



## Short-Term Energy Outlook (STEO)

---

### Forecast highlights

#### *Global liquid fuels*

- EIA delayed the release of the March STEO update by one day to incorporate recent significant global oil market developments. On March 9, Brent crude oil front-month futures prices fell below \$35/b, a 24% daily decline and the second largest daily price decline on record. Prices fell following the March 6 meeting between members of the Organization of the Petroleum Exporting Countries (OPEC) and its partner countries, which ended without an agreement on production levels amid market expectations for declining global oil demand growth in the coming months. In addition to the following highlights, EIA has provided a short summary of the March STEO forecast in the [crude oil section of the \*Petroleum and Natural Gas Markets Review\* \(PNGMR\)](#).
- As a result of the outcome of the March 6 OPEC meeting, EIA's forecast assumes that OPEC will target market share instead of a balanced global oil market. EIA forecasts OPEC crude oil production will average 29.2 million barrels per day (b/d) from April through December 2020, up from an average of 28.7 million b/d in the first quarter of 2020. EIA forecasts OPEC crude oil production will rise to an average of 29.4 million b/d in 2021. The OPEC production data in the March STEO include Ecuador, which finalized its withdrawal from OPEC at the March 6 meeting. Beginning with the April 2020 STEO, EIA will include Ecuador's production volumes in non-OPEC data.
- EIA expects global petroleum and liquid fuels consumption will average 99.1 million b/d in the first quarter of 2020, a decline of 0.9 million b/d from the same period in 2019. EIA expects global petroleum and liquid fuels demand will rise by less than 0.4 million b/d in 2020 and by 1.7 million b/d in 2021. Lower global oil demand growth for 2020 in the March STEO reflects a reduced assumption for global economic growth along with reduced expected travel globally because of the 2019 novel coronavirus disease (COVID-19).
- EIA expects that global liquid fuels inventories will grow by an average of 1.0 million b/d in 2020 after falling by about 0.1 million b/d in 2019. EIA expects inventory builds will be largest in the first half of 2020, rising at a rate of 1.7 million b/d because of slow oil demand growth. Firmer demand growth as the global economy strengthens and slower supply growth will contribute to balanced markets in the fourth quarter of 2020 and

global oil inventory draws in 2021. EIA expects global liquid fuels inventories will decline by 0.4 million b/d in 2021.

- EIA forecasts Brent crude oil prices will average \$43/b in 2020, down from an average of \$64/b in 2019. For 2020, EIA expects prices will average \$37/b during the second quarter and then rise to \$42/b during the second half of the year. EIA forecasts that average Brent prices will rise to an average of \$55/b in 2021, as declining global oil inventories put upward pressure on prices.
- EIA forecasts U.S. crude oil production will average 13.0 million b/d in 2020, up 0.8 million b/d from 2019, but then fall to 12.7 million b/d in 2021. The forecast decline in 2021 is in response to lower oil prices and would mark the first annual U.S. crude oil production decline since 2016. EIA models show oil prices affect production after about a six-month lag. Despite forecast annual average growth of 0.8 million b/d in 2020, EIA expects monthly U.S. crude oil production to begin declining around May, with production falling from 13.2 million b/d in May to 12.8 million b/d in December 2020.
- Based on the lower crude oil price forecast, EIA expects U.S. retail prices for regular grade gasoline to average \$2.14 per gallon (gal) in 2020, down from \$2.60/gal in 2019. EIA expects retail gasoline prices to fall to a monthly average of \$1.97/gal in April before rising to an average of \$2.13/gal from June through August.

### *Natural gas*

- In February, the Henry Hub natural gas spot price averaged \$1.91 per million British thermal units (MMBtu). Warmer-than-normal temperatures in February reduced demand for space heating and put downward pressure on prices. EIA forecasts that prices will begin to rise in the second quarter of 2020 as U.S. natural gas production declines and natural gas use for power generation increases the demand for natural gas. EIA expects prices to average \$2.22/MMBtu in the third quarter of 2020. EIA forecasts that Henry Hub natural gas spot prices will average \$2.11/MMBtu in 2020. EIA expects that natural gas prices will then increase in 2021, reaching an annual average of \$2.51/MMBtu.
- U.S. dry natural gas production [set a record in 2019](#), averaging 92.2 billion cubic feet per day (Bcf/d). Although EIA forecasts dry natural gas production will average 95.3 Bcf/d in 2020, a 3% increase from 2019, EIA expects monthly production to generally decline through 2020, falling from an estimated 96.5 Bcf/d in February to 92.3 Bcf/d in December. The falling production mostly occurs in the Appalachian and Permian regions. In the Appalachian region, low natural gas prices are discouraging producers from engaging in natural gas-directed drilling, and in the Permian region, low oil prices reduce associated gas output from oil-directed wells. In 2021, EIA forecasts dry natural gas production will rise from December 2020 levels in response to higher prices. Forecast dry natural gas production for 2021 averages 92.6 Bcf/d.

- EIA estimates that total U.S. working natural gas in storage ended February at 2.1 trillion cubic feet (Tcf), 9% more than the five-year (2015–19) average. EIA forecasts that total working inventories will end March at 1.9 Tcf, 12% more than the five-year average. In the forecast, inventories rise by almost 2.1 Tcf during the April through October injection season to reach almost 4.0 Tcf on October 31.

### *Electricity, coal, renewables, and emissions*

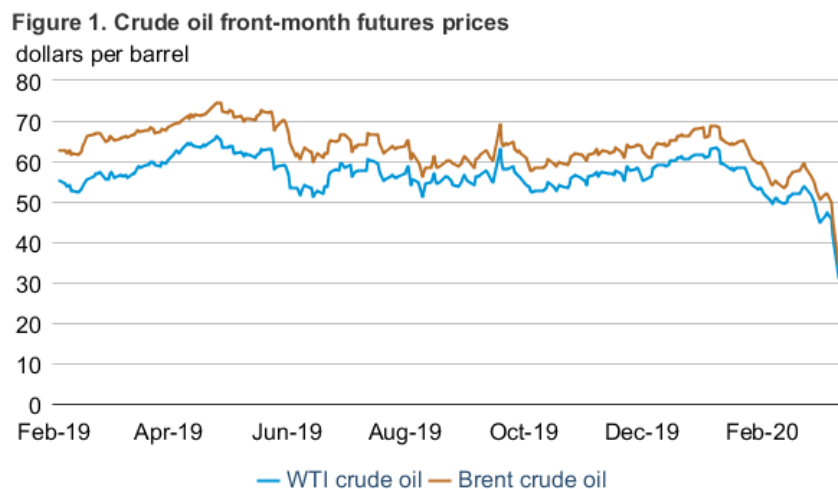
- EIA expects the annual share of U.S. utility-scale electricity generation from natural gas-fired power plants will remain relatively steady through the forecast; it was 37% in 2019, and EIA forecasts it will average 39% in 2020 and 37% in 2021. Coal's forecast share of electricity generation falls from 24% in 2019 to 21% in both 2020 and 2021. Electricity generation from renewable energy sources rises from a share of 17% last year to 19% in 2020 and to 21% in 2021. The increase in the renewables share is the result of additions to wind and solar generating capacity. The nuclear share of generation averaged 20% in 2019 and is expected to remain about the same in 2020 and 2021.
- EIA forecasts that U.S. coal production will total 573 million short tons (MMst) in 2020, down 117 MMst (17%) from 2019. Lower production reflects declining demand for coal in the electric power sector and lower demand for U.S. exports. EIA forecasts that electric power sector demand for coal will fall by 86 MMst (16%) in 2020. EIA expects that U.S. coal production will stabilize in 2021 as export demand rises and U.S. power sector demand for coal increases slightly because natural gas prices increase.
- After decreasing by 2.8% in 2019, EIA forecasts that energy-related carbon dioxide (CO<sub>2</sub>) emissions will decrease by 2.2% in 2020 and by 0.4% in 2021. Declining emissions in 2020 reflect forecast declines in total U.S. energy consumption because of energy efficiency and weather effects, particularly as a result of warmer-than-normal temperatures in January and February. A forecast return to normal temperatures in 2021 results in a slowing decline in emissions. Energy-related CO<sub>2</sub> emissions are sensitive to changes in weather, economic growth, energy prices, and fuel mix.

## Petroleum and natural gas markets review

### Crude oil

Markets for oil, as well as other commodities and equities, have experienced significant volatility and price declines since the final week in February amid concerns over the economic effects of the 2019 novel coronavirus disease (COVID-19). In addition, oil markets, in particular, have responded more recently to the outcome of the OPEC and partners meeting on March 6 with decreased oil prices that affected financial markets.

Brent and West Texas Intermediate (WTI) crude oil prices settled at \$34.36 per barrel (b) and \$31.13/b on March 9, respectively, declines of \$20.09/b and \$18.98/b from February 3, 2020 (**Figure 1**). On March 9, Brent and WTI front-month futures prices declined by 24% and 25%, respectively, the second largest one-day decline in each of their respective futures price histories.



 CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.; WTI=West Texas Intermediate

EIA acknowledges significant uncertainty amid a highly volatile market environment. Several recent developments have contributed to significant revisions in EIA's outlook for global oil demand and supply:

- Slowing forecasts for global economic growth, primarily as a result of COVID-19, have led to significant downward revisions in EIA's global oil demand forecast. Reports of new cases of the virus in countries outside of China have led to restrictions on international and domestic travel as well as reduced activity among [global manufacturers](#).
- As a result of the March 6 OPEC and partners meeting, EIA no longer assumes production management from OPEC members or partner countries that were previously voluntarily reducing production. Previously, EIA assumed OPEC would limit production in 2020 and 2021 to target relatively balanced global oil markets.

- Lower forecast crude oil prices lead to lower U.S. crude oil production, as a result of a price-induced reduction in drilling and completion activity.

**Demand:** Both lower assumed global economic growth and reduced global travel contribute to EIA's forecast of 0.4 million barrels per day (b/d) for global oil demand growth in 2020, a reduction from the January STEO forecast of 1.3 million b/d (EIA's January STEO did not include COVID-19-related demand effects). Most of the reduction is in China, where EIA lowered expected growth for 2020 to 0.1 million b/d, down from a forecast of 0.5 million b/d in the January STEO. EIA also made significant downward revisions to the demand forecasts for Japan, South Korea, and Italy.

The reduced demand forecast has three main drivers: lower assumptions of economic growth, less expected air travel, and other reductions in demand not captured by these two categories. Based on forecasts from Oxford Economics, EIA reduced its assumption for 2020 global oil-weighted growth in gross domestic product (GDP) to 2.1% from the assumption of 2.4% in the January STEO. Updated information on flight cancellations also led EIA to revise its assumptions for the direct loss of jet fuel consumption from reduced air travel in the first and second quarters of 2020. Finally, EIA assumes additional lost oil demand not captured by GDP and air travel. Notable among these factors are more lost demand in China's petrochemical sector and more lost demand from road travel in China. However, these estimates are based on preliminary data, along with assumptions about the severity and duration of effects on oil demand, in the absence of actual data.

This forecast assumes the demand effects from COVID-19 will diminish by the third quarter of 2020, with demand growth resuming its previous trend through the remainder of the forecast.

**OPEC supply:** The outcome of the March 6 OPEC meeting has caused EIA to revise its OPEC crude oil production forecast. After the March 6 meeting, OPEC and partner countries did not agree to further production cuts beyond those currently expiring March 31, 2020. In contrast to the February STEO, EIA no longer expects active production management to target balanced global oil markets among OPEC members or partner countries. These countries had been limiting production under the [Declaration of Cooperation](#), initially agreed to in December 2016.

EIA expects OPEC crude oil production will average 29.1 million b/d in the second and third quarters 2020, up from 28.7 million b/d in the first quarter of 2020. However, production levels targeted by OPEC amid low oil demand are uncertain, and realized levels will have a significant effect on crude oil prices. Unplanned supply outages in Libya add additional uncertainty to the OPEC forecast. Crude oil production in Libya has declined by 1.0 million b/d since December 2019, and EIA estimates February production in Libya averaged 150,000 b/d.

**Prices and inventories:** EIA forecasts Brent crude oil prices will average \$43/b in 2020, down from a forecast of \$65/b in the January STEO, and then increase to an average of \$55/b in 2021. EIA forecasts the decline in liquid fuels demand combined with an increase in OPEC production during the next two quarters will contribute to significant increases in global liquid fuels

inventories. EIA forecasts global oil inventory builds in the first half of 2020 to average 1.7 million b/d before moving to a balanced market in the fourth quarter.

With demand growth accelerating and U.S. crude oil production declining in 2021, EIA forecasts inventory withdrawals to average 0.4 million b/d for the year. EIA expects these consistent inventory withdrawals will put upward pressure on crude oil prices and bring Brent crude oil prices to \$60 by the end of next year. However, the recovery of global oil demand in late 2020 and 2021, the response of U.S. crude oil production to low prices, and the production decisions of OPEC amid these factors are all highly uncertain.

**U.S. crude oil production:** EIA forecasts U.S. crude oil production will average 13.0 million b/d in 2020 and fall to 12.7 million b/d in 2021. These estimates are 0.3 million b/d and 1.1 million b/d lower than in the January STEO. If realized, a production decline next year would be the first year-on-year decline in production since 2016.

Lower crude oil output in the forecast results from lower crude oil prices leading to a reduction in drilling and completion activity. For 2020, EIA's WTI crude oil price forecast averages \$38/b for the year, a decline of \$19/b from 2019 levels, and \$21/b lower than forecast in the January STEO. EIA models show about a six-month lag between changes in crude oil price and changes in wellhead production. Given that lag, EIA expects recent declines in price to lower production beginning in the third quarter of 2020.

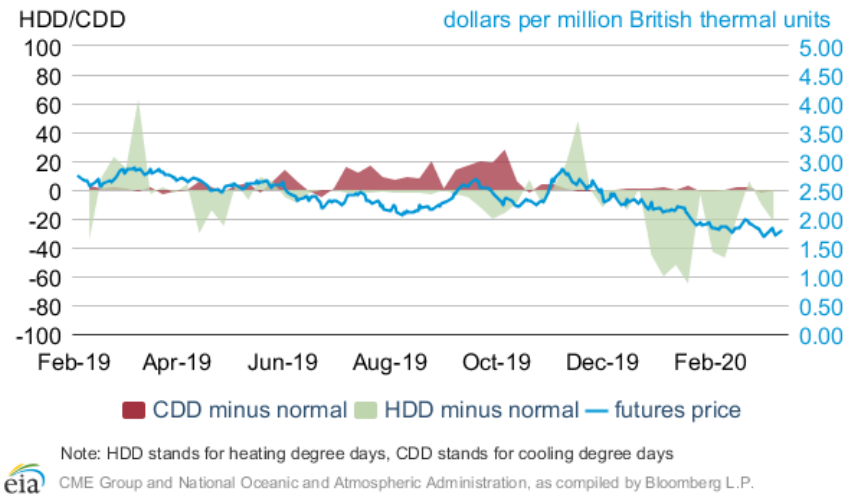
For 2021, EIA expects WTI prices will rise to an average of \$50/b, which EIA expects will contribute to U.S. crude oil production rising again by the fourth quarter of 2020.

EIA estimates that onshore crude oil production in the Lower 48 states will average 10.6 million b/d in 2020, an increase of 0.7 million b/d from 2019 levels, and then fall by 0.4 million b/d to average 10.2 million b/d in 2021. In 2020, production growth comes largely from the Permian region. In 2021, the production declines are mostly attributed to the Bakken and Eagle Ford regions, with the Permian region expected to see flat growth.

## Natural Gas

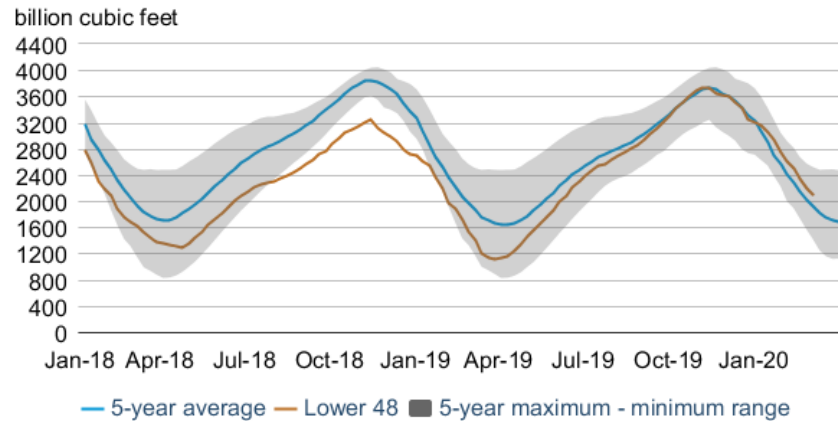
**Prices:** The front-month natural gas futures contract for April delivery at the Henry Hub settled at \$1.78 per million British thermal units (MMBtu) on March 9, down 4 cents/MMBtu from February 3 (**Figure 2**). Warmer-than-normal weather patterns continued to keep prices at historically low levels.

