0.19</i>	0.19	<i>0.19</i>	<i>0.19</i>
Net Inventory Withdrawals	18.31	-8.85	-8.23	2.58	16.94	<i>-13.90</i>	<i>-10.78</i>	<i>2.97</i>	<i>16.15</i>	<i>-11.21</i>	<i>-7.90</i>	<i>4.33</i>	0.88	<i>-1.26</i>	<i>0.33</i>
Total Supply	97.09	71.26	74.55	87.49	103.05	<i>72.07</i>	<i>75.74</i>	<i>88.87</i>	<i>100.78</i>	<i>73.59</i>	<i>76.93</i>	<i>87.56</i>	82.55	<i>84.87</i>	<i>84.70</i>
Balancing Item (b)	0.52	-0.56	-0.46	-1.37	-0.31	<i>0.00</i>	<i>-0.83</i>	<i>-1.65</i>	<i>0.05</i>	<i>-0.49</i>	<i>-0.51</i>	<i>-0.34</i>	-0.47	<i>-0.70</i>	<i>-0.32</i>
Total Primary Supply	97.61	70.71	74.09	86.12	102.74	<i>72.07</i>	<i>74.91</i>	<i>87.22</i>	<i>100.83</i>	<i>73.10</i>	<i>76.42</i>	<i>87.22</i>	82.08	<i>84.17</i>	<i>84.38</i>
Consumption (billion cubic feet per day)															
Residential	25.77	7.98	3.45	17.53	27.13	<i>7.75</i>	<i>3.66</i>	<i>17.29</i>	<i>25.65</i>	<i>7.48</i>	<i>3.74</i>	<i>16.72</i>	13.63	<i>13.90</i>	<i>13.38</i>
Commercial	15.36	6.61	4.58	11.65	16.07	<i>6.70</i>	<i>4.74</i>	<i>11.02</i>	<i>14.95</i>	<i>6.43</i>	<i>4.69</i>	<i>10.47</i>	9.53	<i>9.61</i>	<i>9.13</i>
Industrial	24.30	21.82	21.30	23.41	24.91	<i>21.97</i>	<i>21.62</i>	<i>24.45</i>	<i>25.29</i>	<i>22.65</i>	<i>21.92</i>	<i>25.01</i>	22.70	<i>23.23</i>	<i>23.72</i>
Electric Power (c)	24.91	27.62	37.78	26.04	26.62	<i>28.30</i>	<i>37.39</i>	<i>26.50</i>	<i>26.60</i>	<i>28.90</i>	<i>38.29</i>	<i>26.89</i>	29.11	<i>29.72</i>	<i>30.18</i>
Lease and Plant Fuel	4.55	4.68	4.90	5.08	5.14	<i>5.20</i>	<i>5.26</i>	<i>5.31</i>	<i>5.31</i>	<i>5.31</i>	<i>5.32</i>	<i>5.30</i>	4.81	<i>5.23</i>	<i>5.31</i>
Pipeline and Distribution Use	2.60	1.88	1.97	2.29	2.73	<i>2.00</i>	<i>2.11</i>	<i>2.52</i>	<i>2.89</i>	<i>2.19</i>	<i>2.33</i>	<i>2.70</i>	2.18	<i>2.34</i>	<i>2.53</i>
Vehicle Use	0.12	0.12	0.12	0.12	0.13	<i>0.13</i>	<i>0.13</i>	<i>0.13</i>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	0.12	<i>0.13</i>	<i>0.14</i>
Total Consumption	97.61	70.71	74.09	86.12	102.74	<i>72.07</i>	<i>74.91</i>	<i>87.22</i>	<i>100.83</i>	<i>73.10</i>	<i>76.42</i>	<i>87.22</i>	82.08	<i>84.17</i>	<i>84.38</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	1,391	2,196	2,951	2,709	1,185	<i>2,449</i>	<i>3,441</i>	<i>3,169</i>	<i>1,699</i>	<i>2,720</i>	<i>3,446</i>	<i>3,047</i>	2,709	<i>3,169</i>	<i>3,047</i>
East Region (d)	229	465	778	659	216	<i>560</i>	<i>909</i>	<i>809</i>	<i>319</i>	<i>641</i>	<i>889</i>	<i>765</i>	659	<i>809</i>	<i>765</i>
Midwest Region (d)	261	459	846	777	242	<i>583</i>	<i>994</i>	<i>858</i>	<i>315</i>	<i>579</i>	<i>902</i>	<i>762</i>	777	<i>858</i>	<i>762</i>
South Central Region (d)	614	846	846	880	520	<i>919</i>	<i>1,063</i>	<i>1,074</i>	<i>754</i>	<i>1,037</i>	<i>1,121</i>	<i>1,060</i>	880	<i>1,074</i>	<i>1,060</i>
Mountain Region (d)	87	140	179	141	63	<i>123</i>	<i>174</i>	<i>148</i>	<i>106</i>	<i>151</i>	<i>193</i>	<i>158</i>	141	<i>148</i>	<i>158</i>
Pacific Region (d)	169	253	263	214	115	<i>234</i>	<i>269</i>	<i>248</i>	<i>174</i>	<i>281</i>	<i>311</i>	<i>272</i>	214	<i>248</i>	<i>272</i>
Alaska	31	33	38	37	30	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	<i>31</i>	37	<i>31</i>	<i>31</i>

- = no data available

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

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

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

 (d) For a list of States in each inventory region refer to *Weekly Natural Gas Storage Report, Notes and Definitions* (<http://ir.eia.gov/ngs/notes.html>) .

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

LNG: liquefied natural gas.

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.

Projections: EIA Regional Short-Term Energy Model.

Table 5b. U.S. Regional Natural Gas Prices (dollars per thousand cubic feet)
U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Wholesale/Spot															
Henry Hub Spot Price	3.13	2.96	3.04	3.94	3.02	2.69	2.74	3.05	3.11	2.66	2.72	3.00	3.27	2.88	2.87
Residential Retail															
New England	14.38	16.60	19.08	14.42	14.43	14.36	16.95	13.50	13.09	13.89	16.97	13.42	15.00	14.32	13.56
Middle Atlantic	10.17	11.92	18.30	11.39	10.77	11.98	16.39	11.38	10.56	12.34	16.72	11.21	11.30	11.42	11.45
E. N. Central	7.20	9.77	18.40	8.02	7.27	10.29	16.24	8.75	7.95	10.71	16.35	8.68	8.42	8.55	9.10
W. N. Central	8.15	10.48	18.55	9.06	7.92	10.40	16.78	9.02	8.25	11.04	16.87	9.28	9.29	9.00	9.47
S. Atlantic	11.07	15.63	24.88	12.47	11.60	16.36	22.30	13.15	11.74	16.54	22.55	13.02	12.98	13.43	13.57
E. S. Central	9.61	12.70	21.52	10.58	9.58	13.81	20.24	12.94	10.74	15.31	21.40	13.59	10.90	11.49	12.80
W. S. Central	9.27	14.25	22.03	10.19	8.26	13.30	19.89	12.05	9.04	14.53	20.60	12.24	10.98	11.06	11.65
Mountain	8.22	10.38	14.03	7.69	7.72	9.34	13.15	8.71	8.63	9.97	13.59	8.97	8.74	8.60	9.35
Pacific	11.62	12.02	12.88	11.75	12.43	12.48	12.47	11.35	12.50	12.70	12.95	11.85	11.87	12.13	12.38
U.S. Average	9.37	11.93	17.93	9.97	9.46	11.80	16.39	10.61	9.82	12.24	16.71	10.70	10.49	10.60	10.92
Commercial Retail															
New England	11.05	11.73	10.85	10.56	11.07	10.77	9.98	9.48	9.52	9.41	9.25	9.29	10.99	10.43	9.41
Middle Atlantic	8.13	7.67	7.47	7.86	8.46	7.63	6.91	7.54	7.77	7.60	6.98	7.53	7.89	7.87	7.57
E. N. Central	6.19	6.95	9.01	6.55	6.27	7.32	8.71	6.82	6.62	7.53	8.77	6.77	6.62	6.75	6.96
W. N. Central	6.96	7.30	8.91	7.11	6.80	7.22	8.52	7.07	7.33	7.60	8.59	7.09	7.20	7.06	7.40
S. Atlantic	8.29	9.35	9.73	8.70	8.82	9.24	9.65	9.03	9.05	9.80	10.04	9.01	8.75	9.05	9.28
E. S. Central	8.62	9.32	10.51	8.84	8.52	9.31	9.78	8.73	8.37	9.28	9.67	8.61	8.98	8.83	8.72
W. S. Central	7.21	7.90	8.55	6.99	6.41	7.28	7.93	7.39	7.11	7.44	7.90	7.32	7.44	7.03	7.35
Mountain	6.99	7.48	7.92	6.24	6.38	6.79	7.72	6.85	7.15	7.42	8.12	7.06	6.91	6.72	7.27
Pacific	8.90	8.58	9.11	8.68	9.06	8.93	8.80	8.41	8.67	8.68	8.85	8.52	8.80	8.81	8.65
U.S. Average	7.64	8.08	8.77	7.61	7.62	8.00	8.35	7.68	7.68	8.09	8.42	7.68	7.82	7.78	7.83
Industrial Retail															
New England	8.95	8.62	6.49	7.91	9.03	7.87	6.92	8.08	8.69	7.85	7.12	8.02	8.17	8.13	8.05
Middle Atlantic	8.33	8.07	7.73	7.89	8.75	7.36	7.15	7.41	7.85	7.16	7.09	7.35	8.11	7.90	7.52
E. N. Central	5.69	5.02	5.20	5.74	5.69	5.64	5.59	5.58	6.19	5.70	5.49	5.55	5.53	5.64	5.83
W. N. Central	5.05	4.23	4.21	5.05	5.09	4.27	4.17	4.86	5.38	4.38	4.14	4.90	4.69	4.67	4.77
S. Atlantic	5.34	4.67	4.68	5.42	5.48	4.60	4.53	5.10	5.47	4.66	4.58	5.02	5.06	4.97	4.96
E. S. Central	4.93	4.21	4.14	4.90	4.92	4.14	4.09	4.73	4.98	4.30	4.21	4.73	4.59	4.50	4.58
W. S. Central	3.32	3.09	3.12	4.02	3.48	2.97	2.97	3.23	3.34	2.82	2.93	3.16	3.38	3.15	3.06
Mountain	5.43	5.36	4.72	4.79	5.33	5.21	5.63	5.79	5.97	5.54	5.65	5.67	5.09	5.49	5.73
Pacific	6.97	6.03	6.72	6.65	7.61	6.65	6.32	6.36	6.91	6.29	6.32	6.42	6.61	6.73	6.51
U.S. Average	4.44	3.83	3.73	4.71	4.68	3.74	3.61	4.15	4.54	3.66	3.60	4.10	4.20	4.06	4.00

- = no data available

Prices are not adjusted for inflation.