**Figure 2. Natural gas front-month futures prices and actual minus historical average HDD and CDD**



**Natural gas stocks:** Despite warmer-than-normal temperatures during February, 5% more natural gas was withdrawn from underground storage during the four weeks ending February 28, 2020 than the five-year (2015–19) average, which likely reflected growth in natural gas consumption for power generation. However, there was more natural gas in underground storage at the end of February than the five-year average (**Figure 3**). This February contrasts with the relatively cold conditions during February 2019, when storage levels at the end of the month fell 24% lower than the five-year (2014–18) average. More natural gas in storage this year relative to both the five-year average and year-ago levels contributed to 78 cents/MMBtu lower Henry Hub spot prices in February 2020 compared with February 2019. EIA expects natural gas in storage to build at a rate close to the five-year average during the upcoming April–October injection season, and forecasts that natural gas in storage will end October at almost 4.0 trillion cubic feet, 6% more than the five-year average. With rising temperatures in the coming months causing increased use of natural gas for power generation, EIA expects Henry Hub prices to rise to an average of \$2.22/MMBtu in the third quarter of 2020. Although that level would be an increase from current levels, it would be 16 cents/MMBtu lower than in the third quarter of 2019.

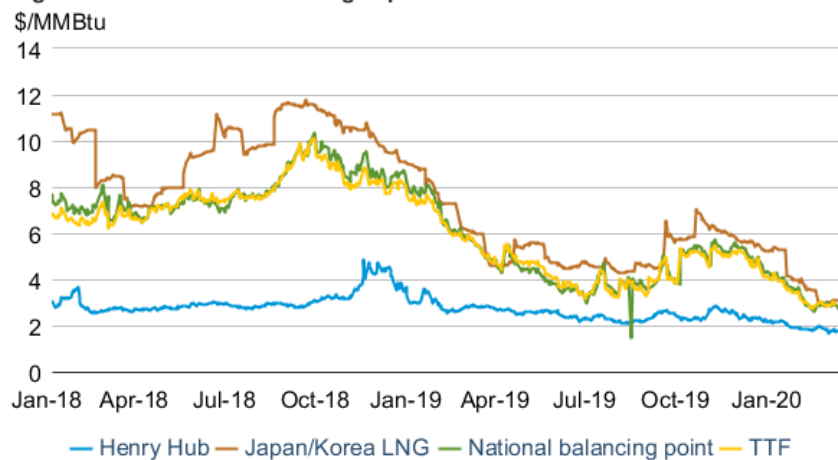
**Figure 3. Working gas in underground storage compared with the 5-year maximum and minimum**



eia U.S. Energy Information Administration

**International natural gas prices:** Europe and Asia have also experienced [warmer-than-normal winter weather](#). As a result, natural gas benchmarks for Europe (the Title Transfer Facility, or TTF, and the National Balancing Point, or NBP) and Asia (Japan-Korea Marker, or JKM) have followed an even steeper downward trend compared with the Henry Hub contract (**Figure 4**). At the end of February, the JKM price reached near parity with TTF, although it typically trades at a premium. The decline of global natural gas prices and narrowing of spreads between markets likely reflects lower demand levels and reduced need for imports in European and Asian markets. EIA expects U.S. LNG exports will average 5.3 Bcf/d in the second quarter of 2020, down by 0.5 Bcf/d from the February STEO.

**Figure 4. International natural gas prices**



eia CME Group, Bloomberg L.P.



## Notable forecast changes

- EIA significantly revised its short-term outlooks for global oil supply, demand, and prices compared with the February STEO. These updates largely resulted from updated data and assumptions about the effects of the 2019 novel coronavirus disease ([COVID-19](#)) on global oil demand and assumptions regarding OPEC's crude oil production following its March 6 meeting. In order to incorporate changed assumptions regarding the OPEC meeting, EIA is releasing this STEO update one day later than scheduled. These changes in global oil assumptions are wide ranging and are summarized in EIA's [forecast changes table](#).
- EIA expects Henry Hub natural gas spot prices to average \$2.11 per million British thermal units in 2020, 10 cents/MMBtu lower than last month's forecast.
- EIA forecasts that U.S. liquefied natural gas exports will average 5.3 billion cubic feet per day (Bcf/d) in the second quarter of 2020 and 6.3 Bcf/d in the third quarter of 2020. These forecasts are 0.5 Bcf/d and 0.2 Bcf/d lower, respectively, than forecast in the February STEO because of less expected global demand for natural gas.
- EIA expects U.S. coal exports in 2020 to average 78 million short tons, which is 9% lower than forecast in the February STEO. The lower forecast reflects less expected global demand for U.S. coal in this forecast compared with last month.
- For more information, see the [detailed table of STEO forecast changes](#).

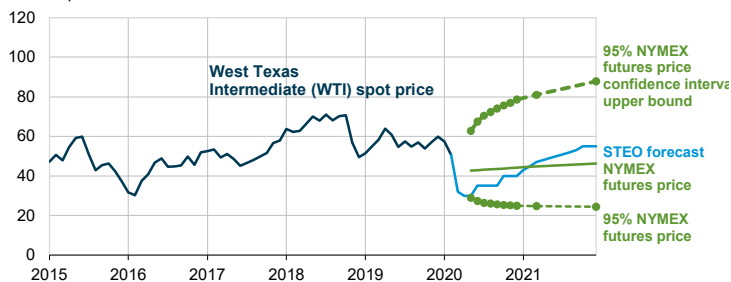
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views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



# Short-Term Energy Outlook

## Chart Gallery for March 2020

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

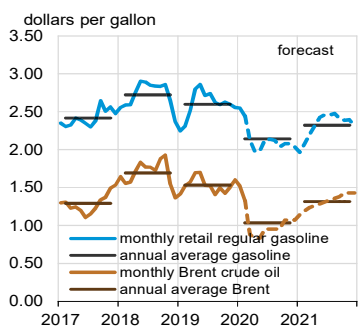


Note: Confidence interval derived from options market information for the five trading days ending Mar 9, 2020. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: Short-Term Energy Outlook, March 2020, and CME Group

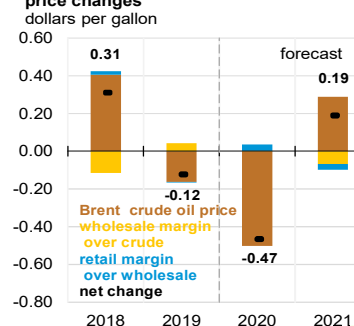


**U.S. gasoline and crude oil prices**

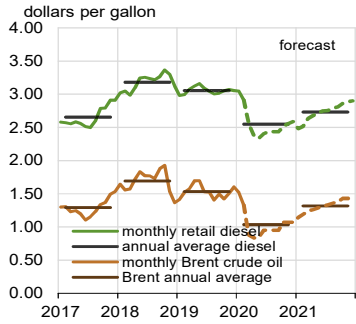


Source: Short-Term Energy Outlook, March 2020

**Components of annual gasoline price changes**

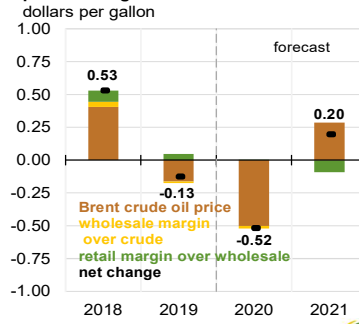


**U.S. diesel and crude oil prices**

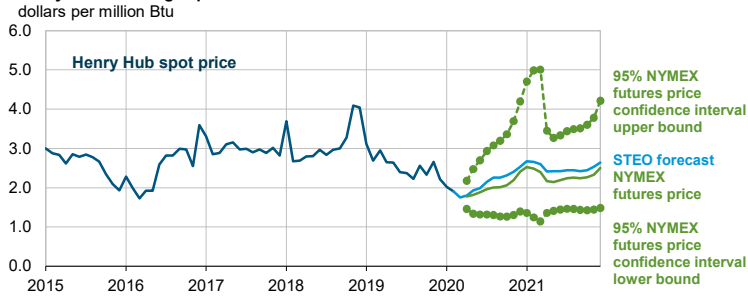


Source: Short-Term Energy Outlook, March 2020

**Components of annual diesel prices changes**



**Henry Hub natural gas price and NYMEX confidence intervals**

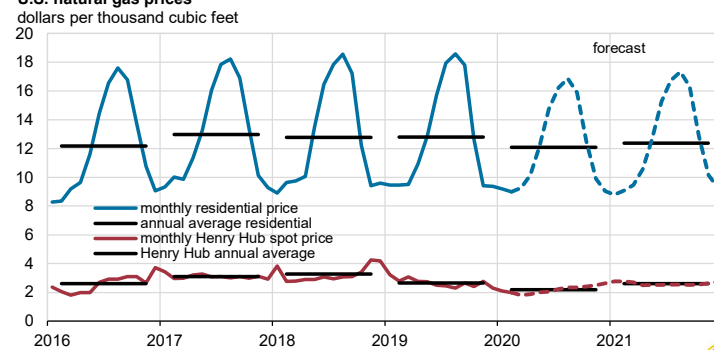


Note: Confidence interval derived from options market information for the five trading days ending Mar 9, 2020. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: Short-Term Energy Outlook, March 2020, and CME Group



**U.S. natural gas prices**

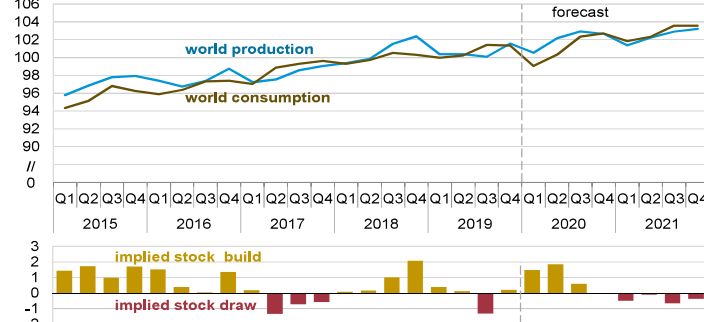


Sources: Short-Term Energy Outlook, March 2020, and Refinitiv



**World liquid fuels production and consumption balance**

million barrels per day

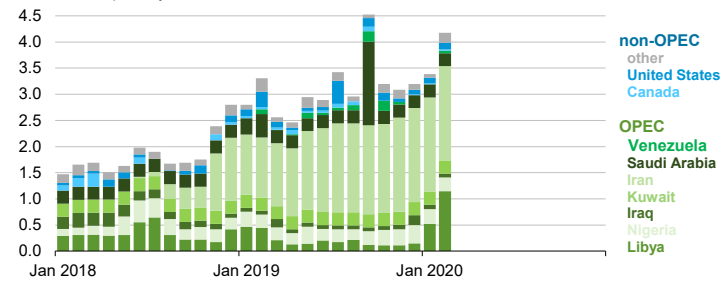


Source: Short-Term Energy Outlook, March 2020



**Estimated unplanned liquid fuels production outages among OPEC and non-OPEC producers**

million barrels per day

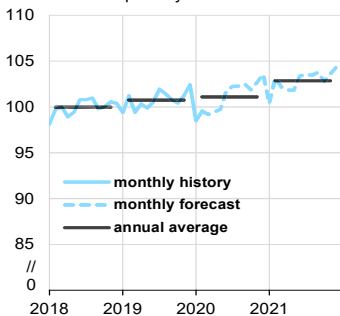


Source: Short-Term Energy Outlook, March 2020



**World liquid fuels consumption**

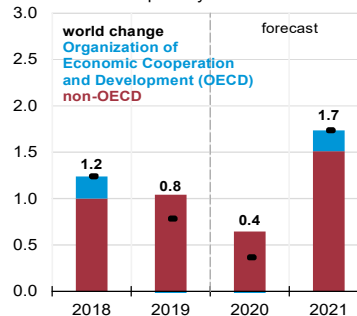
million barrels per day



Source: Short-Term Energy Outlook, March 2020

**Components of annual change**

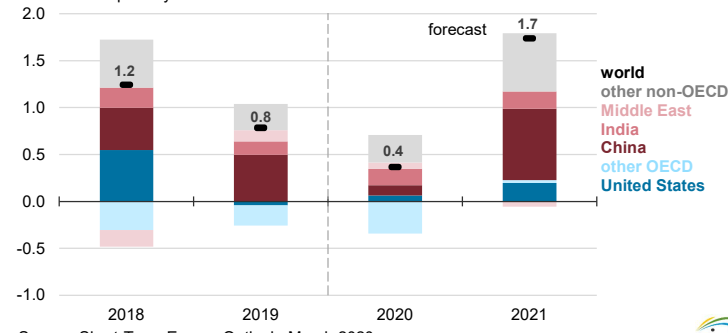
million barrels per day



Source: Short-Term Energy Outlook, March 2020



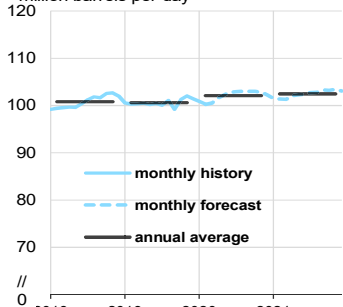
**Annual change in world liquid fuels consumption**  
million barrels per day



Source: Short-Term Energy Outlook, March 2020

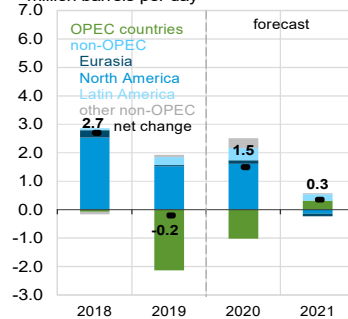


**World crude oil and liquid fuels production**  
million barrels per day

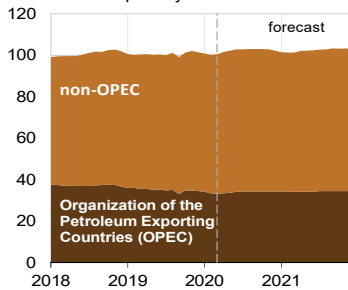


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
million barrels per day

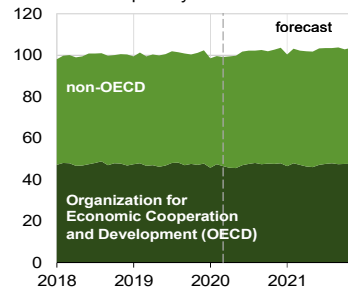


**World liquid fuels production**  
million barrels per day

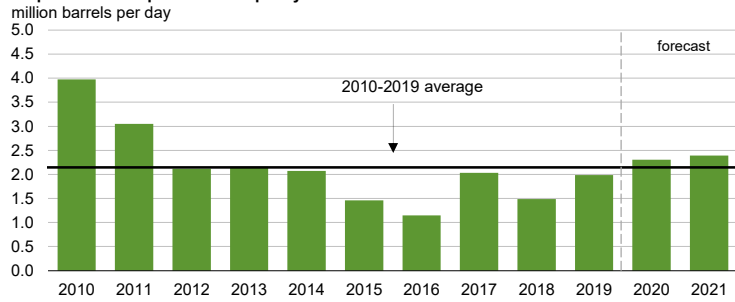


Source: Short-Term Energy Outlook, March 2020

**World liquid fuels consumption**  
million barrels per day



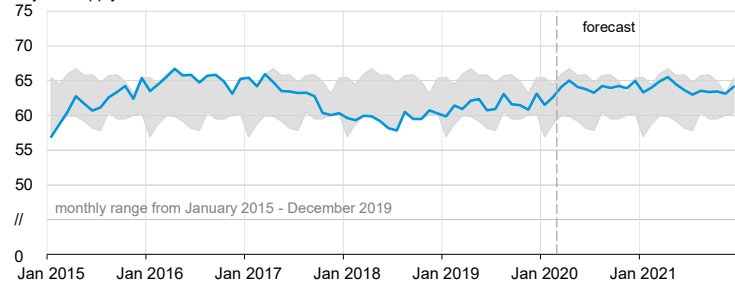
**Organization of the Petroleum Exporting Countries (OPEC)  
surplus crude oil production capacity**



Note: Black line represents 2010-2019 average (2.1 million barrels per day).  
Source: Short-Term Energy Outlook, March 2020



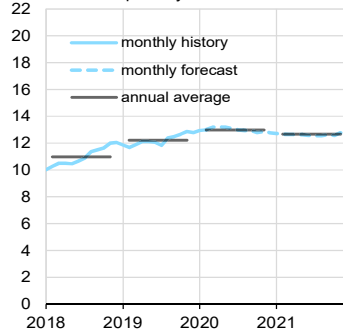
**Organization for Economic Cooperation and Development (OECD)  
commercial inventories of crude oil and other liquids**