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

Regions refer to U.S. Census divisions.

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

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

Natural gas Henry Hub spot price from Reuter's News Service (<http://www.reuters.com>).

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (million short tons)															
Production	187.6	180.8	194.7	192.4	170.3	<i>170.8</i>	<i>183.0</i>	<i>175.7</i>	<i>171.8</i>	<i>138.3</i>	<i>168.6</i>	<i>166.8</i>	755.5	<i>699.8</i>	<i>645.5</i>
Appalachia	50.0	51.6	49.0	49.5	47.4	<i>46.5</i>	<i>48.7</i>	<i>46.9</i>	<i>43.6</i>	<i>39.0</i>	<i>41.7</i>	<i>40.8</i>	200.1	<i>189.6</i>	<i>165.1</i>
Interior	34.0	34.6	34.7	33.9	31.0	<i>32.1</i>	<i>33.5</i>	<i>32.7</i>	<i>32.9</i>	<i>25.9</i>	<i>32.4</i>	<i>33.5</i>	137.1	<i>129.2</i>	<i>124.7</i>
Western	103.7	94.6	111.0	109.0	91.9	<i>92.2</i>	<i>100.8</i>	<i>96.1</i>	<i>95.3</i>	<i>73.4</i>	<i>94.5</i>	<i>92.5</i>	418.3	<i>381.1</i>	<i>355.6</i>
Primary Inventory Withdrawals	-2.8	2.3	1.1	-0.6	0.8	<i>0.3</i>	<i>0.7</i>	<i>-2.0</i>	<i>-0.1</i>	<i>0.9</i>	<i>2.3</i>	<i>-2.9</i>	0.0	<i>-0.2</i>	<i>0.2</i>
Imports	1.4	1.5	1.4	1.6	1.7	<i>1.8</i>	<i>1.7</i>	<i>1.5</i>	<i>1.2</i>	<i>1.3</i>	<i>1.5</i>	<i>1.4</i>	6.0	<i>6.8</i>	<i>5.5</i>
Exports	27.2	30.9	29.1	28.5	25.2	<i>25.8</i>	<i>24.0</i>	<i>23.7</i>	<i>26.0</i>	<i>22.7</i>	<i>22.4</i>	<i>22.2</i>	115.6	<i>98.7</i>	<i>93.2</i>
Metallurgical Coal	14.9	16.9	14.5	15.2	13.9	<i>14.0</i>	<i>12.3</i>	<i>12.2</i>	<i>13.9</i>	<i>12.5</i>	<i>12.9</i>	<i>12.7</i>	61.5	<i>52.4</i>	<i>51.9</i>
Steam Coal	12.3	13.9	14.5	13.3	11.3	<i>11.9</i>	<i>11.7</i>	<i>11.4</i>	<i>12.1</i>	<i>10.1</i>	<i>9.5</i>	<i>9.5</i>	54.1	<i>46.3</i>	<i>41.3</i>
Total Primary Supply	159.0	153.7	168.1	165.0	147.6	<i>147.0</i>	<i>161.5</i>	<i>151.6</i>	<i>147.0</i>	<i>117.8</i>	<i>150.0</i>	<i>143.2</i>	645.9	<i>607.7</i>	<i>558.0</i>
Secondary Inventory Withdrawals	11.8	4.9	20.4	-2.3	5.8	<i>-6.1</i>	<i>5.9</i>	<i>-7.9</i>	<i>-1.2</i>	<i>2.7</i>	<i>6.6</i>	<i>-8.1</i>	34.8	<i>-2.2</i>	<i>-0.1</i>
Waste Coal (a)	2.8	2.3	2.6	2.5	2.3	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	10.1	<i>9.3</i>	<i>9.2</i>
Total Supply	173.5	160.9	191.2	165.2	155.8	<i>143.3</i>	<i>169.7</i>	<i>146.0</i>	<i>148.0</i>	<i>122.7</i>	<i>158.9</i>	<i>137.3</i>	690.8	<i>614.8</i>	<i>567.0</i>
Consumption (million short tons)															
Coke Plants	4.2	4.6	4.7	4.7	4.2	<i>5.0</i>	<i>5.6</i>	<i>6.2</i>	<i>5.2</i>	<i>5.1</i>	<i>5.1</i>	<i>6.3</i>	18.3	<i>21.0</i>	<i>21.6</i>
Electric Power Sector (b)	154.8	144.2	181.6	155.9	145.0	<i>116.4</i>	<i>157.0</i>	<i>132.6</i>	<i>135.4</i>	<i>110.6</i>	<i>146.9</i>	<i>124.0</i>	636.5	<i>551.1</i>	<i>517.0</i>
Retail and Other Industry	8.5	7.9	7.7	8.4	8.1	<i>7.3</i>	<i>7.1</i>	<i>7.2</i>	<i>7.4</i>	<i>7.0</i>	<i>6.9</i>	<i>7.1</i>	32.5	<i>29.7</i>	<i>28.4</i>
Residential and Commercial	0.4	0.2	0.2	0.2	0.2	<i>0.2</i>	<i>0.2</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.2</i>	<i>0.2</i>	1.0	<i>0.7</i>	<i>0.7</i>
Other Industrial	8.2	7.7	7.5	8.2	7.9	<i>7.2</i>	<i>6.9</i>	<i>7.0</i>	<i>7.3</i>	<i>6.9</i>	<i>6.7</i>	<i>6.9</i>	31.6	<i>29.0</i>	<i>27.7</i>
Total Consumption	167.6	156.6	194.1	169.1	157.3	<i>128.7</i>	<i>169.7</i>	<i>146.0</i>	<i>148.0</i>	<i>122.7</i>	<i>158.9</i>	<i>137.3</i>	687.3	<i>601.8</i>	<i>567.0</i>
Discrepancy (c)	5.9	4.3	-2.9	-3.8	-1.6	<i>14.6</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	3.5	<i>13.0</i>	<i>0.0</i>
End-of-period Inventories (million short tons)															
Primary Inventories (d)	26.8	24.5	23.4	24.0	23.2	<i>22.9</i>	<i>22.2</i>	<i>24.2</i>	<i>24.3</i>	<i>23.4</i>	<i>21.1</i>	<i>24.0</i>	24.0	<i>24.2</i>	<i>24.0</i>
Secondary Inventories	131.2	126.3	105.9	108.1	102.3	<i>108.3</i>	<i>102.4</i>	<i>110.3</i>	<i>111.6</i>	<i>108.9</i>	<i>102.3</i>	<i>110.5</i>	108.1	<i>110.3</i>	<i>110.5</i>
Electric Power Sector	126.5	121.5	100.8	102.8	97.1	<i>102.8</i>	<i>96.7</i>	<i>104.7</i>	<i>106.0</i>	<i>103.0</i>	<i>96.3</i>	<i>104.6</i>	102.8	<i>104.7</i>	<i>104.6</i>
Retail and General Industry	2.9	2.9	3.0	3.3	3.6	<i>3.5</i>	<i>3.6</i>	<i>3.4</i>	<i>3.7</i>	<i>3.6</i>	<i>3.7</i>	<i>3.5</i>	3.3	<i>3.4</i>	<i>3.5</i>
Coke Plants	1.5	1.6	1.8	1.8	1.4	<i>1.8</i>	<i>2.0</i>	<i>2.1</i>	<i>1.6</i>	<i>2.0</i>	<i>2.2</i>	<i>2.2</i>	1.8	<i>2.1</i>	<i>2.2</i>
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	6.10	6.10	6.10	6.10	6.02	<i>6.02</i>	<i>6.02</i>	<i>6.02</i>	<i>6.01</i>	<i>6.01</i>	<i>6.01</i>	<i>6.01</i>	6.10	<i>6.02</i>	<i>6.01</i>
Total Raw Steel Production															
(Million short tons per day)	0.251	0.253	0.263	0.270	0.273	<i>0.270</i>	<i>0.260</i>	<i>0.259</i>	<i>0.263</i>	<i>0.265</i>	<i>0.259</i>	<i>0.261</i>	0.259	<i>0.265</i>	<i>0.262</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.06	2.06	2.06	2.08	2.09	<i>2.13</i>	<i>2.10</i>	<i>2.11</i>	<i>2.13</i>	<i>2.14</i>	<i>2.12</i>	<i>2.12</i>	2.06	<i>2.11</i>	<i>2.13</i>

- = no data available

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

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

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

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

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.

Projections: EIA Regional Short-Term Energy Model.

Table 7a. U.S. Electricity Industry Overview

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Electricity Supply (billion kilowatthours per day)															
Electricity Generation	11.13	11.14	12.80	10.71	11.05	<i>10.80</i>	<i>12.39</i>	<i>10.58</i>	<i>11.02</i>	<i>10.82</i>	<i>12.47</i>	<i>10.60</i>	11.45	<i>11.21</i>	<i>11.23</i>
Electric Power Sector (a)	10.69	10.71	12.35	10.27	10.61	<i>10.37</i>	<i>11.95</i>	<i>10.15</i>	<i>10.58</i>	<i>10.38</i>	<i>12.02</i>	<i>10.17</i>	11.01	<i>10.77</i>	<i>10.79</i>
Comm. and Indus. Sectors (b)	0.43	0.43	0.45	0.44	0.44	<i>0.43</i>	<i>0.44</i>	<i>0.43</i>	<i>0.44</i>	<i>0.44</i>	<i>0.45</i>	<i>0.44</i>	0.44	<i>0.44</i>	<i>0.44</i>
Net Imports	0.13	0.12	0.14	0.09	0.14	<i>0.14</i>	<i>0.17</i>	<i>0.13</i>	<i>0.15</i>	<i>0.15</i>	<i>0.17</i>	<i>0.13</i>	0.12	<i>0.14</i>	<i>0.15</i>
Total Supply	11.26	11.26	12.93	10.80	11.18	<i>10.94</i>	<i>12.56</i>	<i>10.70</i>	<i>11.16</i>	<i>10.97</i>	<i>12.64</i>	<i>10.74</i>	11.57	<i>11.35</i>	<i>11.38</i>
Losses and Unaccounted for (c)	0.64	0.93	0.80	0.66	0.64	<i>0.80</i>	<i>0.73</i>	<i>0.67</i>	<i>0.58</i>	<i>0.82</i>	<i>0.73</i>	<i>0.67</i>	0.76	<i>0.71</i>	<i>0.70</i>
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	10.23	9.95	11.73	9.75	10.14	<i>9.76</i>	<i>11.43</i>	<i>9.65</i>	<i>10.19</i>	<i>9.75</i>	<i>11.51</i>	<i>9.67</i>	10.42	<i>10.24</i>	<i>10.28</i>
Residential Sector	4.10	3.60	4.72	3.62	4.02	<i>3.46</i>	<i>4.51</i>	<i>3.54</i>	<i>4.06</i>	<i>3.45</i>	<i>4.57</i>	<i>3.57</i>	4.01	<i>3.88</i>	<i>3.91</i>
Commercial Sector	3.61	3.70	4.21	3.57	3.57	<i>3.66</i>	<i>4.13</i>	<i>3.56</i>	<i>3.58</i>	<i>3.67</i>	<i>4.15</i>	<i>3.57</i>	3.77	<i>3.73</i>	<i>3.74</i>
Industrial Sector	2.50	2.62	2.78	2.55	2.53	<i>2.62</i>	<i>2.77</i>	<i>2.53</i>	<i>2.52</i>	<i>2.61</i>	<i>2.76</i>	<i>2.52</i>	2.61	<i>2.61</i>	<i>2.60</i>
Transportation Sector	0.02	0.02	0.02	0.02	0.02	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	0.02	<i>0.02</i>	<i>0.02</i>
Direct Use (d)	0.39	0.38	0.41	0.39	0.40	<i>0.39</i>	<i>0.40</i>	<i>0.39</i>	<i>0.39</i>	<i>0.39</i>	<i>0.40</i>	<i>0.39</i>	0.39	<i>0.39</i>	<i>0.40</i>
Total Consumption	10.62	10.33	12.14	10.14	10.54	<i>10.14</i>	<i>11.83</i>	<i>10.03</i>	<i>10.58</i>	<i>10.14</i>	<i>11.91</i>	<i>10.06</i>	10.81	<i>10.64</i>	<i>10.68</i>
Average residential electricity usage per customer (kWh)	2,754	2,446	3,240	2,481	2,668	<i>2,319</i>	<i>3,060</i>	<i>2,404</i>	<i>2,696</i>	<i>2,292</i>	<i>3,067</i>	<i>2,393</i>	10,920	<i>10,450</i>	<i>10,448</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.06	2.06	2.06	2.08	2.09	<i>2.13</i>	<i>2.10</i>	<i>2.11</i>	<i>2.13</i>	<i>2.14</i>	<i>2.12</i>	<i>2.12</i>	2.06	<i>2.11</i>	<i>2.13</i>
Natural Gas	3.96	3.09	3.23	4.05	3.70	<i>2.77</i>	<i>2.71</i>	<i>3.28</i>	<i>3.48</i>	<i>2.71</i>	<i>2.66</i>	<i>3.21</i>	3.54	<i>3.07</i>	<i>2.98</i>
Residual Fuel Oil	11.47	13.02	14.02	14.49	11.93	<i>13.79</i>	<i>12.91</i>	<i>12.73</i>	<i>12.98</i>	<i>13.72</i>	<i>13.02</i>	<i>12.79</i>	12.95	<i>12.82</i>	<i>13.10</i>
Distillate Fuel Oil	15.77	16.61	16.82	16.01	14.92	<i>15.87</i>	<i>16.05</i>	<i>16.88</i>	<i>17.13</i>	<i>17.58</i>	<i>17.49</i>	<i>17.57</i>	16.13	<i>15.94</i>	<i>17.42</i>
Retail Prices (cents per kilowatthour)															
Residential Sector	12.59	13.03	13.15	12.75	12.66	<i>13.29</i>	<i>13.35</i>	<i>12.93</i>	<i>12.75</i>	<i>13.49</i>	<i>13.50</i>	<i>13.12</i>	12.89	<i>13.06</i>	<i>13.22</i>
Commercial Sector	10.54	10.60	10.89	10.55	10.41	<i>10.71</i>	<i>10.97</i>	<i>10.59</i>	<i>10.42</i>	<i>10.74</i>	<i>11.02</i>	<i>10.67</i>	10.66	<i>10.68</i>	<i>10.73</i>
Industrial Sector	6.81	6.87	7.22	6.82	6.66	<i>6.88</i>	<i>7.20</i>	<i>6.78</i>	<i>6.70</i>	<i>6.93</i>	<i>7.26</i>	<i>6.83</i>	6.93	<i>6.89</i>	<i>6.94</i>

- = no data available. kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

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

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

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

 (d) Direct Use represents commercial and industrial facility use of onsite net electricity generation; and electrical sales or transfers to adjacent or colocated facilities for which revenue information is not available. See Table 7.6 of the EIA *Monthly Energy Review*.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Residential Sector															
New England	140	111	153	120	139	113	140	118	139	113	141	119	131	128	128
Middle Atlantic	394	323	453	338	392	312	418	330	392	313	419	331	377	363	364
E. N. Central	552	480	603	482	556	442	571	474	548	446	575	474	530	511	511
W. N. Central	327	274	318	272	333	243	313	270	324	244	317	270	297	289	289
S. Atlantic	1,040	920	1,184	939	981	911	1,145	901	1,019	883	1,160	908	1,021	985	993
E. S. Central	368	301	396	307	339	289	379	292	360	282	384	293	343	325	329
W. S. Central	608	582	803	534	576	548	767	527	588	557	792	536	632	605	618
Mountain	239	263	360	235	257	252	351	237	255	263	357	240	274	275	279
Pacific contiguous	422	339	439	376	433	335	413	381	424	340	414	383	394	390	390
AK and HI	14	12	13	13	13	12	12	13	13	12	12	13	13	13	13
Total	4,103	3,604	4,722	3,616	4,019	3,456	4,509	3,543	4,062	3,453	4,571	3,566	4,012	3,882	3,914
Commercial Sector															
New England	141	136	159	136	142	136	152	134	139	133	149	130	143	141	138
Middle Atlantic	431	412	479	410	429	404	460	404	425	401	458	402	433	424	421
E. N. Central	499	501	556	484	495	488	545	483	492	490	546	483	510	503	503
W. N. Central	282	282	307	272	284	268	306	273	283	271	309	274	286	283	285
S. Atlantic	811	862	975	819	801	867	957	808	800	852	960	809	867	858	856
E. S. Central	242	253	296	240	234	254	292	238	237	253	294	238	258	254	255
W. S. Central	501	549	637	517	500	542	635	525	513	555	651	535	551	551	564
Mountain	248	269	309	252	252	264	306	254	254	271	309	257	270	269	273
Pacific contiguous	434	424	472	423	423	423	462	423	423	426	463	424	439	433	434
AK and HI	16	15	16	16	15	15	16	15	15	15	16	15	16	15	15
Total	3,606	3,704	4,206	3,567	3,575	3,662	4,130	3,556	3,581	3,667	4,155	3,568	3,772	3,732	3,744
Industrial Sector															
New England	42	43	47	44	42	44	46	43	42	43	46	43	44	44	43
Middle Atlantic	196	194	214	195	197	192	212	194	196	192	212	193	200	199	198
E. N. Central	499	517	530	493	498	516	525	486	495	511	520	480	510	506	501
W. N. Central	232	242	257	239	235	241	258	240	238	244	261	243	242	243	246
S. Atlantic	366	388	404	370	367	380	393	359	358	371	384	350	382	375	366
E. S. Central	257	261	286	261	260	263	283	256	256	258	278	251	266	266	261
W. S. Central	467	500	520	486	492	507	525	488	498	514	533	494	493	503	510
Mountain	209	229	251	219	214	231	255	222	216	233	257	223	227	230	232
Pacific contiguous	216	231	258	226	211	232	257	225	210	232	258	226	233	231	232
AK and HI	13	13	14	14	12	13	14	14	12	13	14	14	13	13	13
Total	2,498	2,618	2,781	2,545	2,527	2,618	2,768	2,527	2,521	2,612	2,760	2,517	2,611	2,610	2,603
Total All Sectors (a)															
New England	325	292	361	301	324	295	340	296	322	290	337	293	320	314	311
Middle Atlantic	1,033	939	1,157	954	1,029	918	1,100	938	1,023	915	1,099	935	1,021	996	993
E. N. Central	1,552	1,500	1,691	1,461	1,551	1,447	1,642	1,443	1,537	1,449	1,642	1,439	1,551	1,521	1,517
W. N. Central	841	798	882	782	852	752	877	782	845	760	887	787	826	816	820
S. Atlantic	2,220	2,173	2,567	2,131	2,152	2,161	2,498	2,071	2,181	2,111	2,507	2,071	2,273	2,221	2,218
E. S. Central	867	815	979	808	834	805	954	786	853	792	955	782	867	845	846
W. S. Central	1,577	1,632	1,961	1,537	1,568	1,597	1,927	1,540	1,599	1,626	1,976	1,565	1,677	1,659	1,692
Mountain	697	762	920	706	723	747	911	714	726	768	923	721	772	774	785
Pacific contiguous	1,075	996	1,172	1,028	1,069	993	1,134	1,031	1,060	1,001	1,137	1,035	1,068	1,057	1,058
AK and HI	42	41	42	42	41	40	42	42	40	40	42	42	42	41	41
Total	10,229	9,947	11,731	9,749	10,143	9,755	11,427	9,646	10,186	9,752	11,506	9,670	10,416	10,245	10,280

- = no data available

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

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.

Projections: EIA Regional Short-Term Energy Model.