Source: Short-Term Energy Outlook, March 2020

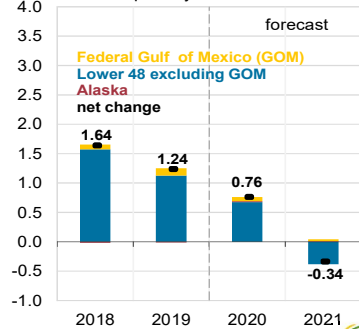


**U.S. crude oil production**

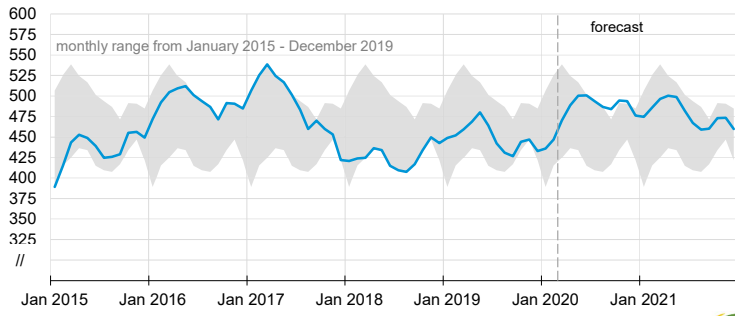


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**



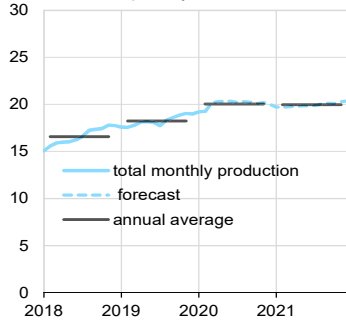
**U.S. commercial crude oil inventories**  
million barrels



Source: Short-Term Energy Outlook, March 2020

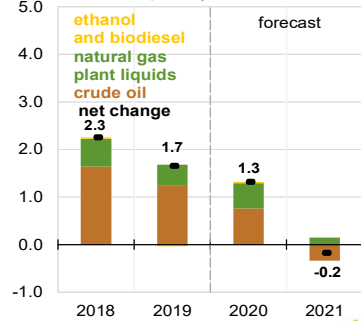


**U.S. crude oil and liquid fuels production**  
million barrels per day

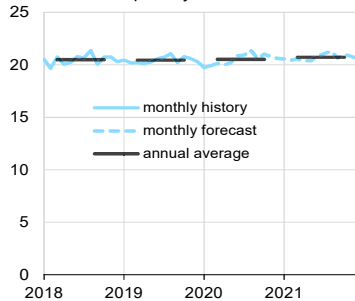


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
million barrels per day

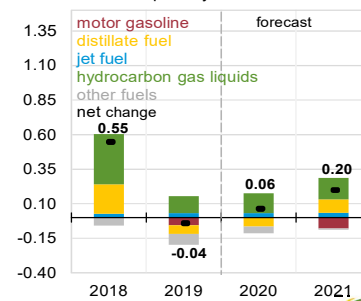


**U.S. liquid fuels product supplied (consumption)**  
million barrels per day

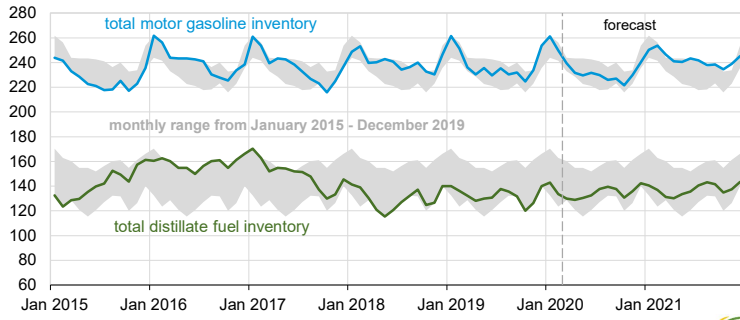


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
million barrels per day



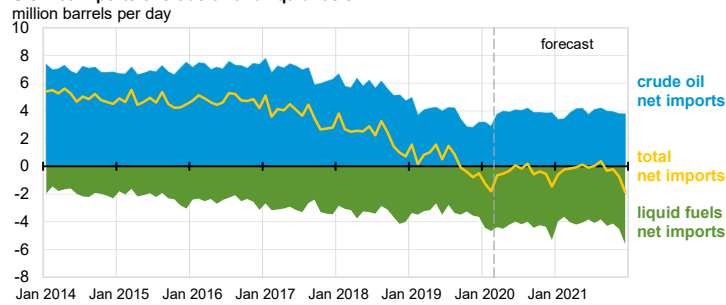
**U.S. gasoline and distillate inventories**  
million barrels



Source: Short-Term Energy Outlook, March 2020



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

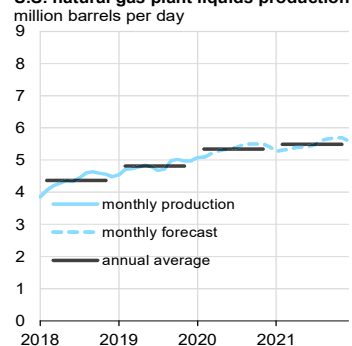


Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: Short-Term Energy Outlook, March 2020

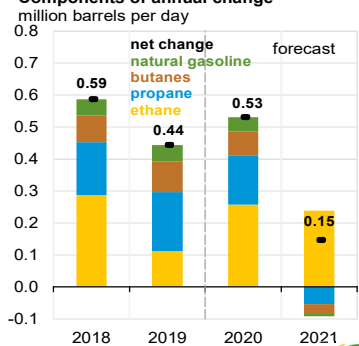


**U.S. natural gas plant liquids production**



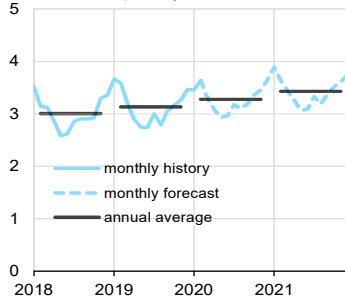
Source: Short-Term Energy Outlook, March 2020

**Components of annual change**



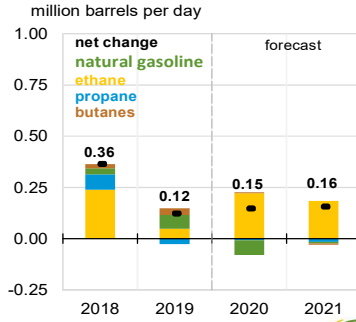


**U.S. hydrocarbon gas liquids product supplied (consumption)**  
million barrels per day

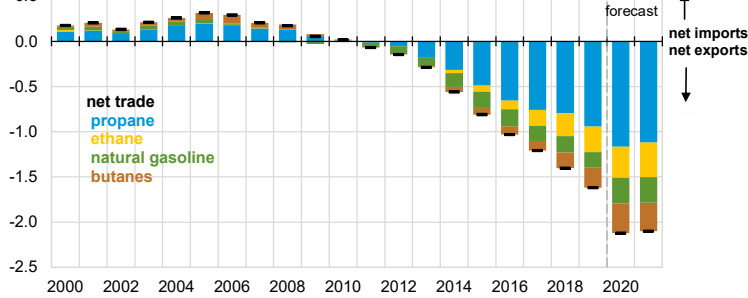


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**



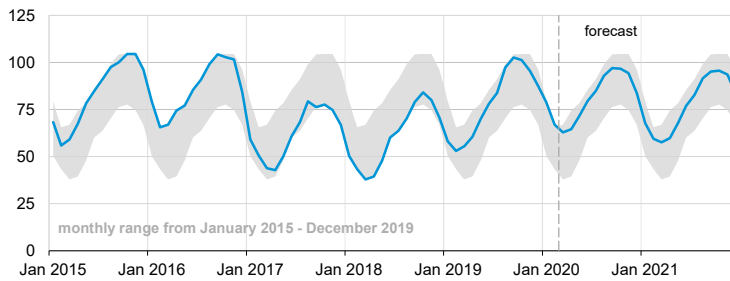
**U.S. net trade of hydrocarbon gas liquids (HGL)**  
million barrels per day



Source: Short-Term Energy Outlook, March 2020



**U.S. commercial propane inventories**  
million barrels

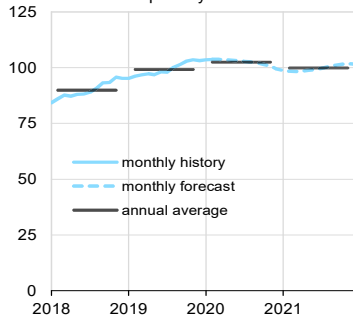


Note: Propane includes refinery propylene.

Source: Short-Term Energy Outlook, March 2020

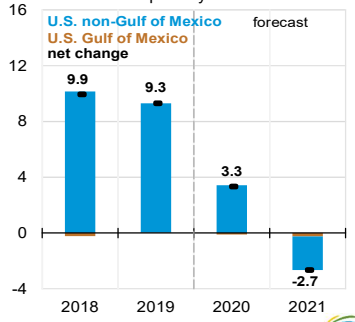


**U.S. marketed natural gas production**  
billion cubic feet per day

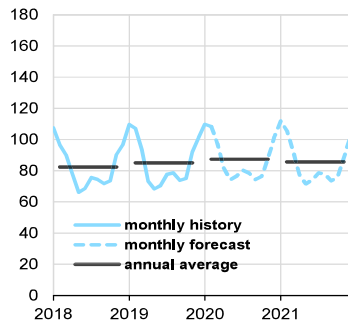


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
billion cubic feet per day

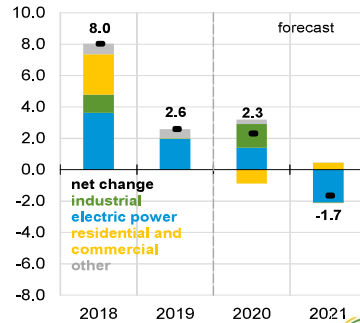


**U.S. natural gas consumption**  
billion cubic feet per day

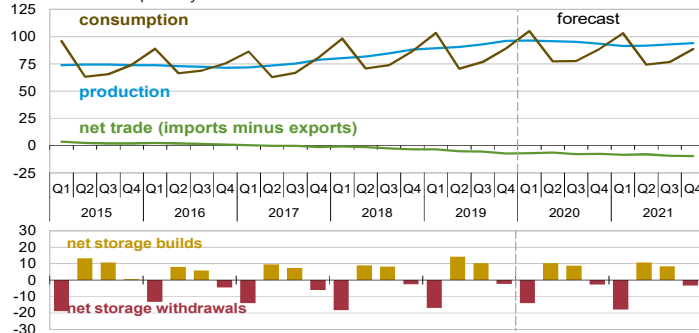


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
billion cubic feet per day



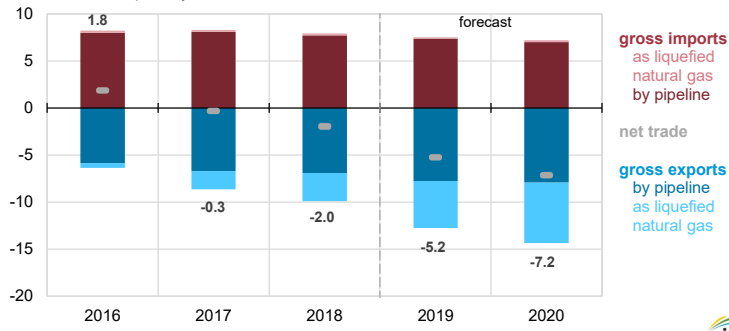
**U.S. natural gas production, consumption, and net imports**  
billion cubic feet per day



Source: Short-Term Energy Outlook, March 2020



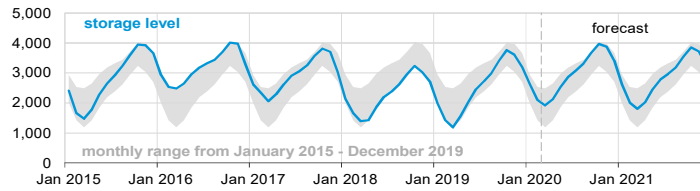
**U.S. annual natural gas trade**  
billion cubic feet per day



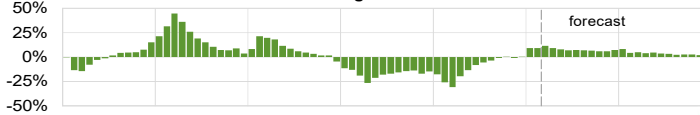
Source: Short-Term Energy Outlook, March 2020



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



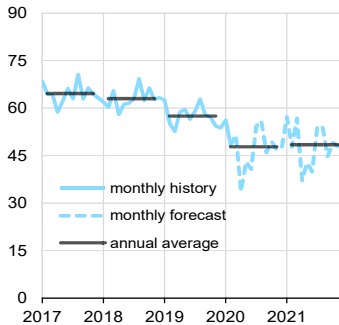
**Percent deviation from 2015 - 2019 average**



Source: Short-Term Energy Outlook, March 2020

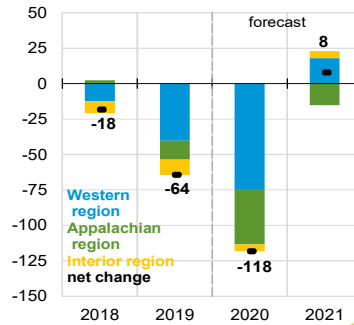


**U.S. coal production**  
million short tons

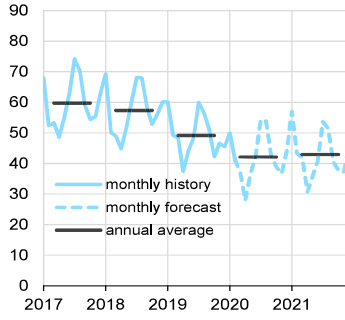


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
million short tons

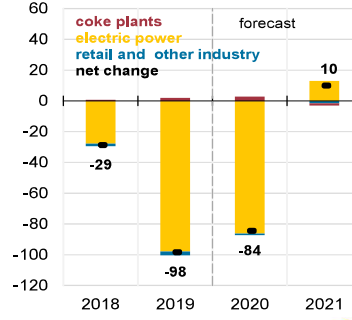


**U.S. coal consumption**  
million short tons

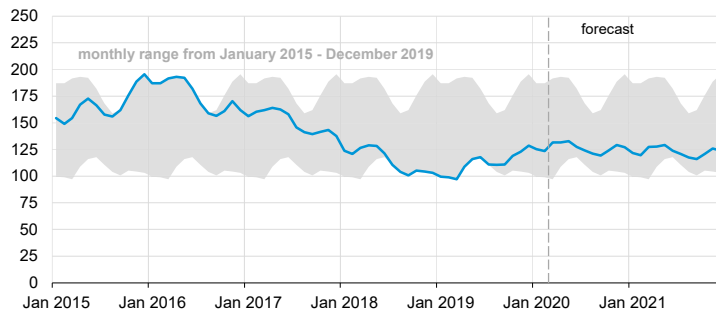


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
million short tons



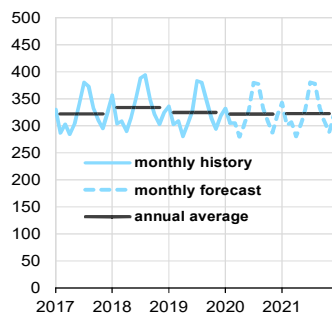
**U.S. electric power coal inventories**  
million short tons



Source: Short-Term Energy Outlook, March 2020

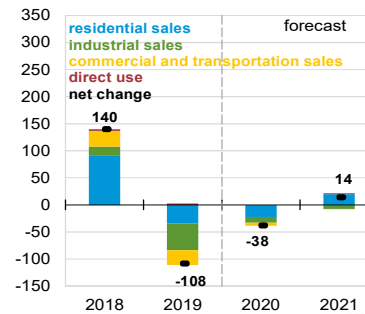


**U.S. electricity consumption**  
billion kilowatthours

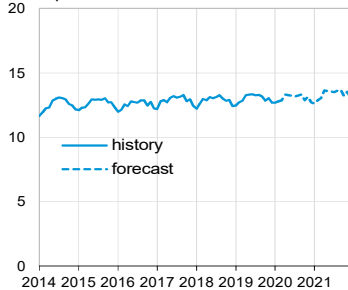


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
billion kilowatthours

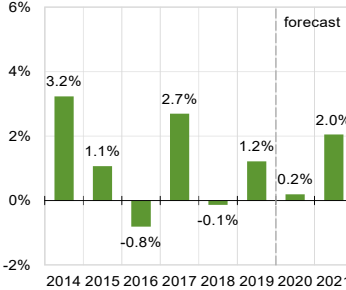


**U.S. monthly residential electricity price**  
cents per kilowatthour

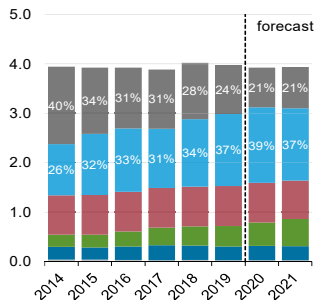


Source: Short-Term Energy Outlook, March 2020

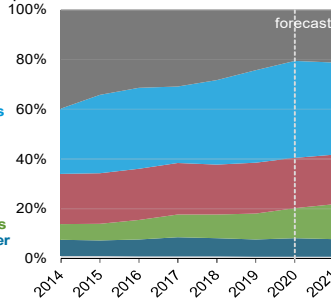
**Annual growth in residential electricity prices**  
percent



**U.S. electricity generation by fuel, all sectors**  
trillion kilowatthours



percent share

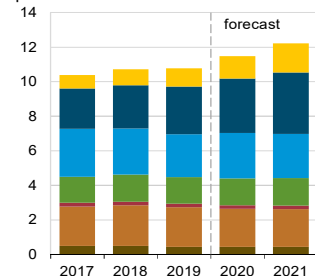


Note: Labels show percentage share of total generation provided by coal and natural gas.