Table 7c. U.S. Regional Retail Electricity Prices (Cents per Kilowatthour)
U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Residential Sector															
New England	20.56	20.57	20.39	20.64	21.05	21.09	21.24	21.31	21.56	21.45	21.53	21.67	20.53	21.17	21.55
Middle Atlantic	15.62	16.21	16.34	15.80	15.20	16.17	16.32	15.62	15.07	16.15	16.42	15.80	16.00	15.83	15.86
E. N. Central	12.94	13.48	13.09	13.19	12.93	13.81	13.48	13.52	13.26	14.16	13.84	13.89	13.16	13.41	13.77
W. N. Central	10.90	12.63	13.10	11.39	10.71	13.07	13.52	11.73	11.10	13.51	13.96	12.13	12.00	12.21	12.64
S. Atlantic	11.66	11.90	11.82	11.62	11.70	12.02	11.96	11.73	11.66	12.07	11.97	11.78	11.75	11.86	11.87
E. S. Central	10.86	11.40	11.16	11.17	11.11	11.68	11.50	11.51	11.21	11.91	11.66	11.73	11.14	11.44	11.61
W. S. Central	10.52	11.01	10.97	10.83	10.79	11.20	11.08	10.79	10.66	11.09	11.01	10.80	10.85	10.98	10.90
Mountain	11.58	12.24	12.26	11.76	11.51	12.33	12.43	11.95	11.72	12.58	12.70	12.22	12.00	12.09	12.34
Pacific	14.88	15.27	17.07	14.77	14.85	15.83	17.42	15.05	15.25	16.56	17.95	15.37	15.55	15.79	16.28
U.S. Average	12.59	13.03	13.15	12.75	12.66	13.29	13.35	12.93	12.75	13.49	13.50	13.12	12.89	13.06	13.22
Commercial Sector															
New England	16.59	15.92	16.19	16.44	16.72	16.34	16.63	16.77	16.95	16.51	16.80	16.99	16.28	16.61	16.81
Middle Atlantic	12.10	12.22	13.17	12.08	11.56	12.15	12.92	11.76	11.28	11.94	12.80	11.71	12.42	12.12	11.96
E. N. Central	10.10	10.15	10.08	10.10	10.14	10.33	10.21	10.17	10.20	10.42	10.33	10.31	10.11	10.21	10.31
W. N. Central	9.18	10.03	10.38	9.23	8.97	10.19	10.58	9.42	9.22	10.50	10.93	9.75	9.73	9.81	10.12
S. Atlantic	9.61	9.30	9.18	9.41	9.45	9.36	9.24	9.41	9.39	9.30	9.19	9.39	9.36	9.36	9.31
E. S. Central	10.51	10.48	10.34	10.54	10.71	10.70	10.63	10.81	10.89	10.89	10.79	11.02	10.46	10.71	10.89
W. S. Central	8.37	8.17	8.12	7.94	8.15	8.10	8.01	7.76	7.96	7.98	7.92	7.71	8.15	8.00	7.89
Mountain	9.27	9.88	10.01	9.36	9.20	9.90	10.06	9.40	9.26	9.99	10.19	9.54	9.66	9.67	9.77
Pacific	12.91	14.02	15.81	14.10	12.99	14.40	16.29	14.53	13.31	14.70	16.62	14.86	14.25	14.60	14.92
U.S. Average	10.54	10.60	10.89	10.55	10.41	10.71	10.97	10.59	10.42	10.74	11.02	10.67	10.66	10.68	10.73
Industrial Sector															
New England	13.46	12.60	12.83	12.98	13.32	12.43	12.64	12.80	13.27	12.43	12.65	12.82	12.96	12.79	12.78
Middle Atlantic	7.26	6.82	6.86	6.79	6.73	6.67	6.64	6.54	6.60	6.57	6.54	6.44	6.93	6.64	6.54
E. N. Central	7.10	6.96	6.99	7.01	7.02	7.02	7.00	7.01	7.08	7.09	7.07	7.07	7.01	7.01	7.08
W. N. Central	7.04	7.38	7.99	6.93	7.13	7.62	8.23	7.12	7.34	7.84	8.47	7.33	7.35	7.54	7.76
S. Atlantic	6.54	6.40	6.60	6.39	6.22	6.33	6.49	6.28	6.17	6.30	6.46	6.25	6.48	6.33	6.30
E. S. Central	5.74	5.92	5.87	5.88	5.71	5.90	5.82	5.82	5.71	5.91	5.84	5.84	5.86	5.82	5.82
W. S. Central	5.42	5.41	5.65	5.27	5.25	5.39	5.56	5.17	5.25	5.37	5.55	5.14	5.44	5.35	5.33
Mountain	6.10	6.48	6.93	6.05	6.14	6.52	6.94	6.04	6.17	6.56	6.97	6.07	6.41	6.43	6.47
Pacific	8.63	9.52	11.17	9.89	8.69	9.56	11.31	10.06	8.92	9.81	11.62	10.33	9.87	9.98	10.24
U.S. Average	6.81	6.87	7.22	6.82	6.66	6.88	7.20	6.78	6.70	6.93	7.26	6.83	6.93	6.89	6.94
All Sectors (a)															
New England	17.86	17.16	17.49	17.58	18.11	17.53	17.95	17.96	18.43	17.78	18.18	18.24	17.53	17.90	18.17
Middle Atlantic	12.50	12.47	13.23	12.30	12.02	12.36	12.99	12.04	11.83	12.25	12.97	12.07	12.65	12.37	12.30
E. N. Central	10.14	10.11	10.18	10.07	10.13	10.21	10.32	10.20	10.29	10.39	10.52	10.40	10.13	10.22	10.40
W. N. Central	9.26	10.12	10.66	9.27	9.14	10.30	10.93	9.51	9.41	10.61	11.29	9.82	9.85	9.98	10.30
S. Atlantic	10.06	9.88	9.99	9.86	9.92	9.95	10.05	9.87	9.92	9.93	10.05	9.91	9.95	9.95	9.96
E. S. Central	9.25	9.36	9.36	9.27	9.31	9.48	9.55	9.44	9.47	9.63	9.70	9.62	9.31	9.45	9.61
W. S. Central	8.33	8.34	8.63	8.10	8.21	8.30	8.56	7.97	8.11	8.22	8.52	7.96	8.37	8.28	8.22
Mountain	9.12	9.68	10.05	9.13	9.12	9.67	10.10	9.20	9.21	9.84	10.26	9.35	9.54	9.56	9.71
Pacific	12.81	13.39	15.25	13.40	12.89	13.75	15.56	13.73	13.20	14.18	15.96	14.05	13.76	14.02	14.38
U.S. Average	10.45	10.50	10.93	10.39	10.36	10.59	10.99	10.45	10.43	10.69	11.10	10.57	10.58	10.62	10.71

- = no data available

Prices are not adjusted for inflation.

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

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

Regions refer to U.S. Census divisions.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
United States															
Coal	3,127	2,859	3,559	3,014	2,883	2,301	3,065	2,574	2,691	2,189	2,863	2,398	3,141	2,706	2,536
Natural Gas	3,455	3,806	5,135	3,677	3,799	3,943	5,122	3,764	3,786	4,037	5,258	3,832	4,022	4,160	4,230
Petroleum (a)	102	53	62	53	57	52	61	54	66	54	61	54	67	56	59
Other Gases	34	32	36	31	35	33	37	31	35	33	37	31	33	34	34
Nuclear	2,294	2,155	2,277	2,120	2,261	2,122	2,254	2,108	2,229	2,070	2,203	2,076	2,211	2,186	2,144
Renewable Energy Sources:	2,093	2,212	1,718	1,794	1,989	2,324	1,833	2,023	2,187	2,410	2,029	2,190	1,953	2,042	2,204
Conventional Hydropower	856	944	697	703	800	953	692	687	764	863	742	689	799	782	764
Wind	869	822	582	744	825	914	676	949	1,027	1,040	765	1,072	753	841	976
Wood Biomass	119	112	115	108	110	110	119	113	112	113	120	114	113	113	115
Waste Biomass	61	58	57	58	56	56	57	57	56	57	57	57	59	57	57
Geothermal	46	44	46	47	47	44	44	44	44	43	44	46	46	45	44
Solar	141	232	222	134	151	246	246	174	184	295	303	214	182	204	249
Pumped Storage Hydropower	-15	-13	-22	-15	-12	-12	-18	-14	-14	-12	-18	-14	-16	-14	-15
Other Nonrenewable Fuels (b)	36	35	32	36	34	35	36	36	35	36	36	36	35	35	36
Total Generation	11,127	11,141	12,796	10,710	11,046	10,799	12,391	10,576	11,015	10,817	12,468	10,604	11,446	11,205	11,228
Northeast Census Region															
Coal	149	120	132	115	141	99	86	99	148	53	57	77	129	106	84
Natural Gas	500	527	783	562	592	576	775	604	617	657	825	629	594	637	682
Petroleum (a)	32	3	3	2	6	2	4	4	9	2	4	5	10	4	5
Other Gases	2	1	2	2	2	1	2	2	2	1	2	2	2	2	2
Nuclear	552	507	525	497	534	474	502	456	483	438	463	437	520	492	455
Hydropower (c)	108	114	106	121	119	119	107	106	103	106	102	103	112	113	103
Other Renewables (d)	80	76	71	72	74	76	71	84	87	80	72	87	75	76	82
Other Nonrenewable Fuels (b)	11	10	11	11	11	11	12	12	11	11	12	12	11	11	11
Total Generation	1,435	1,359	1,634	1,381	1,480	1,359	1,558	1,366	1,460	1,349	1,537	1,350	1,452	1,441	1,424
South Census Region															
Coal	1,262	1,260	1,529	1,213	1,051	1,004	1,299	1,016	1,009	923	1,210	927	1,316	1,093	1,018
Natural Gas	2,049	2,345	2,932	2,081	2,133	2,417	2,931	2,118	2,127	2,417	3,014	2,167	2,353	2,401	2,432
Petroleum (a)	39	21	26	20	21	23	27	22	28	24	27	21	26	23	25
Other Gases	13	12	14	12	14	14	14	12	13	13	14	12	13	13	13
Nuclear	1,008	952	1,010	936	997	969	1,026	967	1,023	960	1,031	971	976	990	996
Hydropower (c)	114	127	112	165	168	133	113	143	144	118	107	139	130	139	127
Other Renewables (d)	451	494	375	402	444	519	431	493	543	610	512	566	430	472	558
Other Nonrenewable Fuels (b)	16	16	11	15	15	15	14	15	15	15	14	15	15	15	15
Total Generation	4,952	5,227	6,008	4,844	4,844	5,093	5,856	4,786	4,902	5,079	5,928	4,818	5,260	5,146	5,183
Midwest Census Region															
Coal	1,303	1,140	1,386	1,188	1,221	908	1,213	1,015	1,096	892	1,176	966	1,255	1,089	1,033
Natural Gas	403	441	549	389	460	465	590	401	441	450	611	403	446	479	477
Petroleum (a)	10	7	9	8	9	8	10	8	9	9	10	7	8	9	9
Other Gases	13	12	14	12	14	12	14	12	15	12	15	12	13	13	14
Nuclear	571	539	569	535	564	521	558	526	556	515	540	509	553	542	530
Hydropower (c)	57	58	36	40	46	62	38	35	39	55	36	34	48	45	41
Other Renewables (d)	367	303	234	320	357	374	274	442	466	436	319	511	306	362	433
Other Nonrenewable Fuels (b)	4	3	4	4	3	3	4	4	4	4	4	4	4	4	4
Total Generation	2,727	2,505	2,802	2,495	2,674	2,353	2,700	2,443	2,626	2,374	2,711	2,447	2,632	2,542	2,540
West Census Region															
Coal	413	339	512	497	470	291	468	444	438	321	420	428	441	418	402
Natural Gas	503	493	870	644	614	486	826	641	600	513	809	633	629	642	639
Petroleum (a)	21	21	24	24	21	19	21	21	20	19	20	20	23	20	20
Other Gases	7	7	7	6	5	6	6	6	5	6	6	6	6	6	6
Nuclear	164	158	173	152	166	158	168	158	167	157	169	159	162	162	163
Hydropower (c)	562	632	420	363	455	628	416	389	465	571	478	399	493	471	478
Other Renewables (d)	338	395	340	297	314	402	366	317	326	422	385	338	343	350	368
Other Nonrenewable Fuels (b)	6	6	6	6	5	6	6	6	5	6	6	6	6	6	6
Total Generation	2,013	2,050	2,352	1,990	2,050	1,995	2,278	1,981	2,028	2,015	2,292	1,989	2,102	2,076	2,081

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

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

(c) Conventional hydroelectric and pumped storage generation.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020	
Fuel Consumption for Electricity Generation, All Sectors																
United States																
Coal (thousand st/d)	1,717	1,583	1,972	1,693	1,608	1,276	1,702	1,436	1,482	1,211	1,592	1,343	1,742	1,506	1,407	
Natural Gas (million cf/d)	25,476	28,253	38,432	26,691	27,232	28,986	38,057	27,174	27,303	29,636	38,997	27,599	29,740	30,383	30,897	
Petroleum (thousand b/d)	180	96	111	94	102	95	111	98	120	97	111	98	120	101	106	
Residual Fuel Oil	51	27	31	26	24	22	26	23	28	21	25	24	33	24	25	
Distillate Fuel Oil	71	26	22	24	26	23	24	27	33	24	24	26	36	25	27	
Petroleum Coke (a)	48	40	54	40	46	47	57	44	53	49	58	44	45	49	51	
Other Petroleum Liquids (b)	9	4	5	5	6	3	4	4	6	3	4	4	6	4	4	
Northeast Census Region																
Coal (thousand st/d)	77	63	69	60	71	50	45	52	77	28	30	41	67	54	44	
Natural Gas (million cf/d)	3,815	3,894	5,824	4,051	4,184	4,153	5,691	4,298	4,449	4,761	6,087	4,494	4,400	4,585	4,950	
Petroleum (thousand b/d)	53	6	6	4	10	4	7	6	15	4	7	8	17	7	9	
South Census Region																
Coal (thousand st/d)	659	670	821	658	571	539	694	546	529	490	647	500	702	588	542	
Natural Gas (million cf/d)	14,737	17,259	21,766	15,053	15,166	17,704	21,636	15,214	15,164	17,665	22,204	15,524	17,217	17,442	17,646	
Petroleum (thousand b/d)	72	39	48	37	39	43	50	41	52	45	50	40	49	43	47	
Midwest Census Region																
Coal (thousand st/d)	743	654	793	693	699	519	694	581	622	509	673	553	721	623	589	
Natural Gas (million cf/d)	3,135	3,415	4,307	2,910	3,365	3,490	4,551	2,953	3,259	3,379	4,698	2,961	3,443	3,591	3,576	
Petroleum (thousand b/d)	19	15	17	14	17	17	19	16	18	17	19	15	16	17	18	
West Census Region																
Coal (thousand st/d)	239	195	290	281	267	168	269	257	254	184	242	249	252	240	232	
Natural Gas (million cf/d)	3,789	3,685	6,535	4,678	4,517	3,639	6,179	4,709	4,431	3,831	6,007	4,620	4,679	4,766	4,726	
Petroleum (thousand b/d)	36	36	40	39	35	31	35	35	34	31	34	34	38	34	33	
End-of-period U.S. Fuel Inventories Held by Electric Power Sector																
Coal (million short tons)	126.5	121.5	100.8	102.8	97.1	102.8	96.7	104.7	106.0	103.0	96.3	104.6	102.8	104.7	104.6	
Residual Fuel Oil (mmb)	10.1	9.9	8.4	8.6	8.7	9.4	9.8	10.5	10.4	10.3	10.2	10.6	8.6	10.5	10.6	
Distillate Fuel Oil (mmb)	15.1	14.9	14.4	14.9	14.7	14.8	14.9	15.3	15.4	15.3	15.2	15.5	14.9	15.3	15.5	
Petroleum Coke (mmb)	3.6	2.9	2.9	2.7	2.5	2.6	2.6	2.7	2.7	2.8	2.9	2.9	2.7	2.7	2.9	

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

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

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. Data include fuel consumed only for generation of electricity. Values do not include consumption by CHP plants for useful thermal output.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)
U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Electric Power Sector															
Geothermal	0.038	0.037	0.039	0.039	0.038	0.037	0.037	0.037	0.037	0.036	0.037	0.039	0.154	0.150	0.149
Hydroelectric Power (a)	0.706	0.787	0.587	0.592	0.661	0.797	0.584	0.579	0.639	0.721	0.626	0.581	2.673	2.621	2.567
Solar (b)	0.116	0.193	0.186	0.113	0.124	0.205	0.207	0.145	0.152	0.245	0.254	0.179	0.608	0.681	0.830
Waste Biomass (c)	0.073	0.070	0.067	0.069	0.066	0.067	0.069	0.068	0.067	0.067	0.068	0.067	0.280	0.269	0.270
Wood Biomass	0.057	0.052	0.055	0.051	0.054	0.048	0.063	0.057	0.057	0.053	0.064	0.058	0.215	0.221	0.232
Wind	0.722	0.689	0.494	0.631	0.685	0.767	0.574	0.805	0.862	0.873	0.649	0.909	2.536	2.831	3.293
Subtotal	1.712	1.830	1.428	1.495	1.627	1.921	1.532	1.692	1.813	1.995	1.699	1.834	6.465	6.773	7.341
Industrial Sector															
Biofuel Losses and Co-products (d)	0.202	0.204	0.211	0.206	0.197	0.206	0.205	0.206	0.203	0.206	0.208	0.207	0.823	0.814	0.824
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
Hydroelectric Power (a)	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.013	0.013	0.012
Solar (b)	0.005	0.007	0.008	0.005	0.006	0.008	0.009	0.006	0.007	0.010	0.010	0.007	0.025	0.029	0.033
Waste Biomass (c)	0.044	0.041	0.039	0.044	0.043	0.041	0.041	0.043	0.043	0.042	0.041	0.043	0.168	0.169	0.169
Wood Biomass	0.382	0.382	0.389	0.388	0.371	0.352	0.358	0.358	0.347	0.343	0.355	0.357	1.540	1.439	1.401
Subtotal	0.637	0.635	0.648	0.648	0.619	0.609	0.613	0.617	0.600	0.601	0.612	0.616	2.567	2.458	2.429
Commercial Sector															
Geothermal	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.020	0.022	0.022
Solar (b)	0.019	0.029	0.029	0.020	0.022	0.033	0.034	0.025	0.028	0.041	0.041	0.030	0.096	0.114	0.140
Waste Biomass (c)	0.011	0.011	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.044	0.044	0.044
Wood Biomass	0.021	0.021	0.021	0.021	0.021	0.021	0.022	0.021	0.021	0.021	0.022	0.021	0.084	0.084	0.084
Subtotal	0.063	0.072	0.072	0.064	0.066	0.077	0.079	0.069	0.072	0.085	0.086	0.074	0.271	0.292	0.318
Residential Sector															
Geothermal	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.040	0.037	0.036
Solar (e)	0.044	0.067	0.067	0.046	0.050	0.079	0.080	0.056	0.061	0.095	0.097	0.068	0.224	0.266	0.321
Wood Biomass	0.128	0.129	0.130	0.130	0.126	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.517	0.492	0.488
Subtotal	0.181	0.206	0.207	0.186	0.186	0.210	0.212	0.187	0.193	0.226	0.228	0.199	0.780	0.795	0.845
Transportation Sector															
Biomass-based Diesel (f)	0.054	0.068	0.071	0.063	0.058	0.075	0.072	0.085	0.072	0.085	0.078	0.082	0.256	0.290	0.317
Ethanol (f)	0.273	0.287	0.294	0.289	0.275	0.298	0.296	0.291	0.277	0.297	0.300	0.291	1.142	1.160	1.165
Subtotal	0.327	0.355	0.365	0.351	0.334	0.373	0.368	0.376	0.349	0.382	0.377	0.374	1.398	1.451	1.482
All Sectors Total															
Biomass-based Diesel (f)	0.054	0.068	0.071	0.063	0.058	0.075	0.072	0.085	0.072	0.085	0.078	0.082	0.256	0.290	0.317
Biofuel Losses and Co-products (d)	0.202	0.204	0.211	0.206	0.197	0.206	0.205	0.206	0.203	0.206	0.208	0.207	0.823	0.814	0.824
Ethanol (f)	0.283	0.297	0.305	0.300	0.285	0.308	0.307	0.302	0.287	0.308	0.311	0.302	1.185	1.202	1.209
Geothermal	0.054	0.053	0.055	0.055	0.054	0.053	0.052	0.053	0.052	0.052	0.052	0.054	0.218	0.212	0.211
Hydroelectric Power (a)	0.710	0.791	0.590	0.596	0.664	0.801	0.587	0.583	0.642	0.725	0.630	0.585	2.688	2.635	2.582
Solar (b)(e)	0.184	0.295	0.289	0.184	0.202	0.325	0.330	0.232	0.249	0.390	0.403	0.284	0.951	1.089	1.325
Waste Biomass (c)	0.128	0.122	0.117	0.125	0.120	0.119	0.121	0.123	0.120	0.120	0.121	0.122	0.492	0.482	0.482
Wood Biomass	0.587	0.584	0.596	0.590	0.573	0.543	0.564	0.558	0.547	0.539	0.562	0.557	2.357	2.238	2.205
Wind	0.722	0.689	0.494	0.631	0.685	0.767	0.574	0.805	0.862	0.873	0.649	0.909	2.536	2.831	3.293
Total Consumption	2.920	3.097	2.721	2.745	2.864	3.190	2.804	2.941	3.027	3.288	3.003	3.097	11.482	11.799	12.415

- = no data available

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

(b) Solar consumption in the electric power, commercial, and industrial sectors includes energy produced from large scale (>1 MW) solar thermal and photovoltaic generators and small-scale (<1 MW) distributed solar photovoltaic systems.

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

(d) Losses and co-products from the production of fuel ethanol and biomass-based diesel

(e) Solar consumption in the residential sector includes energy from small-scale (<1 MW) solar photovoltaic systems. Also includes solar heating consumption in all sectors.

(f) Fuel ethanol and biomass-based diesel consumption in the transportation sector includes production, stock change, and imports less exports. Some biomass-based diesel may be consumed in the residential sector in heating oil.

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

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

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

Projections: EIA Regional Short-Term Energy Model.