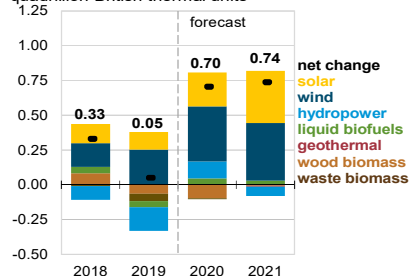
Source: Short-Term Energy Outlook, March 2020



**U.S. renewable energy supply**  
quadrillion British thermal units



**Components of annual change**  
quadrillion British thermal units

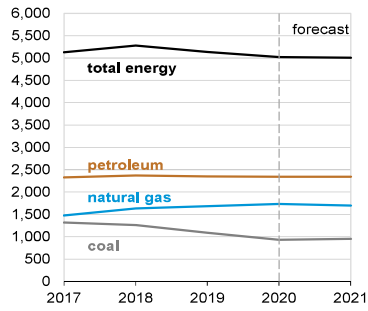


Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

Source: Short-Term Energy Outlook, March 2020

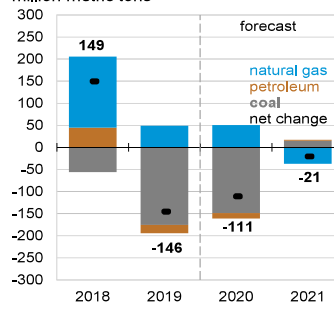


**U.S. annual carbon emissions by source**  
million metric tons

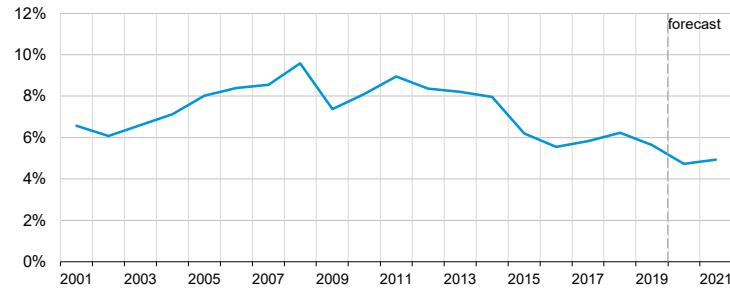


Source: Short-Term Energy Outlook, March 2020

**Components of annual change**  
million metric tons



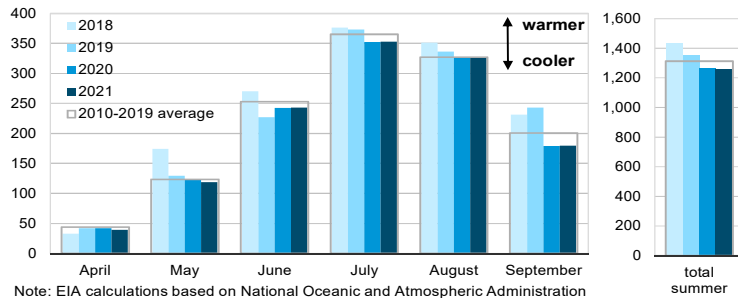
**U.S. annual energy expenditures**  
share of gross domestic product



Source: Short-Term Energy Outlook, March 2020



**U.S. summer cooling degree days**  
population-weighted

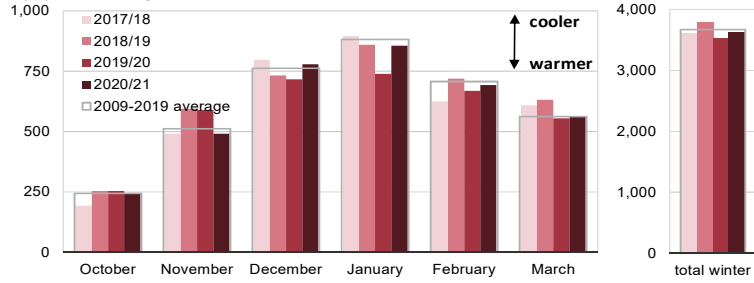


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, March 2020



**U.S. winter heating degree days**  
population-weighted

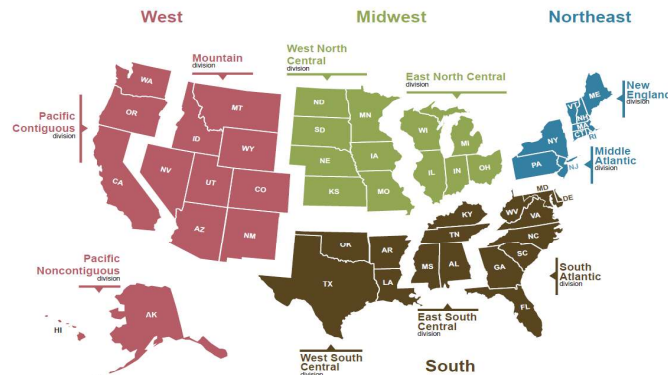


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, March 2020



**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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Energy Supply</b>															
Crude Oil Production (a) (million barrels per day) .....	<b>11.81</b>	<b>12.10</b>	<b>12.23</b>	<b>12.77</b>	<i>13.04</i>	<i>13.16</i>	<i>12.96</i>	<i>12.81</i>	<i>12.67</i>	<i>12.61</i>	<i>12.58</i>	<i>12.76</i>	<b>12.23</b>	<i>12.99</i>	<i>12.66</i>
Dry Natural Gas Production (billion cubic feet per day) .....	<b>89.32</b>	<b>90.50</b>	<b>92.98</b>	<b>96.08</b>	<i>96.41</i>	<i>96.07</i>	<i>95.29</i>	<i>93.36</i>	<i>91.42</i>	<i>91.74</i>	<i>93.11</i>	<i>94.15</i>	<b>92.24</b>	<i>95.28</i>	<i>92.61</i>
Coal Production (million short tons) .....	<b>170</b>	<b>175</b>	<b>180</b>	<b>165</b>	<i>156</i>	<i>117</i>	<i>156</i>	<i>144</i>	<i>162</i>	<i>120</i>	<i>153</i>	<i>147</i>	<b>690</b>	<i>573</i>	<i>581</i>
<b>Energy Consumption</b>															
Liquid Fuels (million barrels per day) .....	<b>20.29</b>	<b>20.32</b>	<b>20.68</b>	<b>20.55</b>	<i>19.94</i>	<i>20.36</i>	<i>20.99</i>	<i>20.80</i>	<i>20.52</i>	<i>20.55</i>	<i>21.01</i>	<i>20.80</i>	<b>20.46</b>	<i>20.52</i>	<i>20.72</i>
Natural Gas (billion cubic feet per day) .....	<b>103.32</b>	<b>70.74</b>	<b>76.74</b>	<b>89.34</b>	<i>105.09</i>	<i>77.47</i>	<i>77.78</i>	<i>88.82</i>	<i>103.15</i>	<i>74.32</i>	<i>76.69</i>	<i>88.54</i>	<b>84.97</b>	<i>87.27</i>	<i>85.61</i>
Coal (b) (million short tons) .....	<b>158</b>	<b>130</b>	<b>168</b>	<b>134</b>	<i>128</i>	<i>107</i>	<i>151</i>	<i>120</i>	<i>142</i>	<i>107</i>	<i>146</i>	<i>120</i>	<b>590</b>	<i>505</i>	<i>515</i>
Electricity (billion kilowatt hours per day) .....	<b>10.53</b>	<b>10.01</b>	<b>12.07</b>	<b>10.07</b>	<i>10.35</i>	<i>10.02</i>	<i>11.85</i>	<i>9.93</i>	<i>10.56</i>	<i>10.04</i>	<i>11.87</i>	<i>9.96</i>	<b>10.67</b>	<i>10.54</i>	<i>10.61</i>
Renewables (c) (quadrillion Btu) .....	<b>2.81</b>	<b>3.08</b>	<b>2.80</b>	<b>2.79</b>	<i>2.92</i>	<i>3.27</i>	<i>2.99</i>	<i>3.00</i>	<i>3.12</i>	<i>3.47</i>	<i>3.19</i>	<i>3.16</i>	<b>11.49</b>	<i>12.19</i>	<i>12.93</i>
Total Energy Consumption (d) (quadrillion Btu) .....	<b>26.23</b>	<b>23.08</b>	<b>24.62</b>	<b>24.86</b>	<i>25.88</i>	<i>23.35</i>	<i>24.57</i>	<i>24.84</i>	<i>26.16</i>	<i>23.31</i>	<i>24.48</i>	<i>24.81</i>	<b>98.79</b>	<i>98.64</i>	<i>98.76</i>
<b>Energy Prices</b>															
Crude Oil West Texas Intermediate Spot (dollars per barrel) .....	<b>54.82</b>	<b>59.94</b>	<b>56.35</b>	<b>56.86</b>	<i>46.35</i>	<i>31.72</i>	<i>35.00</i>	<i>40.00</i>	<i>45.13</i>	<i>49.00</i>	<i>51.98</i>	<i>55.00</i>	<b>57.02</b>	<i>38.19</i>	<i>50.36</i>
Natural Gas Henry Hub Spot (dollars per million Btu) .....	<b>2.92</b>	<b>2.56</b>	<b>2.38</b>	<b>2.40</b>	<i>1.89</i>	<i>1.91</i>	<i>2.22</i>	<i>2.41</i>	<i>2.64</i>	<i>2.42</i>	<i>2.43</i>	<i>2.54</i>	<b>2.57</b>	<i>2.11</i>	<i>2.51</i>
Coal (dollars per million Btu) .....	<b>2.08</b>	<b>2.05</b>	<b>2.00</b>	<b>1.95</b>	<i>2.08</i>	<i>2.04</i>	<i>2.03</i>	<i>2.03</i>	<i>2.06</i>	<i>2.08</i>	<i>2.06</i>	<i>2.07</i>	<b>2.02</b>	<i>2.05</i>	<i>2.06</i>
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR) .....	<b>18,927</b>	<b>19,022</b>	<b>19,121</b>	<b>19,220</b>	<i>19,316</i>	<i>19,422</i>	<i>19,528</i>	<i>19,626</i>	<i>19,711</i>	<i>19,775</i>	<i>19,850</i>	<i>19,934</i>	<b>19,073</b>	<i>19,473</i>	<i>19,817</i>
Percent change from prior year .....	<b>2.7</b>	<b>2.3</b>	<b>2.1</b>	<b>2.3</b>	<i>2.1</i>	<i>2.1</i>	<i>2.1</i>	<i>2.1</i>	<i>2.0</i>	<i>1.8</i>	<i>1.7</i>	<i>1.6</i>	<b>2.3</b>	<i>2.1</i>	<i>1.8</i>
GDP Implicit Price Deflator (Index, 2012=100) .....	<b>111.5</b>	<b>112.2</b>	<b>112.7</b>	<b>113.1</b>	<i>113.5</i>	<i>114.0</i>	<i>114.7</i>	<i>115.4</i>	<i>116.1</i>	<i>116.8</i>	<i>117.4</i>	<i>118.1</i>	<b>112.4</b>	<i>114.4</i>	<i>117.1</i>
Percent change from prior year .....	<b>2.0</b>	<b>1.8</b>	<b>1.7</b>	<b>1.7</b>	<i>1.8</i>	<i>1.6</i>	<i>1.8</i>	<i>2.0</i>	<i>2.2</i>	<i>2.4</i>	<i>2.4</i>	<i>2.4</i>	<b>1.8</b>	<i>1.8</i>	<i>2.4</i>
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	<b>14,878</b>	<b>14,934</b>	<b>15,043</b>	<b>15,100</b>	<i>15,191</i>	<i>15,299</i>	<i>15,352</i>	<i>15,422</i>	<i>15,517</i>	<i>15,591</i>	<i>15,672</i>	<i>15,745</i>	<b>14,989</b>	<i>15,316</i>	<i>15,631</i>
Percent change from prior year .....	<b>3.3</b>	<b>3.0</b>	<b>2.9</b>	<b>2.6</b>	<i>2.1</i>	<i>2.4</i>	<i>2.1</i>	<i>2.1</i>	<i>2.2</i>	<i>1.9</i>	<i>2.1</i>	<i>2.1</i>	<b>3.0</b>	<i>2.2</i>	<i>2.1</i>
Manufacturing Production Index (Index, 2012=100) .....	<b>106.5</b>	<b>105.7</b>	<b>105.9</b>	<b>105.8</b>	<i>105.8</i>	<i>105.7</i>	<i>106.3</i>	<i>106.4</i>	<i>106.6</i>	<i>106.5</i>	<i>106.8</i>	<i>107.3</i>	<b>106.0</b>	<i>106.1</i>	<i>106.8</i>
Percent change from prior year .....	<b>1.6</b>	<b>0.1</b>	<b>-0.6</b>	<b>-1.1</b>	<i>-0.7</i>	<i>0.0</i>	<i>0.4</i>	<i>0.6</i>	<i>0.7</i>	<i>0.8</i>	<i>0.5</i>	<i>0.8</i>	<b>0.0</b>	<i>0.1</i>	<i>0.7</i>
<b>Weather</b>															
U.S. Heating Degree-Days .....	<b>2,210</b>	<b>481</b>	<b>57</b>	<b>1,559</b>	<i>1,962</i>	<i>475</i>	<i>72</i>	<i>1,516</i>	<i>2,112</i>	<i>491</i>	<i>72</i>	<i>1,514</i>	<b>4,307</b>	<i>4,025</i>	<i>4,189</i>
U.S. Cooling Degree-Days .....	<b>46</b>	<b>399</b>	<b>953</b>	<b>105</b>	<i>52</i>	<i>408</i>	<i>858</i>	<i>94</i>	<i>43</i>	<i>401</i>	<i>859</i>	<i>95</i>	<b>1,502</b>	<i>1,411</i>	<i>1,398</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 (MER). 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Crude Oil</b> (dollars per barrel)															
West Texas Intermediate Spot Average .....	<b>54.82</b>	<b>59.94</b>	<b>56.35</b>	<b>56.86</b>	46.35	31.72	35.00	40.00	45.13	49.00	51.98	55.00	<b>57.02</b>	38.19	50.36
Brent Spot Average .....	<b>63.14</b>	<b>69.07</b>	<b>61.90</b>	<b>63.30</b>	51.80	36.72	40.00	45.00	50.13	54.00	56.98	60.00	<b>64.37</b>	43.30	55.36
U.S. Imported Average .....	<b>55.25</b>	<b>62.98</b>	<b>57.30</b>	<b>55.49</b>	42.00	28.04	31.93	36.93	42.60	46.48	49.49	52.51	<b>57.92</b>	34.36	47.90
U.S. Refiner Average Acquisition Cost .....	<b>56.93</b>	<b>63.55</b>	<b>58.67</b>	<b>57.66</b>	45.47	30.53	34.43	39.43	44.01	48.02	50.99	54.01	<b>59.23</b>	37.35	49.33
<b>U.S. Liquid Fuels</b> (cents per gallon)															
<b>Refiner Prices for Resale</b>															
Gasoline .....	<b>167</b>	<b>205</b>	<b>189</b>	<b>182</b>	153	128	133	131	138	164	168	161	<b>186</b>	136	158
Diesel Fuel .....	<b>192</b>	<b>203</b>	<b>192</b>	<b>197</b>	160	130	137	149	155	171	177	184	<b>196</b>	144	172
Heating Oil .....	<b>189</b>	<b>195</b>	<b>184</b>	<b>191</b>	163	120	125	140	156	167	174	183	<b>190</b>	142	164
<b>Refiner Prices to End Users</b>															
Jet Fuel .....	<b>193</b>	<b>204</b>	<b>194</b>	<b>197</b>	152	127	137	145	155	170	176	184	<b>197</b>	140	172
No. 6 Residual Fuel Oil (a) .....	<b>153</b>	<b>163</b>	<b>155</b>	<b>162</b>	147	101	114	127	107	114	119	127	<b>158</b>	122	117
<b>Retail Prices Including Taxes</b>															
Gasoline Regular Grade (b) .....	<b>236</b>	<b>279</b>	<b>265</b>	<b>259</b>	237	203	210	206	208	240	245	236	<b>260</b>	214	233
Gasoline All Grades (b) .....	<b>245</b>	<b>288</b>	<b>274</b>	<b>269</b>	246	215	222	220	221	253	258	250	<b>269</b>	225	246
On-highway Diesel Fuel .....	<b>302</b>	<b>312</b>	<b>302</b>	<b>306</b>	283	237	243	255	255	271	279	288	<b>306</b>	254	273
Heating Oil .....	<b>300</b>	<b>305</b>	<b>290</b>	<b>301</b>	287	240	229	249	257	264	273	293	<b>300</b>	263	271
<b>Natural Gas</b>															
Henry Hub Spot (dollars per thousand cubic feet) .....	<b>3.03</b>	<b>2.66</b>	<b>2.47</b>	<b>2.49</b>	1.97	1.98	2.31	2.51	2.74	2.51	2.53	2.63	<b>2.66</b>	2.19	2.60
Henry Hub Spot (dollars per million Btu) .....	<b>2.92</b>	<b>2.56</b>	<b>2.38</b>	<b>2.40</b>	1.89	1.91	2.22	2.41	2.64	2.42	2.43	2.54	<b>2.57</b>	2.11	2.51
<b>U.S. Retail Prices</b> (dollars per thousand cubic feet)															
Industrial Sector .....	<b>4.67</b>	<b>3.74</b>	<b>3.30</b>	<b>3.74</b>	3.49	2.88	3.13	3.65	4.06	3.48	3.42	3.83	<b>3.91</b>	3.31	3.72
Commercial Sector .....	<b>7.59</b>	<b>7.97</b>	<b>8.40</b>	<b>7.22</b>	7.02	7.29	7.82	7.20	7.19	7.73	8.17	7.40	<b>7.62</b>	7.21	7.45
Residential Sector .....	<b>9.47</b>	<b>12.48</b>	<b>18.10</b>	<b>9.88</b>	9.15	11.58	16.30	9.93	9.08	11.96	16.76	10.19	<b>10.56</b>	10.24	10.33
<b>U.S. Electricity</b>															
<b>Power Generation Fuel Costs</b> (dollars per million Btu)															
Coal .....	<b>2.08</b>	<b>2.05</b>	<b>2.00</b>	<b>1.95</b>	2.08	2.04	2.03	2.03	2.06	2.08	2.06	2.07	<b>2.02</b>	2.05	2.06
Natural Gas .....	<b>3.71</b>	<b>2.73</b>	<b>2.51</b>	<b>2.79</b>	2.29	1.88	2.17	2.63	3.08	2.53	2.46	2.80	<b>2.88</b>	2.23	2.69
Residual Fuel Oil (c) .....	<b>12.21</b>	<b>13.39</b>	<b>12.79</b>	<b>12.35</b>	11.99	9.03	8.17	8.42	9.26	10.89	10.70	10.99	<b>12.68</b>	9.38	10.45
Distillate Fuel Oil .....	<b>14.88</b>	<b>15.75</b>	<b>15.01</b>	<b>15.27</b>	13.54	10.49	10.90	11.75	12.04	13.37	13.76	14.39	<b>15.21</b>	11.80	13.31
<b>Retail Prices</b> (cents per kilowatthour)															
Industrial Sector .....	<b>6.67</b>	<b>6.72</b>	<b>7.24</b>	<b>6.65</b>	6.48	6.61	7.26	6.71	6.66	6.81	7.40	6.81	<b>6.83</b>	6.78	6.93
Commercial Sector .....	<b>10.41</b>	<b>10.65</b>	<b>11.00</b>	<b>10.53</b>	10.28	10.47	10.86	10.47	10.32	10.64	11.12	10.74	<b>10.66</b>	10.54	10.72
Residential Sector .....	<b>12.67</b>	<b>13.32</b>	<b>13.25</b>	<b>12.85</b>	12.78	13.27	13.23	12.90	12.83	13.59	13.59	13.25	<b>13.02</b>	13.05	13.32

- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Supply (million barrels per day) (a)</b>															
OECD .....	<b>31.08</b>	<b>31.32</b>	<b>31.46</b>	<b>32.69</b>	33.30	33.71	33.56	33.62	33.27	33.29	33.42	33.91	<b>31.64</b>	33.55	33.48
U.S. (50 States) .....	<b>18.91</b>	<b>19.38</b>	<b>19.49</b>	<b>20.25</b>	20.68	21.10	21.05	20.92	20.54	20.68	20.83	21.11	<b>19.51</b>	20.94	20.79
Canada .....	<b>5.44</b>	<b>5.47</b>	<b>5.47</b>	<b>5.62</b>	5.69	5.68	5.70	5.74	5.79	5.78	5.82	5.88	<b>5.50</b>	5.70	5.82
Mexico .....	<b>1.91</b>	<b>1.91</b>	<b>1.92</b>	<b>1.92</b>	1.94	1.90	1.91	1.85	1.82	1.80	1.78	1.77	<b>1.91</b>	1.90	1.79
Other OECD .....	<b>4.82</b>	<b>4.56</b>	<b>4.58</b>	<b>4.90</b>	4.98	5.03	4.91	5.11	5.11	5.04	4.98	5.16	<b>4.71</b>	5.01	5.07
Non-OECD .....	<b>69.29</b>	<b>69.05</b>	<b>68.65</b>	<b>68.87</b>	67.25	68.48	69.38	69.05	68.10	68.94	69.50	69.30	<b>68.96</b>	68.54	68.97
OPEC .....	<b>35.98</b>	<b>35.43</b>	<b>34.45</b>	<b>34.81</b>	33.77	33.89	34.46	34.45	34.36	34.34	34.53	34.62	<b>35.16</b>	34.15	34.46
Crude Oil Portion .....	<b>30.47</b>	<b>30.00</b>	<b>29.20</b>	<b>29.54</b>	28.69	28.85	29.41	29.39	29.32	29.29	29.47	29.55	<b>29.80</b>	29.09	29.41
Other Liquids (b) .....	<b>5.51</b>	<b>5.43</b>	<b>5.25</b>	<b>5.27</b>	5.07	5.05	5.06	5.06	5.04	5.05	5.06	5.07	<b>5.36</b>	5.06	5.06
Eurasia .....	<b>14.87</b>	<b>14.43</b>	<b>14.59</b>	<b>14.68</b>	14.71	14.76	14.74	14.78	14.72	14.58	14.62	14.66	<b>14.64</b>	14.75	14.64
China .....	<b>4.89</b>	<b>4.92</b>	<b>4.89</b>	<b>4.88</b>	4.87	4.95	4.95	5.00	4.98	5.01	5.01	5.05	<b>4.89</b>	4.94	5.01
Other Non-OECD .....	<b>13.55</b>	<b>14.26</b>	<b>14.71</b>	<b>14.50</b>	13.90	14.88	15.22	14.82	14.05	15.01	15.34	14.97	<b>14.26</b>	14.71	14.85
Total World Supply .....	<b>100.36</b>	<b>100.36</b>	<b>100.10</b>	<b>101.57</b>	100.55	102.19	102.94	102.67	101.37	102.23	102.92	103.21	<b>100.60</b>	102.09	102.44
Non-OPEC Supply .....	<b>64.39</b>	<b>64.93</b>	<b>65.65</b>	<b>66.75</b>	66.78	68.29	68.48	68.22	67.01	67.89	68.39	68.60	<b>65.44</b>	67.95	67.98
<b>Consumption (million barrels per day) (c)</b>															
OECD .....	<b>47.39</b>	<b>46.71</b>	<b>47.87</b>	<b>47.53</b>	46.60	46.17	47.77	47.83	47.24	46.58	47.75	47.70	<b>47.38</b>	47.10	47.32
U.S. (50 States) .....	<b>20.29</b>	<b>20.32</b>	<b>20.68</b>	<b>20.55</b>	19.94	20.36	20.99	20.80	20.52	20.55	21.01	20.80	<b>20.46</b>	20.52	20.72
U.S. Territories .....	<b>0.12</b>	<b>0.11</b>	<b>0.12</b>	<b>0.13</b>	0.12	0.11	0.12	0.13	0.16	0.14	0.14	0.15	<b>0.12</b>	0.12	0.15
Canada .....	<b>2.45</b>	<b>2.44</b>	<b>2.60</b>	<b>2.55</b>	2.52	2.46	2.57	2.54	2.52	2.46	2.57	2.54	<b>2.51</b>	2.52	2.52
Europe .....	<b>13.89</b>	<b>14.03</b>	<b>14.54</b>	<b>14.07</b>	13.62	13.76	14.42	14.17	13.72	13.93	14.43	14.14	<b>14.14</b>	13.99	14.06
Japan .....	<b>4.09</b>	<b>3.41</b>	<b>3.44</b>	<b>3.80</b>	3.97	3.21	3.30	3.65	3.87	3.17	3.24	3.56	<b>3.68</b>	3.53	3.46
Other OECD .....	<b>6.55</b>	<b>6.40</b>	<b>6.49</b>	<b>6.43</b>	6.44	6.27	6.38	6.54	6.46	6.33	6.36	6.51	<b>6.47</b>	6.41	6.41
Non-OECD .....	<b>52.58</b>	<b>53.53</b>	<b>53.55</b>	<b>53.83</b>	52.46	54.16	54.57	54.87	54.62	55.76	55.83	55.88	<b>53.37</b>	54.02	55.53
Eurasia .....	<b>4.83</b>	<b>4.90</b>	<b>5.17</b>	<b>5.12</b>	4.83	4.96	5.34	5.24	4.98	5.04	5.43	5.28	<b>5.01</b>	5.10	5.18
Europe .....	<b>0.76</b>	<b>0.76</b>	<b>0.78</b>	<b>0.78</b>	0.77	0.77	0.79	0.79	0.78	0.78	0.80	0.80	<b>0.77</b>	0.78	0.79
China .....	<b>14.38</b>	<b>14.67</b>	<b>14.39</b>	<b>14.61</b>	13.90	14.79	14.76	15.05	15.32	15.53	15.23	15.47	<b>14.51</b>	14.62	15.39
Other Asia .....	<b>13.95</b>	<b>13.97</b>	<b>13.62</b>	<b>13.94</b>	14.13	14.22	13.94	14.29	14.66	14.83	14.39	14.76	<b>13.87</b>	14.15	14.66
Other Non-OECD .....	<b>18.66</b>	<b>19.22</b>	<b>19.59</b>	<b>19.38</b>	18.83	19.41	19.74	19.49	18.88	19.58	19.98	19.57	<b>19.21</b>	19.37	19.51
Total World Consumption .....	<b>99.97</b>	<b>100.24</b>	<b>101.41</b>	<b>101.36</b>	99.06	100.33	102.34	102.70	101.87	102.34	103.59	103.59	<b>100.75</b>	101.12	102.85
<b>Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)</b>															
U.S. (50 States) .....	<b>0.17</b>	<b>-0.62</b>	<b>0.06</b>	<b>0.28</b>	0.10	-0.67	-0.10	0.50	0.09	-0.34	-0.08	0.46	<b>-0.03</b>	-0.04	0.04
Other OECD .....	<b>-0.21</b>	<b>0.03</b>	<b>-0.16</b>	<b>0.26</b>	-0.53	-0.38	-0.16	-0.16	0.13	0.14	0.24	-0.03	<b>-0.02</b>	-0.31	0.12
Other Stock Draws and Balance .....	<b>-0.35</b>	<b>0.47</b>	<b>1.40</b>	<b>-0.74</b>	-1.05	-0.80	-0.34	-0.31	0.27	0.30	0.51	-0.06	<b>0.20</b>	-0.62	0.25
Total Stock Draw .....	<b>-0.40</b>	<b>-0.13</b>	<b>1.31</b>	<b>-0.20</b>	-1.49	-1.86	-0.60	0.03	0.50	0.11	0.67	0.37	<b>0.15</b>	-0.97	0.41
<b>End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)</b>															
U.S. Commercial Inventory .....	<b>1,249</b>	<b>1,310</b>	<b>1,305</b>	<b>1,289</b>	1,280	1,347	1,356	1,313	1,307	1,341	1,350	1,310	<b>1,289</b>	1,313	1,310
OECD Commercial Inventory .....	<b>2,867</b>	<b>2,925</b>	<b>2,934</b>	<b>2,894</b>	2,934	3,035	3,060	3,031	3,013	3,034	3,020	2,983	<b>2,894</b>	3,031	2,983