Table 8b. U.S. Renewable Electricity Generation and Capacity
U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Renewable Energy Electric Generating Capacity (megawatts, end of period)															
Electric Power Sector (a)															
Biomass	7,244	7,217	7,210	7,151	6,986	7,133	7,044	7,071	7,071	7,009	7,009	7,052	7,151	7,071	7,052
Waste	4,198	4,170	4,163	4,160	4,125	4,114	4,114	4,141	4,141	4,078	4,078	4,080	4,160	4,141	4,080
Wood	3,046	3,046	3,046	2,991	2,861	3,020	2,930	2,930	2,930	2,930	2,930	2,972	2,991	2,930	2,972
Conventional Hydroelectric	79,507	79,468	79,476	79,595	79,618	79,637	79,540	79,559	79,642	79,660	79,782	79,834	79,595	79,559	79,834
Geothermal	2,396	2,396	2,396	2,398	2,395	2,403	2,403	2,403	2,403	2,403	2,493	2,518	2,398	2,403	2,518
Large-Scale Solar (b)	28,024	28,876	29,390	31,489	32,493	33,443	34,112	36,966	38,178	41,671	42,201	45,316	31,489	36,966	45,316
Wind	88,661	88,793	89,702	93,683	95,928	97,567	99,832	106,151	107,558	108,807	110,041	117,021	93,683	106,151	117,021
Other Sectors (c)															
Biomass	6,657	6,635	6,622	6,622	6,622	6,635	6,635	6,657	6,657	6,657	6,657	6,649	6,622	6,657	6,649
Waste	855	854	850	850	850	850	850	866	866	866	866	866	850	866	866
Wood	5,802	5,781	5,772	5,772	5,772	5,785	5,785	5,791	5,791	5,791	5,791	5,784	5,772	5,791	5,784
Conventional Hydroelectric	284	284	284	284	290	290	290	290	290	289	289	289	284	290	289
Large-Scale Solar (b)	354	360	368	373	375	381	381	383	383	385	385	385	373	383	385
Small-Scale Solar (d)	17,048	17,887	18,712	19,521	20,585	21,677	22,856	24,102	25,427	26,840	28,357	29,977	19,521	24,102	29,977
Residential Sector	10,155	10,660	11,179	11,664	12,440	13,151	13,932	14,761	15,650	16,606	17,645	18,764	11,664	14,761	18,764
Commercial Sector	5,501	5,778	6,026	6,286	6,533	6,853	7,189	7,542	7,913	8,303	8,712	9,141	6,286	7,542	9,141
Industrial Sector	1,391	1,449	1,507	1,571	1,612	1,673	1,735	1,799	1,864	1,931	2,000	2,071	1,571	1,799	2,071
Wind	113	110	116	116	116	116	116	116	116	116	116	116	116	116	116
Renewable Electricity Generation (thousand megawatthours per day)															
Electric Power Sector (a)															
Biomass	92	85	86	82	83	80	90	86	86	83	91	86	86	85	86
Waste	52	49	48	49	47	48	49	48	47	48	48	48	50	48	48
Wood	40	35	37	33	36	32	41	38	38	35	42	39	37	37	39
Conventional Hydroelectric	852	939	692	698	796	948	688	682	761	858	738	684	795	778	760
Geothermal	46	44	46	46	46	44	44	44	44	43	44	46	46	45	44
Large-Scale Solar (b)	140	230	219	133	149	244	243	171	181	292	299	211	180	202	246
Wind	868	821	581	743	824	913	675	948	1,026	1,039	764	1,071	752	840	975
Other Sectors (c)															
Biomass	87	86	86	84	83	86	86	84	83	86	86	84	86	85	85
Waste	78	77	77	75	74	77	77	75	74	77	77	75	77	76	76
Wood	9	9	8	9	9	9	8	9	9	9	8	9	9	9	9
Conventional Hydroelectric	5	5	4	5	4	5	4	5	4	5	4	5	5	4	4
Large-Scale Solar (b)	1	3	3	1	2	2	3	3	3	3	3	3	2	2	3
Small-Scale Solar (d)	64	97	96	66	78	117	119	84	96	145	147	104	81	99	123
Residential Sector	37	57	56	38	46	70	71	50	57	88	90	64	47	59	75
Commercial Sector	22	32	32	22	25	37	38	26	31	45	46	32	27	32	39
Industrial Sector	6	8	9	6	7	10	10	7	8	11	11	8	7	8	10
Wind	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

-- = 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.

(a) Power plants larger than or equal to one megawatt in size that are operated by electric utilities or independent power producers.

(b) Solar thermal and photovoltaic generating units at power plants larger than or equal to one megawatt.

(c) Businesses or individual households not primarily engaged in electric power production for sale to the public, whose generating capacity is at least one megawatt (except for small-scale solar photovoltaic data, which consists of systems smaller than one megawatt).

(d) Solar photovoltaic systems smaller than one megawatt, as measured in alternating current.

Historical data: Latest data available from EIA databases supporting the Electric Power Monthly, DOE/EIA-0226.

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

Projections: EIA-860M database, EIA-826 Solar PV database, and EIA Regional Short-Term Energy Model.

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

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Macroeconomic															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR)	18,324	18,512	18,665	18,765	18,912	<i>19,011</i>	<i>19,125</i>	<i>19,237</i>	<i>19,345</i>	<i>19,455</i>	<i>19,547</i>	<i>19,636</i>	18,566	<i>19,071</i>	<i>19,496</i>
Real Personal Consumption Expend. (billion chained 2012 dollars - SAAR)	12,723	12,842	12,953	13,032	13,071	<i>13,172</i>	<i>13,256</i>	<i>13,350</i>	<i>13,446</i>	<i>13,544</i>	<i>13,648</i>	<i>13,748</i>	12,888	<i>13,212</i>	<i>13,597</i>
Real Private Fixed Investment (billion chained 2012 dollars - SAAR)	3,271	3,322	3,332	3,357	3,370	<i>3,376</i>	<i>3,403</i>	<i>3,439</i>	<i>3,470</i>	<i>3,495</i>	<i>3,521</i>	<i>3,543</i>	3,321	<i>3,397</i>	<i>3,507</i>
Business Inventory Change (billion chained 2012 dollars - SAAR)	36	-10	93	107	129	<i>100</i>	<i>88</i>	<i>83</i>	<i>82</i>	<i>81</i>	<i>75</i>	<i>71</i>	57	<i>100</i>	<i>77</i>
Real Government Expenditures (billion chained 2012 dollars - SAAR)	3,152	3,172	3,192	3,189	3,208	<i>3,233</i>	<i>3,245</i>	<i>3,256</i>	<i>3,267</i>	<i>3,287</i>	<i>3,286</i>	<i>3,288</i>	3,176	<i>3,235</i>	<i>3,282</i>
Real Exports of Goods & Services (billion chained 2012 dollars - SAAR)	2,518	2,574	2,542	2,553	2,577	<i>2,590</i>	<i>2,626</i>	<i>2,662</i>	<i>2,698</i>	<i>2,729</i>	<i>2,757</i>	<i>2,781</i>	2,547	<i>2,614</i>	<i>2,741</i>
Real Imports of Goods & Services (billion chained 2012 dollars - SAAR)	3,420	3,415	3,492	3,509	3,476	<i>3,498</i>	<i>3,532</i>	<i>3,597</i>	<i>3,669</i>	<i>3,739</i>	<i>3,807</i>	<i>3,869</i>	3,459	<i>3,526</i>	<i>3,771</i>
Real Disposable Personal Income (billion chained 2012 dollars - SAAR)	14,220	14,282	14,375	14,527	14,612	<i>14,631</i>	<i>14,698</i>	<i>14,797</i>	<i>14,917</i>	<i>15,043</i>	<i>15,147</i>	<i>15,236</i>	14,351	<i>14,685</i>	<i>15,086</i>
Non-Farm Employment (millions)	148.0	148.7	149.4	150.1	150.7	<i>151.2</i>	<i>151.8</i>	<i>152.2</i>	<i>152.7</i>	<i>153.4</i>	<i>153.6</i>	<i>153.8</i>	149.1	<i>151.5</i>	<i>153.4</i>
Civilian Unemployment Rate (percent)	4.1	3.9	3.8	3.8	3.9	<i>3.6</i>	<i>3.5</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	<i>3.4</i>	3.9	<i>3.6</i>	<i>3.4</i>
Housing Starts (millions - SAAR)	1.32	1.26	1.23	1.19	1.19	<i>1.19</i>	<i>1.20</i>	<i>1.23</i>	<i>1.26</i>	<i>1.28</i>	<i>1.29</i>	<i>1.30</i>	1.25	<i>1.20</i>	<i>1.29</i>
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	106.7	107.9	109.3	110.3	110.3	<i>110.4</i>	<i>110.9</i>	<i>111.4</i>	<i>111.7</i>	<i>111.9</i>	<i>112.1</i>	<i>112.4</i>	108.6	<i>110.7</i>	<i>112.0</i>
Manufacturing	104.8	105.5	106.6	107.0	106.7	<i>107.2</i>	<i>107.7</i>	<i>108.3</i>	<i>108.7</i>	<i>108.9</i>	<i>109.2</i>	<i>109.4</i>	106.0	<i>107.5</i>	<i>109.1</i>
Food	113.3	114.3	114.9	113.1	115.1	<i>115.7</i>	<i>116.2</i>	<i>116.7</i>	<i>117.2</i>	<i>117.7</i>	<i>118.2</i>	<i>118.8</i>	113.9	<i>115.9</i>	<i>118.0</i>
Paper	96.0	95.9	96.0	96.0	94.8	<i>94.2</i>	<i>94.0</i>	<i>93.9</i>	<i>93.6</i>	<i>93.3</i>	<i>93.2</i>	<i>93.1</i>	96.0	<i>94.3</i>	<i>93.3</i>
Petroleum and Coal Products	106.7	106.8	107.5	106.8	106.8	<i>106.0</i>	<i>105.9</i>	<i>106.2</i>	<i>106.5</i>	<i>106.7</i>	<i>106.9</i>	<i>107.0</i>	106.9	<i>106.2</i>	<i>106.8</i>
Chemicals	98.4	100.2	101.3	101.8	101.0	<i>101.2</i>	<i>101.8</i>	<i>102.6</i>	<i>103.2</i>	<i>103.8</i>	<i>104.5</i>	<i>105.2</i>	100.4	<i>101.6</i>	<i>104.2</i>
Nonmetallic Mineral Products	119.1	120.4	119.0	120.0	120.8	<i>119.6</i>	<i>119.3</i>	<i>119.5</i>	<i>119.8</i>	<i>120.1</i>	<i>120.5</i>	<i>120.8</i>	119.6	<i>119.8</i>	<i>120.3</i>
Primary Metals	95.8	96.2	97.5	100.8	98.9	<i>99.0</i>	<i>99.4</i>	<i>99.5</i>	<i>99.0</i>	<i>98.1</i>	<i>97.4</i>	<i>96.4</i>	97.6	<i>99.2</i>	<i>97.7</i>
Coal-weighted Manufacturing (a)	103.6	104.7	105.3	106.1	105.5	<i>105.1</i>	<i>105.4</i>	<i>105.7</i>	<i>105.7</i>	<i>105.7</i>	<i>105.7</i>	<i>105.7</i>	104.9	<i>105.4</i>	<i>105.7</i>
Distillate-weighted Manufacturing (a)	111.3	111.8	112.2	112.0	111.9	<i>111.3</i>	<i>111.5</i>	<i>111.8</i>	<i>112.0</i>	<i>112.2</i>	<i>112.4</i>	<i>112.6</i>	111.8	<i>111.6</i>	<i>112.3</i>
Electricity-weighted Manufacturing (a)	104.5	105.4	106.5	107.1	106.6	<i>106.4</i>	<i>106.8</i>	<i>107.3</i>	<i>107.5</i>	<i>107.6</i>	<i>107.8</i>	<i>108.0</i>	105.9	<i>106.8</i>	<i>107.7</i>
Natural Gas-weighted Manufacturing (a) ...	104.3	105.8	106.8	107.0	106.2	<i>106.0</i>	<i>106.4</i>	<i>107.0</i>	<i>107.2</i>	<i>107.5</i>	<i>107.8</i>	<i>108.1</i>	106.0	<i>106.4</i>	<i>107.7</i>
Price Indexes															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	2.49	2.51	2.52	2.53	2.53	<i>2.56</i>	<i>2.57</i>	<i>2.59</i>	<i>2.60</i>	<i>2.61</i>	<i>2.62</i>	<i>2.64</i>	2.51	<i>2.56</i>	<i>2.62</i>
Producer Price Index: All Commodities (index, 1982=1.00)	2.00	2.01	2.03	2.04	2.00	<i>2.02</i>	<i>2.03</i>	<i>2.03</i>	<i>2.03</i>	<i>2.03</i>	<i>2.03</i>	<i>2.04</i>	2.02	<i>2.02</i>	<i>2.03</i>
Producer Price Index: Petroleum (index, 1982=1.00)	1.98	2.22	2.26	2.10	1.84	<i>2.06</i>	<i>2.02</i>	<i>1.99</i>	<i>1.97</i>	<i>2.05</i>	<i>2.04</i>	<i>1.97</i>	2.14	<i>1.98</i>	<i>2.00</i>
GDP Implicit Price Deflator (index, 2012=100)	109.3	110.2	110.7	111.1	111.4	<i>111.9</i>	<i>112.5</i>	<i>113.1</i>	<i>113.8</i>	<i>114.4</i>	<i>115.1</i>	<i>115.9</i>	110.3	<i>112.2</i>	<i>114.8</i>
Miscellaneous															
Vehicle Miles Traveled (b) (million miles/day)	8,198	9,192	9,114	8,810	8,239	<i>9,326</i>	<i>9,247</i>	<i>8,934</i>	<i>8,414</i>	<i>9,428</i>	<i>9,337</i>	<i>9,023</i>	8,831	<i>8,939</i>	<i>9,051</i>
Air Travel Capacity (Available ton-miles/day, thousands)	603	664	667	661	631	<i>660</i>	<i>671</i>	<i>646</i>	<i>625</i>	<i>658</i>	<i>667</i>	<i>645</i>	649	<i>652</i>	<i>649</i>
Aircraft Utilization (Revenue ton-miles/day, thousands)	368	414	418	394	377	<i>423</i>	<i>429</i>	<i>406</i>	<i>386</i>	<i>421</i>	<i>427</i>	<i>406</i>	398	<i>409</i>	<i>410</i>
Airline Ticket Price Index (index, 1982-1984=100)	262.8	277.9	259.7	259.3	255.7	<i>286.7</i>	<i>292.9</i>	<i>319.9</i>	<i>336.7</i>	<i>354.8</i>	<i>327.8</i>	<i>342.6</i>	264.9	<i>288.8</i>	<i>340.5</i>
Raw Steel Production (million short tons per day)	0.251	0.253	0.263	0.270	0.273	<i>0.270</i>	<i>0.260</i>	<i>0.259</i>	<i>0.263</i>	<i>0.265</i>	<i>0.259</i>	<i>0.261</i>	0.259	<i>0.265</i>	<i>0.262</i>
Carbon Dioxide (CO2) Emissions (million metric tons)															
Petroleum	578	591	601	599	574	<i>590</i>	<i>605</i>	<i>599</i>	<i>579</i>	<i>588</i>	<i>608</i>	<i>600</i>	2,369	<i>2,367</i>	<i>2,376</i>
Natural Gas	478	349	370	431	506	<i>356</i>	<i>374</i>	<i>437</i>	<i>500</i>	<i>361</i>	<i>382</i>	<i>437</i>	1,629	<i>1,673</i>	<i>1,680</i>
Coal	307	287	355	310	290	<i>238</i>	<i>314</i>	<i>271</i>	<i>275</i>	<i>228</i>	<i>293</i>	<i>256</i>	1,259	<i>1,113</i>	<i>1,051</i>
Total Energy (c)	1,366	1,231	1,329	1,342	1,373	<i>1,187</i>	<i>1,295</i>	<i>1,309</i>	<i>1,357</i>	<i>1,180</i>	<i>1,286</i>	<i>1,295</i>	5,268	<i>5,164</i>	<i>5,118</i>

- = no data available

SAAR = Seasonally-adjusted annual rate

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

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

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

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration. Minor discrepancies with published historical data are due to independent rounding.**Projections:** EIA Regional Short-Term Energy Model. U.S. macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Real Gross State Product (Billion \$2009)															
New England	971	973	981	985	993	998	1,002	1,008	1,013	1,019	1,023	1,027	978	1,000	1,020
Middle Atlantic	2,720	2,748	2,768	2,776	2,797	2,809	2,822	2,836	2,849	2,864	2,874	2,884	2,753	2,816	2,868
E. N. Central	2,483	2,494	2,519	2,528	2,544	2,552	2,562	2,575	2,587	2,595	2,601	2,608	2,506	2,558	2,598
W. N. Central	1,150	1,168	1,173	1,177	1,184	1,189	1,195	1,200	1,205	1,211	1,216	1,221	1,167	1,192	1,213
S. Atlantic	3,259	3,286	3,325	3,339	3,367	3,386	3,408	3,429	3,451	3,474	3,493	3,513	3,302	3,397	3,483
E. S. Central	812	821	827	831	836	840	844	848	853	857	860	863	823	842	858
W. S. Central	2,225	2,248	2,263	2,294	2,313	2,327	2,343	2,359	2,375	2,393	2,409	2,423	2,258	2,336	2,400
Mountain	1,197	1,210	1,224	1,234	1,245	1,254	1,263	1,271	1,279	1,289	1,297	1,305	1,216	1,258	1,293
Pacific	3,540	3,597	3,616	3,636	3,668	3,691	3,720	3,744	3,767	3,790	3,809	3,827	3,597	3,706	3,798
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	98.8	99.2	99.7	99.6	98.6	99.0	99.4	99.7	99.9	100.0	100.2	100.3	99.3	99.2	100.1
Middle Atlantic	98.6	99.0	99.6	99.8	98.8	99.1	99.5	99.9	100.2	100.3	100.5	100.6	99.3	99.3	100.4
E. N. Central	107.6	108.2	109.2	109.3	108.6	108.8	109.3	110.0	110.4	110.2	110.3	110.4	108.6	109.2	110.3
W. N. Central	104.2	104.9	106.2	106.7	106.4	106.8	107.3	107.9	108.4	108.7	109.0	109.3	105.5	107.1	108.8
S. Atlantic	108.8	109.7	110.7	110.9	111.1	111.6	112.1	112.7	113.0	113.2	113.5	113.6	110.0	111.9	113.3
E. S. Central	109.8	110.2	111.2	111.8	111.4	111.8	112.4	113.0	113.5	113.6	113.8	114.0	110.7	112.2	113.7
W. S. Central	98.7	99.7	100.9	101.6	102.2	102.8	103.5	104.1	104.6	105.1	105.4	105.7	100.2	103.1	105.2
Mountain	112.2	113.5	115.3	116.4	116.4	116.9	117.7	118.4	119.0	119.5	120.0	120.3	114.3	117.3	119.7
Pacific	104.5	105.1	105.7	106.5	106.6	107.1	107.6	108.1	108.5	108.8	109.2	109.5	105.4	107.4	109.0
Real Personal Income (Billion \$2009)															
New England	858	856	861	868	874	876	879	884	891	898	903	907	861	878	900
Middle Atlantic	2,216	2,226	2,239	2,252	2,266	2,270	2,279	2,291	2,306	2,322	2,335	2,345	2,233	2,276	2,327
E. N. Central	2,342	2,341	2,358	2,380	2,398	2,401	2,410	2,425	2,442	2,459	2,472	2,482	2,355	2,408	2,464
W. N. Central	1,084	1,092	1,094	1,111	1,114	1,113	1,117	1,125	1,134	1,145	1,153	1,161	1,095	1,117	1,149
S. Atlantic	3,079	3,086	3,118	3,146	3,172	3,180	3,199	3,224	3,254	3,286	3,312	3,336	3,107	3,194	3,297
E. S. Central	861	865	870	877	883	884	888	893	900	906	912	916	868	887	908
W. S. Central	1,876	1,886	1,897	1,919	1,933	1,937	1,948	1,962	1,981	2,000	2,015	2,028	1,894	1,945	2,006
Mountain	1,102	1,105	1,117	1,129	1,139	1,142	1,149	1,158	1,169	1,182	1,192	1,201	1,113	1,147	1,186
Pacific	2,671	2,690	2,704	2,728	2,741	2,748	2,762	2,782	2,805	2,831	2,852	2,869	2,698	2,758	2,839
Households (Thousands)															
New England	5,914	5,926	5,944	5,955	5,965	5,971	5,982	5,992	6,003	6,016	6,023	6,032	5,955	5,992	6,032
Middle Atlantic	16,210	16,249	16,300	16,331	16,355	16,369	16,396	16,424	16,452	16,484	16,504	16,525	16,331	16,424	16,525
E. N. Central	19,003	19,037	19,090	19,121	19,149	19,168	19,200	19,234	19,268	19,314	19,347	19,380	19,121	19,234	19,380
W. N. Central	8,604	8,627	8,658	8,680	8,701	8,718	8,740	8,763	8,786	8,811	8,832	8,852	8,680	8,763	8,852
S. Atlantic	25,469	25,561	25,679	25,771	25,861	25,943	26,036	26,131	26,227	26,332	26,420	26,507	25,771	26,131	26,507
E. S. Central	7,626	7,641	7,665	7,682	7,699	7,714	7,733	7,753	7,772	7,793	7,811	7,828	7,682	7,753	7,828
W. S. Central	14,686	14,731	14,793	14,843	14,891	14,936	14,989	15,044	15,101	15,162	15,214	15,267	14,843	15,044	15,267
Mountain	9,244	9,292	9,349	9,394	9,437	9,475	9,518	9,559	9,602	9,647	9,687	9,726	9,394	9,559	9,726
Pacific	18,859	18,903	18,966	19,010	19,055	19,094	19,148	19,203	19,260	19,321	19,371	19,422	19,010	19,203	19,422
Total Non-farm Employment (Millions)															
New England	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.6
Middle Atlantic	19.7	19.8	19.9	19.9	20.0	20.1	20.1	20.2	20.2	20.3	20.3	20.3	19.8	20.1	20.3
E. N. Central	22.1	22.2	22.2	22.3	22.4	22.5	22.5	22.6	22.6	22.7	22.6	22.7	22.2	22.5	22.6
W. N. Central	10.7	10.7	10.8	10.8	10.8	10.8	10.8	10.9	10.9	10.9	10.9	10.9	10.7	10.8	10.9
S. Atlantic	28.5	28.6	28.7	28.9	29.1	29.2	29.3	29.4	29.5	29.7	29.8	29.8	28.7	29.2	29.7
E. S. Central	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.2	8.3	8.4
W. S. Central	17.3	17.4	17.5	17.6	17.6	17.7	17.8	17.9	18.0	18.1	18.1	18.2	17.4	17.8	18.1
Mountain	10.7	10.8	10.9	10.9	11.0	11.1	11.1	11.2	11.2	11.3	11.3	11.4	10.8	11.1	11.3
Pacific	23.3	23.4	23.5	23.6	23.7	23.8	23.9	24.0	24.1	24.2	24.2	24.3	23.5	23.9	24.2

- = no data available

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

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.**Historical data:** Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17.