- = 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, Lithuania, 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>North America</b> .....	<b>26.26</b>	<b>26.76</b>	<b>26.88</b>	<b>27.80</b>	<i>28.31</i>	<i>28.68</i>	<i>28.65</i>	<i>28.51</i>	<i>28.15</i>	<i>28.26</i>	<i>28.44</i>	<i>28.75</i>	<b>26.93</b>	<i>28.54</i>	<i>28.40</i>
Canada .....	<b>5.44</b>	<b>5.47</b>	<b>5.47</b>	<b>5.62</b>	<i>5.69</i>	<i>5.68</i>	<i>5.70</i>	<i>5.74</i>	<i>5.79</i>	<i>5.78</i>	<i>5.82</i>	<i>5.88</i>	<b>5.50</b>	<i>5.70</i>	<i>5.82</i>
Mexico .....	<b>1.91</b>	<b>1.91</b>	<b>1.92</b>	<b>1.92</b>	<i>1.94</i>	<i>1.90</i>	<i>1.91</i>	<i>1.85</i>	<i>1.82</i>	<i>1.80</i>	<i>1.78</i>	<i>1.77</i>	<b>1.91</b>	<i>1.90</i>	<i>1.79</i>
United States .....	<b>18.91</b>	<b>19.38</b>	<b>19.49</b>	<b>20.25</b>	<i>20.68</i>	<i>21.10</i>	<i>21.05</i>	<i>20.92</i>	<i>20.54</i>	<i>20.68</i>	<i>20.83</i>	<i>21.11</i>	<b>19.51</b>	<i>20.94</i>	<i>20.79</i>
<b>Central and South America</b> .....	<b>4.91</b>	<b>5.69</b>	<b>6.25</b>	<b>5.92</b>	<i>5.29</i>	<i>6.31</i>	<i>6.65</i>	<i>6.27</i>	<i>5.52</i>	<i>6.52</i>	<i>6.87</i>	<i>6.51</i>	<b>5.70</b>	<i>6.13</i>	<i>6.36</i>
Argentina .....	<b>0.66</b>	<b>0.70</b>	<b>0.70</b>	<b>0.70</b>	<i>0.69</i>	<i>0.71</i>	<i>0.71</i>	<i>0.71</i>	<i>0.71</i>	<i>0.72</i>	<i>0.73</i>	<i>0.72</i>	<b>0.69</b>	<i>0.71</i>	<i>0.72</i>
Brazil .....	<b>2.90</b>	<b>3.65</b>	<b>4.22</b>	<b>3.89</b>	<i>3.20</i>	<i>4.17</i>	<i>4.51</i>	<i>4.13</i>	<i>3.39</i>	<i>4.38</i>	<i>4.73</i>	<i>4.37</i>	<b>3.67</b>	<i>4.01</i>	<i>4.22</i>
Colombia .....	<b>0.92</b>	<b>0.92</b>	<b>0.91</b>	<b>0.91</b>	<i>0.91</i>	<i>0.91</i>	<i>0.90</i>	<i>0.90</i>	<i>0.91</i>	<i>0.91</i>	<i>0.89</i>	<i>0.90</i>	<b>0.92</b>	<i>0.91</i>	<i>0.90</i>
Other Central and S. America .....	<b>0.42</b>	<b>0.41</b>	<b>0.42</b>	<b>0.42</b>	<i>0.48</i>	<i>0.51</i>	<i>0.52</i>	<i>0.53</i>	<i>0.52</i>	<i>0.51</i>	<i>0.52</i>	<i>0.52</i>	<b>0.42</b>	<i>0.51</i>	<i>0.52</i>
<b>Europe</b> .....	<b>4.26</b>	<b>3.97</b>	<b>3.95</b>	<b>4.29</b>	<i>4.44</i>	<i>4.48</i>	<i>4.34</i>	<i>4.53</i>	<i>4.54</i>	<i>4.46</i>	<i>4.41</i>	<i>4.60</i>	<b>4.12</b>	<i>4.45</i>	<i>4.50</i>
Norway .....	<b>1.79</b>	<b>1.58</b>	<b>1.66</b>	<b>1.96</b>	<i>2.06</i>	<i>2.09</i>	<i>2.07</i>	<i>2.17</i>	<i>2.18</i>	<i>2.12</i>	<i>2.12</i>	<i>2.19</i>	<b>1.75</b>	<i>2.10</i>	<i>2.15</i>
United Kingdom .....	<b>1.25</b>	<b>1.17</b>	<b>1.09</b>	<b>1.15</b>	<i>1.18</i>	<i>1.20</i>	<i>1.09</i>	<i>1.17</i>	<i>1.16</i>	<i>1.17</i>	<i>1.10</i>	<i>1.22</i>	<b>1.16</b>	<i>1.16</i>	<i>1.16</i>
<b>Eurasia</b> .....	<b>14.87</b>	<b>14.43</b>	<b>14.59</b>	<b>14.68</b>	<i>14.71</i>	<i>14.76</i>	<i>14.74</i>	<i>14.78</i>	<i>14.72</i>	<i>14.58</i>	<i>14.62</i>	<i>14.66</i>	<b>14.64</b>	<i>14.75</i>	<i>14.64</i>
Azerbaijan .....	<b>0.82</b>	<b>0.79</b>	<b>0.78</b>	<b>0.77</b>	<i>0.78</i>	<i>0.77</i>	<i>0.76</i>	<i>0.76</i>	<i>0.75</i>	<i>0.75</i>	<i>0.74</i>	<i>0.75</i>	<b>0.79</b>	<i>0.77</i>	<i>0.75</i>
Kazakhstan .....	<b>2.03</b>	<b>1.85</b>	<b>1.96</b>	<b>2.02</b>	<i>2.00</i>	<i>1.98</i>	<i>2.02</i>	<i>2.06</i>	<i>2.05</i>	<i>1.94</i>	<i>1.98</i>	<i>2.03</i>	<b>1.97</b>	<i>2.02</i>	<i>2.00</i>
Russia .....	<b>11.58</b>	<b>11.41</b>	<b>11.48</b>	<b>11.49</b>	<i>11.55</i>	<i>11.62</i>	<i>11.57</i>	<i>11.57</i>	<i>11.55</i>	<i>11.52</i>	<i>11.53</i>	<i>11.52</i>	<b>11.49</b>	<i>11.58</i>	<i>11.53</i>
Turkmenistan .....	<b>0.29</b>	<b>0.23</b>	<b>0.22</b>	<b>0.24</b>	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<b>0.25</b>	<i>0.25</i>	<i>0.24</i>
Other Eurasia .....	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<b>0.15</b>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	<i>0.14</i>	<i>0.13</i>	<i>0.13</i>	<i>0.13</i>	<i>0.13</i>	<b>0.15</b>	<i>0.14</i>	<i>0.13</i>
<b>Middle East</b> .....	<b>3.11</b>	<b>3.11</b>	<b>3.12</b>	<b>3.12</b>	<i>3.20</i>	<i>3.20</i>	<i>3.20</i>	<i>3.20</i>	<i>3.26</i>	<i>3.25</i>	<i>3.25</i>	<i>3.25</i>	<b>3.11</b>	<i>3.20</i>	<i>3.25</i>
Oman .....	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<b>0.98</b>	<i>0.99</i>	<i>0.99</i>	<i>0.99</i>	<i>0.99</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<b>0.98</b>	<i>0.99</i>	<i>1.00</i>
Qatar .....	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	<i>2.10</i>	<i>2.10</i>	<i>2.10</i>	<i>2.10</i>	<b>2.00</b>	<i>2.06</i>	<i>2.10</i>
<b>Asia and Oceania</b> .....	<b>9.46</b>	<b>9.44</b>	<b>9.31</b>	<b>9.39</b>	<i>9.35</i>	<i>9.39</i>	<i>9.41</i>	<i>9.45</i>	<i>9.42</i>	<i>9.41</i>	<i>9.39</i>	<i>9.41</i>	<b>9.40</b>	<i>9.40</i>	<i>9.41</i>
Australia .....	<b>0.40</b>	<b>0.44</b>	<b>0.47</b>	<b>0.49</b>	<i>0.50</i>	<i>0.51</i>	<i>0.51</i>	<i>0.52</i>	<i>0.53</i>	<i>0.52</i>	<i>0.51</i>	<i>0.51</i>	<b>0.45</b>	<i>0.51</i>	<i>0.52</i>
China .....	<b>4.89</b>	<b>4.92</b>	<b>4.89</b>	<b>4.88</b>	<i>4.87</i>	<i>4.95</i>	<i>4.95</i>	<i>5.00</i>	<i>4.98</i>	<i>5.01</i>	<i>5.01</i>	<i>5.05</i>	<b>4.89</b>	<i>4.94</i>	<i>5.01</i>
India .....	<b>1.01</b>	<b>0.99</b>	<b>0.98</b>	<b>0.97</b>	<i>0.94</i>	<i>0.93</i>	<i>0.93</i>	<i>0.92</i>	<i>0.94</i>	<i>0.93</i>	<i>0.92</i>	<i>0.91</i>	<b>0.99</b>	<i>0.93</i>	<i>0.92</i>
Indonesia .....	<b>0.94</b>	<b>0.90</b>	<b>0.90</b>	<b>0.88</b>	<i>0.90</i>	<i>0.89</i>	<i>0.88</i>	<i>0.87</i>	<i>0.86</i>	<i>0.85</i>	<i>0.84</i>	<i>0.84</i>	<b>0.91</b>	<i>0.88</i>	<i>0.85</i>
Malaysia .....	<b>0.75</b>	<b>0.73</b>	<b>0.65</b>	<b>0.72</b>	<i>0.69</i>	<i>0.67</i>	<i>0.69</i>	<i>0.69</i>	<i>0.69</i>	<i>0.68</i>	<i>0.68</i>	<i>0.67</i>	<b>0.71</b>	<i>0.69</i>	<i>0.68</i>
Vietnam .....	<b>0.25</b>	<b>0.25</b>	<b>0.23</b>	<b>0.22</b>	<i>0.22</i>	<i>0.22</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.20</i>	<b>0.24</b>	<i>0.21</i>	<i>0.21</i>
<b>Africa</b> .....	<b>1.52</b>	<b>1.54</b>	<b>1.55</b>	<b>1.56</b>	<i>1.48</i>	<i>1.48</i>	<i>1.48</i>	<i>1.48</i>	<i>1.41</i>	<i>1.41</i>	<i>1.41</i>	<i>1.41</i>	<b>1.54</b>	<i>1.48</i>	<i>1.41</i>
Egypt .....	<b>0.66</b>	<b>0.65</b>	<b>0.65</b>	<b>0.65</b>	<i>0.60</i>	<i>0.60</i>	<i>0.60</i>	<i>0.60</i>	<i>0.56</i>	<i>0.56</i>	<i>0.56</i>	<i>0.56</i>	<b>0.65</b>	<i>0.60</i>	<i>0.56</i>
South Sudan .....	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<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>	<i>0.19</i>	<b>0.18</b>	<i>0.19</i>	<i>0.19</i>
<b>Total non-OPEC liquids</b> .....	<b>64.39</b>	<b>64.93</b>	<b>65.65</b>	<b>66.75</b>	<i>66.78</i>	<i>68.29</i>	<i>68.48</i>	<i>68.22</i>	<i>67.01</i>	<i>67.89</i>	<i>68.39</i>	<i>68.60</i>	<b>65.44</b>	<i>67.95</i>	<i>67.98</i>
<b>OPEC non-crude liquids</b> .....	<b>5.51</b>	<b>5.43</b>	<b>5.25</b>	<b>5.27</b>	<i>5.07</i>	<i>5.05</i>	<i>5.06</i>	<i>5.06</i>	<i>5.04</i>	<i>5.05</i>	<i>5.06</i>	<i>5.07</i>	<b>5.36</b>	<i>5.06</i>	<i>5.06</i>
<b>Non-OPEC + OPEC non-crude</b> .....	<b>69.89</b>	<b>70.36</b>	<b>70.90</b>	<b>72.03</b>	<i>71.85</i>	<i>73.34</i>	<i>73.53</i>	<i>73.28</i>	<i>72.06</i>	<i>72.94</i>	<i>73.45</i>	<i>73.66</i>	<b>70.80</b>	<i>73.00</i>	<i>73.03</i>
<b>Unplanned non-OPEC Production Outages</b> .....	<b>0.35</b>	<b>0.26</b>	<b>0.39</b>	<b>0.25</b>	<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>	<i>n/a</i>	<b>0.31</b>	<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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Crude Oil</b>															
Algeria .....	1.01	1.02	1.02	1.02	-	-	-	-	-	-	-	-	1.02	-	-
Angola .....	1.50	1.43	1.40	1.36	-	-	-	-	-	-	-	-	1.42	-	-
Congo (Brazzaville) .....	0.33	0.33	0.33	0.32	-	-	-	-	-	-	-	-	0.32	-	-
Ecuador .....	0.53	0.53	0.55	0.52	-	-	-	-	-	-	-	-	0.53	-	-
Equatorial Guinea .....	0.11	0.11	0.13	0.13	-	-	-	-	-	-	-	-	0.12	-	-
Gabon .....	0.20	0.20	0.20	0.20	-	-	-	-	-	-	-	-	0.20	-	-
Iran .....	2.63	2.33	2.10	2.03	-	-	-	-	-	-	-	-	2.27	-	-
Iraq .....	4.75	4.70	4.70	4.65	-	-	-	-	-	-	-	-	4.70	-	-
Kuwait .....	2.74	2.72	2.70	2.70	-	-	-	-	-	-	-	-	2.72	-	-
Libya .....	0.93	1.14	1.13	1.17	-	-	-	-	-	-	-	-	1.09	-	-
Nigeria .....	1.58	1.65	1.71	1.67	-	-	-	-	-	-	-	-	1.65	-	-
Saudi Arabia .....	10.00	9.92	9.38	9.83	-	-	-	-	-	-	-	-	9.78	-	-
United Arab Emirates .....	3.12	3.12	3.13	3.20	-	-	-	-	-	-	-	-	3.14	-	-
Venezuela .....	1.05	0.79	0.73	0.73	-	-	-	-	-	-	-	-	0.83	-	-
OPEC Total .....	30.47	30.00	29.20	29.54	28.69	28.85	29.41	29.39	29.32	29.29	29.47	29.55	29.80	29.09	29.41
<b>Other Liquids (a)</b> .....	5.51	5.43	5.25	5.27	5.07	5.05	5.06	5.06	5.04	5.05	5.06	5.07	5.36	5.06	5.06
<b>Total OPEC Supply</b> .....	35.98	35.43	34.45	34.81	33.77	33.89	34.46	34.45	34.36	34.34	34.53	34.62	35.16	34.15	34.46
<b>Crude Oil Production Capacity</b>															
Africa .....	5.66	5.89	5.91	5.87	5.06	5.13	5.65	5.66	5.64	5.64	5.66	5.67	5.83	5.38	5.65
Middle East .....	25.31	24.96	23.96	24.15	24.67	24.89	25.07	25.15	25.16	25.24	25.26	25.35	24.59	24.94	25.25
South America .....	1.58	1.32	1.28	1.25	1.29	1.03	1.00	0.97	0.94	0.91	0.88	0.85	1.36	1.07	0.89
OPEC Total .....	32.55	32.18	31.16	31.27	31.02	31.04	31.72	31.77	31.74	31.78	31.79	31.87	31.78	31.39	31.80
<b>Surplus Crude Oil Production Capacity</b>															
Africa .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Middle East .....	2.08	2.18	1.95	1.73	2.32	2.19	2.31	2.39	2.42	2.50	2.32	2.32	1.99	2.30	2.39
South America .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OPEC Total .....	2.08	2.18	1.95	1.73	2.32	2.19	2.31	2.39	2.42	2.50	2.32	2.32	1.99	2.30	2.39
<b>Unplanned OPEC Production Outages</b> .....	2.52	2.51	3.24	2.94	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2.80	n/a	n/a