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

Projections: Macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Table 9c. U.S. Regional Weather Data

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Heating Degree Days															
New England	3,055	907	70	2,306	3,230	880	129	2,125	3,150	854	129	2,125	6,337	6,363	6,258
Middle Atlantic	2,935	752	37	2,049	2,987	625	81	1,946	2,906	681	80	1,946	5,773	5,639	5,613
E. N. Central	3,212	825	60	2,337	3,331	752	130	2,207	3,115	718	128	2,207	6,435	6,419	6,167
W. N. Central	3,421	827	121	2,600	3,644	783	168	2,390	3,198	695	166	2,390	6,969	6,984	6,450
South Atlantic	1,442	219	2	967	1,334	135	13	966	1,406	191	13	965	2,630	2,449	2,574
E. S. Central	1,815	325	2	1,338	1,716	209	21	1,303	1,805	238	21	1,303	3,480	3,248	3,367
W. S. Central	1,192	142	3	910	1,208	97	5	821	1,154	81	5	821	2,246	2,131	2,061
Mountain	2,124	600	124	1,958	2,432	722	152	1,832	2,195	689	150	1,831	4,806	5,137	4,865
Pacific	1,438	540	84	1,099	1,686	540	86	1,190	1,480	564	88	1,191	3,162	3,502	3,323
U.S. Average	2,129	522	48	1,577	2,211	471	76	1,514	2,096	478	75	1,512	4,276	4,271	4,161
Heating Degree Days, Prior 10-year Average															
New England	3,172	817	119	2,121	3,166	820	111	2,122	3,153	821	104	2,113	6,229	6,219	6,191
Middle Atlantic	2,947	646	81	1,949	2,956	650	76	1,941	2,948	643	71	1,932	5,623	5,622	5,594
E. N. Central	3,209	692	116	2,210	3,196	697	112	2,198	3,198	697	109	2,190	6,228	6,203	6,194
W. N. Central	3,264	705	144	2,379	3,255	702	140	2,380	3,287	703	138	2,363	6,492	6,477	6,491
South Atlantic	1,476	177	12	974	1,480	176	11	964	1,459	170	11	956	2,639	2,631	2,596
E. S. Central	1,868	217	18	1,301	1,862	222	17	1,292	1,850	216	17	1,280	3,404	3,392	3,363
W. S. Central	1,181	80	4	801	1,183	85	4	807	1,199	84	3	791	2,066	2,078	2,076
Mountain	2,194	737	144	1,841	2,164	714	139	1,855	2,193	712	138	1,830	4,916	4,873	4,873
Pacific	1,465	592	84	1,182	1,444	582	83	1,174	1,456	577	84	1,162	3,322	3,282	3,278
U.S. Average	2,160	478	71	1,524	2,150	475	68	1,518	2,149	471	66	1,504	4,233	4,211	4,190
Cooling Degree Days															
New England	0	81	578	0	0	89	413	2	0	88	413	2	659	504	503
Middle Atlantic	0	177	708	4	0	161	536	5	0	156	541	5	889	701	702
E. N. Central	0	332	637	4	0	193	519	7	0	220	526	7	973	719	753
W. N. Central	2	441	686	6	0	232	636	10	3	266	654	10	1,134	877	933
South Atlantic	137	729	1,269	281	155	753	1,147	225	122	645	1,153	225	2,416	2,279	2,145
E. S. Central	37	650	1,162	82	28	567	1,024	64	28	517	1,038	64	1,931	1,682	1,646
W. S. Central	127	1,004	1,564	165	72	836	1,462	191	89	864	1,487	191	2,860	2,561	2,631
Mountain	21	509	1,000	51	10	368	918	73	18	426	926	73	1,581	1,369	1,444
Pacific	31	182	721	72	22	149	590	58	27	170	587	58	1,007	819	842
U.S. Average	52	478	959	99	46	406	838	90	43	399	847	90	1,587	1,380	1,380
Cooling Degree Days, Prior 10-year Average															
New England	0	81	433	1	0	79	455	1	0	85	464	1	515	535	550
Middle Atlantic	0	166	566	5	0	165	589	6	0	172	600	6	738	760	778
E. N. Central	3	228	533	7	3	242	548	7	3	242	566	8	771	800	818
W. N. Central	7	277	659	11	7	298	668	11	7	297	687	12	953	985	1,003
South Atlantic	119	675	1,161	227	120	684	1,180	239	127	696	1,187	239	2,182	2,224	2,249
E. S. Central	34	539	1,031	63	36	554	1,049	67	36	558	1,063	70	1,667	1,707	1,727
W. S. Central	100	887	1,532	204	104	897	1,552	205	100	893	1,553	209	2,722	2,758	2,756
Mountain	24	426	923	84	25	438	933	81	24	435	932	83	1,457	1,477	1,474
Pacific	30	185	621	78	31	185	631	76	31	183	624	77	914	923	916
U.S. Average	45	408	856	94	46	417	873	97	47	421	881	98	1,403	1,433	1,447

- = no data available

Notes: Regional degree days for each period are calculated by EIA as contemporaneous period population-weighted averages of state degree day data published by the National Oceanic and Atmospheric Administration (NOAA).

See *Change in Regional and U.S. Degree-Day Calculations* (http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf) for more information.

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

Regions refer to U.S. Census divisions. See "Census division" in EIA's Energy Glossary (<http://www.eia.gov/tools/glossary/>) for a list of states in each region.

Historical data: Latest data available from U.S. Department of Commerce, National Oceanic and Atmospheric Association (NOAA).

Projections: Based on forecasts by the NOAA Climate Prediction Center (<http://www.cpc.ncep.noaa.gov/pacdir/DDdir/NHOME3.shtml>).

Appendix to the June 2019 *Short-Term Energy Outlook*

This appendix is prepared in fulfillment of section 1245(d)(4)(A) of the National Defense Authorization Act (NDAA) for Fiscal Year 2012, as amended. The law requires the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy, to submit to Congress a report on the availability and price of petroleum and petroleum products produced in countries other than Iran in the two-month period preceding the submission of the report. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The data in this appendix, therefore, should not be construed as representing those of the U.S. Department of Energy or other federal agencies.

EIA consulted with the U.S. Department of the Treasury, the U.S. Department of State, and the intelligence community in the process of developing the NDAA report, which was previously published as a stand-alone report. Detailed background and contextual information not repeated here can be found in [early editions of the NDAA report](#).

This appendix is published in the *Short-Term Energy Outlook* in even numbered months.

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	April 2019	May 2019	April 2019 – May 2019 Average	April 2018 – May 2018 Average	2016 – 2018 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	100.1	100.2	100.1	99.5	98.8
Global Petroleum and Other Liquids Consumption (b)	99.9	99.7	99.8	99.0	98.4
Biofuels Production (c)	2.5	2.8	2.7	2.7	2.5
Biofuels Consumption (c)	2.4	2.4	2.4	2.3	2.3
Iran Liquid Fuels Production	3.3	3.0	3.1	4.7	4.5
Iran Liquid Fuels Consumption	1.9	2.0	2.0	1.7	1.8
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	94.3	94.3	94.3	92.1	91.8
Consumption (d)	95.6	95.3	95.5	94.9	94.4
Production minus Consumption	-1.4	-1.0	-1.2	-2.8	-2.6
World Inventory Net Withdrawals Including Iran	-0.1	-0.4	-0.3	-0.5	-0.3
Estimated OECD Inventory Level (e) (million barrels)	2,864	2,902	2,883	2,813	2,960
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	2.2	2.2	2.2	1.9	1.6

Note: The term "petroleum and other liquids" encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.

(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.

(b) Consumption of petroleum by the OECD countries is synonymous with "products 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.

(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.

(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.

(e) Estimated inventory level is for OECD countries only.

(f) EIA defines surplus oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field.

Source: U.S. Energy Information Administration.

Table a2. Crude Oil and Petroleum Product Price Data

Item	April 2019	May 2019	April 2019 – May 2019 Average	April 2018 – May 2018 Average	2016 – 2018 Average
Brent Front Month Futures Price (\$ per barrel)	71.63	70.30	70.95	74.45	57.19
WTI Front Month Futures Price (\$ per barrel)	63.87	60.87	62.34	68.20	53.07
Dubai Front Month Futures Price (\$ per barrel)	71.20	69.85	70.51	71.62	55.04
Brent 1st - 13th Month Futures Spread (\$ per barrel)	4.15	5.28	4.73	5.23	-0.56
WTI 1st - 13th Month Futures Spread (\$ per barrel)	2.80	2.24	2.51	5.44	-0.92
RBOB Front Month Futures Price (\$ per gallon)	2.04	1.98	2.01	2.12	1.65
Heating Oil Front Month Futures Price (\$ per gallon)	2.06	2.03	2.05	2.15	1.71
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.33	0.30	0.32	0.34	0.29
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.36	0.36	0.36	0.37	0.35

(a) Brent refers to Brent crude oil traded on the Intercontinental Exchange (ICE).

(b) WTI refers to West Texas Intermediate crude oil traded on the New York Mercantile Exchange (NYMEX), owned by Chicago Mercantile Exchange (CME) Group.

(c) RBOB refers to *reformulated blendstock for oxygenate blending traded on the NYMEX*.

Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE), and Dubai Mercantile Exchange (DME).