- = 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 - March 2020

	2019				2020				2021				2019	2020	2021
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
<b>North America</b> .....	<b>24.68</b>	<b>24.72</b>	<b>25.22</b>	<b>24.89</b>	<i>24.35</i>	<i>24.74</i>	<i>25.48</i>	<i>25.28</i>	<i>24.93</i>	<i>24.94</i>	<i>25.50</i>	<i>25.27</i>	<b>24.88</b>	<i>24.96</i>	<i>25.16</i>
Canada .....	<b>2.45</b>	<b>2.44</b>	<b>2.60</b>	<b>2.55</b>	<i>2.52</i>	<i>2.46</i>	<i>2.57</i>	<i>2.54</i>	<i>2.52</i>	<i>2.46</i>	<i>2.57</i>	<i>2.54</i>	<b>2.51</b>	<i>2.52</i>	<i>2.52</i>
Mexico .....	<b>1.93</b>	<b>1.94</b>	<b>1.93</b>	<b>1.78</b>	<i>1.88</i>	<i>1.91</i>	<i>1.91</i>	<i>1.93</i>	<i>1.88</i>	<i>1.91</i>	<i>1.91</i>	<i>1.93</i>	<b>1.89</b>	<i>1.91</i>	<i>1.91</i>
United States .....	<b>20.29</b>	<b>20.32</b>	<b>20.68</b>	<b>20.55</b>	<i>19.94</i>	<i>20.36</i>	<i>20.99</i>	<i>20.80</i>	<i>20.52</i>	<i>20.55</i>	<i>21.01</i>	<i>20.80</i>	<b>20.46</b>	<i>20.52</i>	<i>20.72</i>
<b>Central and South America</b> .....	<b>6.66</b>	<b>6.86</b>	<b>6.91</b>	<b>6.94</b>	<i>6.68</i>	<i>6.82</i>	<i>6.95</i>	<i>6.96</i>	<i>6.75</i>	<i>6.88</i>	<i>7.01</i>	<i>7.02</i>	<b>6.84</b>	<i>6.85</i>	<i>6.92</i>
Brazil .....	<b>3.01</b>	<b>3.14</b>	<b>3.18</b>	<b>3.18</b>	<i>3.06</i>	<i>3.13</i>	<i>3.22</i>	<i>3.23</i>	<i>3.12</i>	<i>3.19</i>	<i>3.29</i>	<i>3.29</i>	<b>3.13</b>	<i>3.16</i>	<i>3.22</i>
<b>Europe</b> .....	<b>14.66</b>	<b>14.80</b>	<b>15.32</b>	<b>14.85</b>	<i>14.39</i>	<i>14.54</i>	<i>15.21</i>	<i>14.96</i>	<i>14.50</i>	<i>14.71</i>	<i>15.23</i>	<i>14.95</i>	<b>14.91</b>	<i>14.78</i>	<i>14.85</i>
<b>Eurasia</b> .....	<b>4.83</b>	<b>4.90</b>	<b>5.17</b>	<b>5.12</b>	<i>4.83</i>	<i>4.96</i>	<i>5.34</i>	<i>5.24</i>	<i>4.98</i>	<i>5.04</i>	<i>5.43</i>	<i>5.28</i>	<b>5.01</b>	<i>5.10</i>	<i>5.18</i>
Russia .....	<b>3.67</b>	<b>3.76</b>	<b>3.97</b>	<b>3.91</b>	<i>3.66</i>	<i>3.82</i>	<i>4.14</i>	<i>4.03</i>	<i>3.80</i>	<i>3.90</i>	<i>4.22</i>	<i>4.06</i>	<b>3.83</b>	<i>3.91</i>	<i>3.99</i>
<b>Middle East</b> .....	<b>8.19</b>	<b>8.55</b>	<b>8.94</b>	<b>8.53</b>	<i>8.26</i>	<i>8.70</i>	<i>9.00</i>	<i>8.53</i>	<i>8.13</i>	<i>8.67</i>	<i>9.05</i>	<i>8.42</i>	<b>8.55</b>	<i>8.63</i>	<i>8.57</i>
<b>Asia and Oceania</b> .....	<b>36.43</b>	<b>35.91</b>	<b>35.42</b>	<b>36.40</b>	<i>35.97</i>	<i>35.99</i>	<i>35.87</i>	<i>37.03</i>	<i>37.87</i>	<i>37.37</i>	<i>36.73</i>	<i>37.82</i>	<b>36.04</b>	<i>36.22</i>	<i>37.45</i>
China .....	<b>14.38</b>	<b>14.67</b>	<b>14.39</b>	<b>14.61</b>	<i>13.90</i>	<i>14.79</i>	<i>14.76</i>	<i>15.05</i>	<i>15.32</i>	<i>15.53</i>	<i>15.23</i>	<i>15.47</i>	<b>14.51</b>	<i>14.62</i>	<i>15.39</i>
Japan .....	<b>4.09</b>	<b>3.41</b>	<b>3.44</b>	<b>3.80</b>	<i>3.97</i>	<i>3.21</i>	<i>3.30</i>	<i>3.65</i>	<i>3.87</i>	<i>3.17</i>	<i>3.24</i>	<i>3.56</i>	<b>3.68</b>	<i>3.53</i>	<i>3.46</i>
India .....	<b>4.82</b>	<b>4.75</b>	<b>4.48</b>	<b>4.74</b>	<i>4.93</i>	<i>4.97</i>	<i>4.64</i>	<i>4.93</i>	<i>5.10</i>	<i>5.16</i>	<i>4.82</i>	<i>5.12</i>	<b>4.70</b>	<i>4.87</i>	<i>5.05</i>
<b>Africa</b> .....	<b>4.51</b>	<b>4.51</b>	<b>4.43</b>	<b>4.63</b>	<i>4.58</i>	<i>4.58</i>	<i>4.49</i>	<i>4.70</i>	<i>4.72</i>	<i>4.72</i>	<i>4.63</i>	<i>4.84</i>	<b>4.52</b>	<i>4.59</i>	<i>4.73</i>
<b>Total OECD Liquid Fuels Consumption</b> .....	<b>47.39</b>	<b>46.71</b>	<b>47.87</b>	<b>47.53</b>	<i>46.60</i>	<i>46.17</i>	<i>47.77</i>	<i>47.83</i>	<i>47.24</i>	<i>46.58</i>	<i>47.75</i>	<i>47.70</i>	<b>47.38</b>	<i>47.10</i>	<i>47.32</i>
<b>Total non-OECD Liquid Fuels Consumption</b> .....	<b>52.58</b>	<b>53.53</b>	<b>53.55</b>	<b>53.83</b>	<i>52.46</i>	<i>54.16</i>	<i>54.57</i>	<i>54.87</i>	<i>54.62</i>	<i>55.76</i>	<i>55.83</i>	<i>55.88</i>	<b>53.37</b>	<i>54.02</i>	<i>55.53</i>
<b>Total World Liquid Fuels Consumption</b> .....	<b>99.97</b>	<b>100.24</b>	<b>101.41</b>	<b>101.36</b>	<i>99.06</i>	<i>100.33</i>	<i>102.34</i>	<i>102.70</i>	<i>101.87</i>	<i>102.34</i>	<i>103.59</i>	<i>103.59</i>	<b>100.75</b>	<i>101.12</i>	<i>102.85</i>
<b>Oil-weighted Real Gross Domestic Product (a)</b>															
World Index, 2015 Q1 = 100 .....	<b>111.7</b>	<b>112.2</b>	<b>112.8</b>	<b>113.3</b>	<i>113.5</i>	<i>114.4</i>	<i>115.3</i>	<i>116.1</i>	<i>116.9</i>	<i>117.7</i>	<i>118.5</i>	<i>119.3</i>	<b>112.5</b>	<i>114.8</i>	<i>118.1</i>
Percent change from prior year .....	<b>2.1</b>	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>	<i>1.6</i>	<i>1.9</i>	<i>2.3</i>	<i>2.5</i>	<i>3.0</i>	<i>2.9</i>	<i>2.8</i>	<i>2.8</i>	<b>2.0</b>	<i>2.1</i>	<i>2.9</i>
OECD Index, 2015 Q1 = 100 .....	<b>108.9</b>	<b>109.4</b>	<b>109.8</b>	<b>110.0</b>	<i>110.2</i>	<i>110.7</i>	<i>111.2</i>	<i>111.7</i>	<i>112.2</i>	<i>112.6</i>	<i>113.1</i>	<i>113.6</i>	<b>109.5</b>	<i>110.9</i>	<i>112.9</i>
Percent change from prior year .....	<b>1.9</b>	<b>1.7</b>	<b>1.7</b>	<b>1.6</b>	<i>1.2</i>	<i>1.2</i>	<i>1.3</i>	<i>1.5</i>	<i>1.8</i>	<i>1.7</i>	<i>1.7</i>	<i>1.7</i>	<b>1.7</b>	<i>1.3</i>	<i>1.7</i>
Non-OECD Index, 2015 Q1 = 100 .....	<b>114.4</b>	<b>115.0</b>	<b>115.6</b>	<b>116.4</b>	<i>116.7</i>	<i>118.0</i>	<i>119.3</i>	<i>120.4</i>	<i>121.5</i>	<i>122.7</i>	<i>123.8</i>	<i>125.0</i>	<b>115.3</b>	<i>118.6</i>	<i>123.3</i>
Percent change from prior year .....	<b>2.4</b>	<b>2.2</b>	<b>2.1</b>	<b>2.1</b>	<i>2.0</i>	<i>2.6</i>	<i>3.2</i>	<i>3.4</i>	<i>4.2</i>	<i>4.0</i>	<i>3.8</i>	<i>3.8</i>	<b>2.2</b>	<i>2.8</i>	<i>3.9</i>
<b>Real U.S. Dollar Exchange Rate (a)</b>															
Index, 2015 Q1 = 100 .....	<b>105.30</b>	<b>105.88</b>	<b>106.33</b>	<b>106.13</b>	<i>105.60</i>	<i>105.68</i>	<i>105.63</i>	<i>105.23</i>	<i>104.80</i>	<i>104.43</i>	<i>104.18</i>	<i>103.58</i>	<b>105.91</b>	<i>105.53</i>	<i>104.25</i>
Percent change from prior year .....	<b>4.6</b>	<b>3.1</b>	<b>0.8</b>	<b>-0.1</b>	<i>0.3</i>	<i>-0.2</i>	<i>-0.7</i>	<i>-0.8</i>	<i>-0.8</i>	<i>-1.2</i>	<i>-1.4</i>	<i>-1.6</i>	<b>2.1</b>	<i>-0.4</i>	<i>-1.2</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, Lithuania, 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 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>HGL Production</b>															
<b>Natural Gas Processing Plants</b>															
Ethane .....	1.87	1.87	1.71	1.85	1.97	2.03	2.11	2.21	2.24	2.26	2.34	2.44	1.83	2.08	2.32
Propane .....	1.50	1.56	1.61	1.67	1.70	1.75	1.77	1.73	1.65	1.67	1.71	1.71	1.59	1.74	1.69
Butanes .....	0.79	0.84	0.87	0.89	0.89	0.93	0.95	0.92	0.86	0.89	0.92	0.91	0.85	0.92	0.90
Natural Gasoline (Pentanes Plus) .....	0.49	0.55	0.60	0.57	0.56	0.61	0.63	0.60	0.55	0.59	0.62	0.60	0.55	0.60	0.59
<b>Refinery and Blender Net Production</b>															
Ethane/Ethylene .....	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00
Propane .....	0.28	0.30	0.29	0.29	0.28	0.30	0.29	0.29	0.28	0.31	0.30	0.30	0.29	0.29	0.30
Propylene (refinery-grade) .....	0.28	0.28	0.28	0.28	0.28	0.29	0.28	0.29	0.28	0.29	0.28	0.29	0.28	0.28	0.28
Butanes/Butylenes .....	-0.09	0.26	0.18	-0.23	-0.08	0.26	0.19	-0.20	-0.08	0.26	0.19	-0.20	0.03	0.04	0.04
<b>Renewable Fuels and Oxygenate Plant Net Production</b>															
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
<b>HGL Net Imports</b>															
Ethane .....	-0.27	-0.27	-0.28	-0.31	-0.28	-0.35	-0.37	-0.38	-0.36	-0.39	-0.38	-0.41	-0.28	-0.34	-0.38
Propane/Propylene .....	-0.75	-0.99	-0.97	-1.07	-1.06	-1.23	-1.17	-1.21	-1.02	-1.14	-1.14	-1.18	-0.94	-1.17	-1.12
Butanes/Butylenes .....	-0.14	-0.26	-0.26	-0.25	-0.34	-0.33	-0.33	-0.33	-0.30	-0.31	-0.32	-0.34	-0.23	-0.33	-0.32
Natural Gasoline (Pentanes Plus) .....	-0.17	-0.14	-0.15	-0.21	-0.29	-0.28	-0.29	-0.26	-0.28	-0.27	-0.30	-0.27	-0.17	-0.28	-0.28
<b>HGL Refinery and Blender Net Inputs</b>															
Butanes/Butylenes .....	0.46	0.29	0.33	0.54	0.42	0.30	0.34	0.51	0.41	0.30	0.33	0.50	0.40	0.39	0.39
Natural Gasoline (Pentanes Plus) .....	0.14	0.17	0.18	0.18	0.16	0.17	0.17	0.17	0.16	0.17	0.18	0.18	0.17	0.17	0.17
<b>HGL Consumption</b>															
Ethane/Ethylene .....	1.61	1.49	1.47	1.55	1.72	1.66	1.77	1.85	1.88	1.85	1.98	2.03	1.53	1.75	1.94
Propane .....	1.20	0.58	0.65	1.05	1.17	0.61	0.69	0.96	1.18	0.60	0.65	0.94	0.87	0.86	0.84
Propylene (refinery-grade) .....	0.28	0.31	0.29	0.29	0.29	0.32	0.31	0.30	0.29	0.31	0.31	0.29	0.30	0.30	0.30
Butanes/Butylenes .....	0.20	0.21	0.30	0.24	0.18	0.28	0.26	0.23	0.20	0.26	0.25	0.22	0.24	0.24	0.23
Natural Gasoline (Pentanes Plus) .....	0.20	0.20	0.23	0.17	0.10	0.12	0.13	0.15	0.11	0.11	0.11	0.13	0.20	0.13	0.12
<b>HGL Inventories (million barrels)</b>															
Ethane .....	48.14	56.18	56.46	58.84	54.91	57.85	55.58	56.28	54.16	57.87	56.21	57.93	54.94	56.15	56.55
Propane .....	47.77	71.72	95.60	79.63	54.37	71.46	89.06	74.76	47.86	67.43	86.18	73.42	79.63	74.76	73.42
Propylene (refinery-grade) .....	7.82	6.57	6.95	7.65	8.62	8.13	7.96	8.84	9.80	9.55	8.98	9.95	7.65	8.84	9.95
Butanes/Butylenes .....	39.30	70.72	85.88	52.15	40.91	66.80	85.50	53.48	42.19	68.09	86.79	54.77	52.15	53.48	54.77
Natural Gasoline (Pentanes Plus) .....	18.12	19.71	21.28	20.90	19.55	20.86	21.91	21.31	18.87	20.24	21.35	20.86	20.90	21.31	20.86
<b>Refinery and Blender Net Inputs</b>															
Crude Oil .....	16.20	16.76	16.97	16.32	16.27	17.05	17.38	16.94	16.26	17.04	17.15	16.78	16.56	16.91	16.81
Hydrocarbon Gas Liquids .....	0.59	0.46	0.51	0.72	0.58	0.47	0.51	0.68	0.57	0.47	0.50	0.68	0.57	0.56	0.56
Other Hydrocarbons/Oxygenates .....	1.16	1.21	1.22	1.19	1.20	1.23	1.21	1.20	1.18	1.25	1.23	1.21	1.19	1.21	1.22
Unfinished Oils .....	0.18	0.34	0.46	0.43	0.18	0.53	0.54	0.46	0.24	0.48	0.45	0.38	0.35	0.43	0.39
Motor Gasoline Blend Components .....	0.63	0.94	0.77	0.40	0.54	0.84	0.66	0.26	0.57	0.84	0.66	0.26	0.68	0.58	0.58
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 .....	18.76	19.70	19.93	19.07	18.78	20.12	20.31	19.54	18.83	20.08	20.00	19.31	19.37	19.69	19.55
<b>Refinery Processing Gain</b>															
.....	1.06	1.07	1.07	1.10	1.12	1.19	1.22	1.23	1.17	1.21	1.24	1.25	1.08	1.19	1.22
<b>Refinery and Blender Net Production</b>															
Hydrocarbon Gas Liquids .....	0.48	0.84	0.76	0.34	0.48	0.86	0.77	0.39	0.49	0.86	0.77	0.39	0.61	0.62	0.63
Finished Motor Gasoline .....	9.84	10.15	10.20	10.16	9.85	10.36	10.38	10.28	9.79	10.25	10.16	10.10	10.09	10.22	10.08
Jet Fuel .....	1.73	1.78	1.88	1.79	1.73	1.80	1.90	1.81	1.71	1.78	1.80	1.74	1.80	1.81	1.75
Distillate Fuel .....	5.05	5.21	5.18	5.11	4.99	5.30	5.36	5.27	5.05	5.32	5.31	5.23	5.14	5.23	5.23
Residual Fuel .....	0.36	0.39	0.39	0.31	0.30	0.34	0.34	0.29	0.34	0.36	0.35	0.30	0.36	0.32	0.34
Other Oils (a) .....	2.37	2.40	2.58	2.46	2.55	2.64	2.78	2.73	2.62	2.72	2.84	2.81	2.45	2.68	2.75
Total Refinery and Blender Net Production .....	19.82	20.78	21.00	20.17	19.90	21.30	21.53	20.77	20.00	21.29	21.23	20.56	20.44	20.88	20.77
<b>Refinery Distillation Inputs</b>															
.....	16.48	17.14	17.44	16.86	16.63	17.21	17.58	17.14	16.49	17.20	17.36	16.99	16.98	17.14	17.01
<b>Refinery Operable Distillation Capacity</b>															
.....	18.78	18.80	18.81	18.81	18.81	18.81	18.81	18.84	18.84	18.84	18.84	18.86	18.80	18.82	18.84
<b>Refinery Distillation Utilization Factor</b>															
.....	0.88	0.91	0.93	0.90	0.88	0.91	0.93	0.91	0.88	0.91	0.92	0.90	0.90	0.91	0.90

- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Prices (cents per gallon)</b>															
Refiner Wholesale Price .....	167	205	189	182	153	128	133	131	138	164	168	161	186	136	158
<b>Gasoline Regular Grade Retail Prices Including Taxes</b>															
PADD 1 .....	233	268	256	247	231	192	201	197	202	229	237	231	251	205	225
PADD 2 .....	223	269	257	244	222	192	202	195	195	234	235	225	249	202	223
PADD 3 .....	206	246	234	224	206	178	183	179	186	213	217	209	228	186	207
PADD 4 .....	226	285	270	276	241	199	207	201	202	233	242	231	265	212	227
PADD 5 .....	297	356	331	350	305	268	269	272	262	297	302	295	334	278	290
U.S. Average .....	236	279	265	259	237	203	210	206	208	240	245	236	260	214	233
<b>Gasoline All Grades Including Taxes</b>	<b>245</b>	<b>288</b>	<b>274</b>	<b>269</b>	<b>246</b>	<b>215</b>	<b>222</b>	<b>220</b>	<b>221</b>	<b>253</b>	<b>258</b>	<b>250</b>	<b>269</b>	<b>225</b>	<b>246</b>
<b>End-of-period Inventories (million barrels)</b>															
<b>Total Gasoline Inventories</b>															
PADD 1 .....	62.4	59.7	64.9	65.6	59.0	59.6	57.8	62.0	66.4	66.4	61.7	67.2	65.6	62.0	67.2
PADD 2 .....	53.9	49.6	51.0	55.0	55.9	50.6	49.4	51.4	54.4	52.8	52.5	50.4	55.0	51.4	50.4
PADD 3 .....	82.5	82.4	81.5	91.8	86.4	85.2	83.9	87.8	87.8	87.8	87.8	87.8	91.8	87.8	87.8
PADD 4 .....	6.9	7.5	7.7	8.3	8.3	7.5	6.9	7.2	7.7	7.8	7.4	7.8	8.3	7.2	7.8
PADD 5 .....	30.4	30.6	26.8	33.2	29.8	28.7	29.1	31.8	30.3	28.7	29.1	31.9	33.2	31.8	31.9
U.S. Total .....	236.1	229.7	231.9	253.8	239.4	231.6	227.0	240.3	246.5	243.4	238.5	245.2	253.8	240.3	245.2
<b>Finished Gasoline Inventories</b>															
U.S. Total .....	21.7	21.0	23.0	26.0	24.4	22.9	24.0	24.3	23.7	22.2	23.2	23.2	26.0	24.3	23.2
<b>Gasoline Blending Components Inventories</b>															
U.S. Total .....	214.4	208.8	208.9	227.9	215.0	208.7	203.0	216.0	222.8	221.2	215.3	221.9	227.9	216.0	221.9

- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Supply (billion cubic feet per day)</b>															
Total Marketed Production .....	<b>96.08</b>	<b>97.44</b>	<b>99.91</b>	<b>103.25</b>	<i>103.65</i>	<i>103.33</i>	<i>102.54</i>	<i>100.53</i>	<i>98.49</i>	<i>98.88</i>	<i>100.41</i>	<i>101.59</i>	<b>99.19</b>	<i>102.51</i>	<i>99.85</i>
Alaska .....	<b>0.96</b>	<b>0.93</b>	<b>0.79</b>	<b>0.93</b>	<i>1.00</i>	<i>0.85</i>	<i>0.78</i>	<i>0.94</i>	<i>1.01</i>	<i>0.87</i>	<i>0.80</i>	<i>0.95</i>	<b>0.90</b>	<i>0.89</i>	<i>0.90</i>
Federal GOM (a) .....	<b>2.80</b>	<b>2.75</b>	<b>2.51</b>	<b>2.72</b>	<i>2.72</i>	<i>2.69</i>	<i>2.52</i>	<i>2.46</i>	<i>2.49</i>	<i>2.41</i>	<i>2.27</i>	<i>2.24</i>	<b>2.69</b>	<i>2.60</i>	<i>2.35</i>
Lower 48 States (excl GOM) .....	<b>92.32</b>	<b>93.76</b>	<b>96.61</b>	<b>99.60</b>	<i>99.93</i>	<i>99.78</i>	<i>99.25</i>	<i>97.13</i>	<i>95.00</i>	<i>95.60</i>	<i>97.34</i>	<i>98.41</i>	<b>95.60</b>	<i>99.02</i>	<i>96.60</i>
Total Dry Gas Production .....	<b>89.32</b>	<b>90.50</b>	<b>92.98</b>	<b>96.08</b>	<i>96.41</i>	<i>96.07</i>	<i>95.29</i>	<i>93.36</i>	<i>91.42</i>	<i>91.74</i>	<i>93.11</i>	<i>94.15</i>	<b>92.24</b>	<i>95.28</i>	<i>92.61</i>
LNG Gross Imports .....	<b>0.28</b>	<b>0.03</b>	<b>0.06</b>	<b>0.20</b>	<i>0.32</i>	<i>0.10</i>	<i>0.18</i>	<i>0.20</i>	<i>0.32</i>	<i>0.18</i>	<i>0.18</i>	<i>0.20</i>	<b>0.14</b>	<i>0.20</i>	<i>0.22</i>
LNG Gross Exports .....	<b>4.01</b>	<b>4.55</b>	<b>4.95</b>	<b>6.40</b>	<i>6.74</i>	<i>5.27</i>	<i>6.33</i>	<i>7.35</i>	<i>8.23</i>	<i>6.88</i>	<i>7.56</i>	<i>8.20</i>	<b>4.98</b>	<i>6.43</i>	<i>7.72</i>
Pipeline Gross Imports .....	<b>8.35</b>	<b>6.73</b>	<b>7.10</b>	<b>7.30</b>	<i>7.68</i>	<i>6.51</i>	<i>6.47</i>	<i>7.33</i>	<i>7.83</i>	<i>6.46</i>	<i>6.66</i>	<i>7.55</i>	<b>7.36</b>	<i>7.00</i>	<i>7.12</i>
Pipeline Gross Exports .....	<b>7.86</b>	<b>7.18</b>	<b>7.80</b>	<b>8.24</b>	<i>8.20</i>	<i>7.73</i>	<i>8.02</i>	<i>7.79</i>	<i>8.38</i>	<i>7.70</i>	<i>8.61</i>	<i>9.24</i>	<b>7.77</b>	<i>7.93</i>	<i>8.49</i>
Supplemental Gaseous Fuels .....	<b>0.20</b>	<b>0.16</b>	<b>0.15</b>	<b>0.17</b>	<i>0.18</i>	<i>0.18</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<i>0.17</i>	<b>0.17</b>	<i>0.17</i>	<i>0.17</i>
Net Inventory Withdrawals .....	<b>16.93</b>	<b>-14.18</b>	<b>-10.41</b>	<b>2.44</b>	<i>13.94</i>	<i>-10.39</i>	<i>-8.75</i>	<i>2.79</i>	<i>17.87</i>	<i>-10.67</i>	<i>-8.39</i>	<i>3.30</i>	<b>-1.37</b>	<i>-0.61</i>	<i>0.46</i>
Total Supply .....	<b>103.21</b>	<b>71.52</b>	<b>77.14</b>	<b>91.55</b>	<i>103.59</i>	<i>79.47</i>	<i>79.01</i>	<i>88.71</i>	<i>101.00</i>	<i>73.29</i>	<i>75.57</i>	<i>87.93</i>	<b>85.80</b>	<i>87.68</i>	<i>84.39</i>
Balancing Item (b) .....	<b>0.11</b>	<b>-0.79</b>	<b>-0.39</b>	<b>-2.21</b>	<i>1.50</i>	<i>-2.01</i>	<i>-1.23</i>	<i>0.11</i>	<i>2.15</i>	<i>1.03</i>	<i>1.13</i>	<i>0.61</i>	<b>-0.83</b>	<i>-0.41</i>	<i>1.23</i>
Total Primary Supply .....	<b>103.32</b>	<b>70.74</b>	<b>76.74</b>	<b>89.34</b>	<i>105.09</i>	<i>77.47</i>	<i>77.78</i>	<i>88.82</i>	<i>103.15</i>	<i>74.32</i>	<i>76.69</i>	<i>88.54</i>	<b>84.97</b>	<i>87.27</i>	<i>85.61</i>
<b>Consumption (billion cubic feet per day)</b>															
Residential .....	<b>27.15</b>	<b>7.34</b>	<b>3.53</b>	<b>17.00</b>	<i>25.53</i>	<i>7.94</i>	<i>3.60</i>	<i>15.93</i>	<i>26.94</i>	<i>7.90</i>	<i>3.54</i>	<i>15.83</i>	<b>13.70</b>	<i>13.23</i>	<i>13.49</i>
Commercial .....	<b>16.19</b>	<b>6.36</b>	<b>4.68</b>	<b>11.45</b>	<i>14.70</i>	<i>6.58</i>	<i>4.90</i>	<i>10.77</i>	<i>15.38</i>	<i>6.67</i>	<i>4.91</i>	<i>10.78</i>	<b>9.65</b>	<i>9.23</i>	<i>9.41</i>
Industrial .....	<b>25.12</b>	<b>21.74</b>	<b>21.31</b>	<b>23.79</b>	<i>26.36</i>	<i>23.43</i>	<i>22.58</i>	<i>25.52</i>	<i>26.31</i>	<i>23.28</i>	<i>22.49</i>	<i>25.67</i>	<b>22.98</b>	<i>24.47</i>	<i>24.43</i>
Electric Power (c) .....	<b>26.83</b>	<b>28.13</b>	<b>39.74</b>	<b>29.09</b>	<i>30.10</i>	<i>31.89</i>	<i>38.95</i>	<i>28.59</i>	<i>26.21</i>	<i>28.89</i>	<i>37.96</i>	<i>28.07</i>	<b>30.98</b>	<i>32.39</i>	<i>30.31</i>
Lease and Plant Fuel .....	<b>4.93</b>	<b>5.00</b>	<b>5.13</b>	<b>5.30</b>	<i>5.32</i>	<i>5.30</i>	<i>5.26</i>	<i>5.16</i>	<i>5.05</i>	<i>5.07</i>	<i>5.15</i>	<i>5.21</i>	<b>5.09</b>	<i>5.26</i>	<i>5.12</i>
Pipeline and Distribution Use .....	<b>2.96</b>	<b>2.03</b>	<b>2.20</b>	<b>2.56</b>	<i>2.92</i>	<i>2.17</i>	<i>2.34</i>	<i>2.70</i>	<i>3.11</i>	<i>2.35</i>	<i>2.50</i>	<i>2.82</i>	<b>2.44</b>	<i>2.53</i>	<i>2.69</i>
Vehicle Use .....	<b>0.13</b>	<b>0.13</b>	<b>0.14</b>	<b>0.15</b>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<b>0.14</b>	<i>0.15</i>	<i>0.16</i>
Total Consumption .....	<b>103.32</b>	<b>70.74</b>	<b>76.74</b>	<b>89.34</b>	<i>105.09</i>	<i>77.47</i>	<i>77.78</i>	<i>88.82</i>	<i>103.15</i>	<i>74.32</i>	<i>76.69</i>	<i>88.54</i>	<b>84.97</b>	<i>87.27</i>	<i>85.61</i>
<b>End-of-period Inventories (billion cubic feet)</b>															
Working Gas Inventory .....	<b>1,185</b>	<b>2,461</b>	<b>3,415</b>	<b>3,189</b>	<i>1,920</i>	<i>2,865</i>	<i>3,670</i>	<i>3,413</i>	<i>1,805</i>	<i>2,776</i>	<i>3,548</i>	<i>3,245</i>	<b>3,189</b>	<i>3,413</i>	<i>3,245</i>
East Region (d) .....	<b>216</b>	<b>537</b>	<b>845</b>	<b>764</b>	<i>362</i>	<i>637</i>	<i>911</i>	<i>819</i>	<i>301</i>	<i>609</i>	<i>875</i>	<i>750</i>	<b>764</b>	<i>819</i>	<i>750</i>
Midwest Region (d) .....	<b>242</b>	<b>579</b>	<b>990</b>	<b>885</b>	<i>466</i>	<i>736</i>	<i>1,083</i>	<i>977</i>	<i>353</i>	<i>608</i>	<i>955</i>	<i>845</i>	<b>885</b>	<i>977</i>	<i>845</i>
South Central Region (d) .....	<b>519</b>	<b>917</b>	<b>1,049</b>	<b>1,095</b>	<i>780</i>	<i>1,058</i>	<i>1,165</i>	<i>1,163</i>	<i>837</i>	<i>1,100</i>	<i>1,190</i>	<i>1,197</i>	<b>1,095</b>	<i>1,163</i>	<i>1,197</i>
Mountain Region (d) .....	<b>63</b>	<b>135</b>	<b>200</b>	<b>167</b>	<i>87</i>	<i>124</i>	<i>170</i>	<i>143</i>	<i>100</i>	<i>145</i>	<i>188</i>	<i>154</i>	<b>167</b>	<i>143</i>	<i>154</i>
Pacific Region (d) .....	<b>115</b>	<b>259</b>	<b>294</b>	<b>245</b>	<i>198</i>	<i>284</i>	<i>313</i>	<i>285</i>	<i>187</i>	<i>287</i>	<i>313</i>	<i>272</i>	<b>245</b>	<i>285</i>	<i>272</i>
Alaska .....	<b>30</b>	<b>33</b>	<b>37</b>	<b>33</b>	<i>27</i>	<i>27</i>	<i>27</i>	<i>27</i>	<i>27</i>	<i>27</i>	<i>27</i>	<i>27</i>	<b>33</b>	<i>27</i>	<i>27</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/hgs/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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Wholesale/Spot</b>															
Henry Hub Spot Price .....	<b>3.03</b>	<b>2.66</b>	<b>2.47</b>	<b>2.49</b>	<i>1.97</i>	<i>1.98</i>	<i>2.31</i>	<i>2.51</i>	<i>2.74</i>	<i>2.51</i>	<i>2.53</i>	<i>2.63</i>	<b>2.66</b>	<i>2.19</i>	<i>2.60</i>
<b>Residential Retail</b>															
New England .....	<b>14.44</b>	<b>15.56</b>	<b>19.31</b>	<b>14.05</b>	<i>13.44</i>	<i>13.78</i>	<i>16.51</i>	<i>12.68</i>	<i>12.46</i>	<i>13.57</i>	<i>16.59</i>	<i>12.75</i>	<b>14.78</b>	<i>13.46</i>	<i>12.98</i>
Middle Atlantic .....	<b>10.79</b>	<b>13.08</b>	<b>18.50</b>	<b>11.38</b>	<i>10.20</i>	<i>11.79</i>	<i>15.95</i>	<i>10.11</i>	<i>9.23</i>	<i>11.63</i>	<i>16.18</i>	<i>10.37</i>	<b>11.74</b>	<i>10.82</i>	<i>10.36</i>
E. N. Central .....	<b>7.27</b>	<b>10.48</b>	<b>19.03</b>	<b>7.68</b>	<i>6.95</i>	<i>9.77</i>	<i>15.77</i>	<i>7.82</i>	<i>7.32</i>	<i>10.32</i>	<i>16.04</i>	<i>7.85</i>	<b>8.41</b>	<i>8.17</i>	<i>8.41</i>
W. N. Central .....	<b>7.93</b>	<b>10.67</b>	<b>18.16</b>	<b>8.23</b>	<i>7.35</i>	<i>10.09</i>	<i>16.28</i>	<i>8.51</i>	<i>7.52</i>	<i>10.50</i>	<i>16.59</i>	<i>8.63</i>	<b>8.84</b>	<i>8.57</i>	<i>8.75</i>
S. Atlantic .....	<b>11.63</b>	<b>18.34</b>	<b>26.03</b>	<b>12.90</b>	<i>11.46</i>	<i>15.81</i>	<i>21.78</i>	<i>11.82</i>	<i>10.48</i>	<i>15.76</i>	<i>21.99</i>	<i>11.99</i>	<b>13.83</b>	<i>13.00</i>	<i>12.43</i>
E. S. Central .....	<b>9.64</b>	<b>14.84</b>	<b>21.40</b>	<b>10.68</b>	<i>9.67</i>	<i>13.78</i>	<i>20.70</i>	<i>12.48</i>	<i>10.08</i>	<i>14.83</i>	<i>21.73</i>	<i>13.06</i>	<b>11.14</b>	<i>11.75</i>	<i>12.20</i>
W. S. Central .....	<b>8.29</b>	<b>13.38</b>	<b>21.45</b>	<b>10.77</b>	<i>8.84</i>	<i>13.70</i>	<i>19.77</i>	<i>11.48</i>	<i>8.86</i>	<i>14.58</i>	<i>20.40</i>	<i>11.71</i>	<b>10.61</b>	<i>11.31</i>	<i>11.39</i>
Mountain .....	<b>7.73</b>	<b>9.46</b>	<b>13.40</b>	<b>7.74</b>	<i>7.47</i>	<i>8.97</i>	<i>12.61</i>	<i>7.57</i>	<i>7.43</i>	<i>9.36</i>	<i>13.19</i>	<i>8.07</i>	<b>8.37</b>	<i>8.12</i>	<i>8.38</i>
Pacific .....	<b>12.44</b>	<b>12.75</b>	<b>13.50</b>	<b>11.98</b>	<i>12.22</i>	<i>12.69</i>	<i>13.40</i>	<i>12.44</i>	<i>12.78</i>	<i>13.57</i>	<i>14.27</i>	<i>13.16</i>	<b>12.48</b>	<i>12.51</i>	<i>13.21</i>
U.S. Average .....	<b>9.47</b>	<b>12.48</b>	<b>18.10</b>	<b>9.88</b>	<i>9.15</i>	<i>11.58</i>	<i>16.30</i>	<i>9.93</i>	<i>9.08</i>	<i>11.96</i>	<i>16.76</i>	<i>10.19</i>	<b>10.56</b>	<i>10.24</i>	<i>10.33</i>
<b>Commercial Retail</b>															
New England .....	<b>11.21</b>	<b>11.42</b>	<b>11.61</b>	<b>10.13</b>	<i>9.57</i>	<i>8.88</i>	<i>8.64</i>	<i>8.62</i>	<i>8.88</i>	<i>9.10</i>	<i>9.12</i>	<i>9.08</i>	<b>10.95</b>	<i>9.07</i>	<i>9.00</i>
Middle Atlantic .....	<b>8.43</b>	<b>7.72</b>	<b>6.86</b>	<b>7.47</b>	<i>7.36</i>	<i>7.00</i>	<i>6.46</i>	<i>7.08</i>	<i>7.30</i>	<i>7.19</i>	<i>6.65</i>	<i>7.19</i>	<b>7.85</b>	<i>7.10</i>	<i>7.17</i>
E. N. Central .....	<b>6.27</b>	<b>7.19</b>	<b>8.85</b>	<b>6.04</b>	<i>5.48</i>	<i>6.48</i>	<i>8.10</i>	<i>6.35</i>	<i>6.21</i>	<i>7.26</i>	<i>8.59</i>	<i>6.56</i>	<b>6.51</b>	<i>6.11</i>	<i>6.64</i>
W. N. Central .....	<b>6.79</b>	<b>7.11</b>	<b>8.20</b>	<b>6.24</b>	<i>6.33</i>	<i>6.58</i>	<i>7.86</i>	<i>6.45</i>	<i>6.76</i>	<i>7.23</i>	<i>8.35</i>	<i>6.78</i>	<b>6.76</b>	<i>6.52</i>	<i>6.95</i>
S. Atlantic .....	<b>8.85</b>	<b>9.54</b>	<b>9.64</b>	<b>8.82</b>	<i>8.54</i>	<i>9.03</i>	<i>9.51</i>	<i>8.69</i>	<i>8.55</i>	<i>9.37</i>	<i>9.72</i>	<i>8.69</i>	<b>9.05</b>	<i>8.79</i>	<i>8.87</i>
E. S. Central .....	<b>8.61</b>	<b>9.78</b>	<b>10.06</b>	<b>8.65</b>	<i>8.33</i>	<i>8.64</i>	<i>9.06</i>	<i>8.12</i>	<i>7.75</i>	<i>8.79</i>	<i>9.35</i>	<i>8.32</i>	<b>8.94</b>	<i>8.39</i>	<i>8.25</i>
W. S. Central .....	<b>6.02</b>	<b>6.57</b>	<b>7.42</b>	<b>6.40</b>	<i>6.19</i>	<i>6.44</i>	<i>7.27</i>	<i>6.89</i>	<i>6.58</i>	<i>7.10</i>	<i>7.70</i>	<i>7.09</i>	<b>6.41</b>	<i>6.58</i>	<i>6.97</i>
Mountain .....	<b>6.40</b>	<b>6.72</b>	<b>7.41</b>	<b>6.16</b>	<i>6.42</i>	<i>6.56</i>	<i>7.40</i>	<i>6.51</i>	<i>6.76</i>	<i>7.07</i>	<i>7.85</i>	<i>6.84</i>	<b>6.47</b>	<i>6.57</i>	<i>6.96</i>
Pacific .....	<b>9.08</b>	<b>8.82</b>	<b>9.14</b>	<b>8.90</b>	<i>8.66</i>	<i>8.16</i>	<i>8.31</i>	<i>8.05</i>	<i>8.29</i>	<i>8.40</i>	<i>8.65</i>	<i>8.28</i>	<b>8.99</b>	<i>8.32</i>	<i>8.36</i>
U.S. Average .....	<b>7.59</b>	<b>7.97</b>	<b>8.40</b>	<b>7.22</b>	<i>7.02</i>	<i>7.29</i>	<i>7.82</i>	<i>7.20</i>	<i>7.19</i>	<i>7.73</i>	<i>8.17</i>	<i>7.40</i>	<b>7.62</b>	<i>7.21</i>	<i>7.45</i>
<b>Industrial Retail</b>															
New England .....	<b>9.17</b>	<b>8.27</b>	<b>6.92</b>	<b>7.29</b>	<i>7.41</i>	<i>6.87</i>	<i>6.54</i>	<i>7.71</i>	<i>8.23</i>	<i>7.49</i>	<i>6.83</i>	<i>7.74</i>	<b>8.08</b>	<i>7.22</i>	<i>7.69</i>
Middle Atlantic .....	<b>8.76</b>	<b>7.65</b>	<b>6.99</b>	<b>6.95</b>	<i>7.14</i>	<i>6.31</i>	<i>6.45</i>	<i>6.86</i>	<i>7.37</i>	<i>6.83</i>	<i>6.87</i>	<i>7.09</i>	<b>7.86</b>	<i>6.84</i>	<i>7.14</i>
E. N. Central .....	<b>5.75</b>	<b>5.38</b>	<b>5.64</b>	<b>5.14</b>	<i>5.38</i>	<i>4.79</i>	<i>4.89</i>	<i>5.00</i>	<i>5.69</i>	<i>5.44</i>	<i>5.34</i>	<i>5.28</i>	<b>5.49</b>	<i>5.11</i>	<i>5.48</i>
W. N. Central .....	<b>5.16</b>	<b>3.94</b>	<b>3.37</b>	<b>4.19</b>	<i>4.33</i>	<i>3.34</i>	<i>3.38</i>	<i>4.19</i>	<i>4.77</i>	<i>4.06</i>	<i>3.92</i>	<i>4.57</i>	<b>4.24</b>	<i>3.88</i>	<i>4.38</i>
S. Atlantic .....	<b>5.52</b>	<b>4.60</b>	<b>4.40</b>	<b>4.52</b>	<i>4.40</i>	<i>3.85</i>	<i>4.13</i>	<i>4.61</i>	<i>4.99</i>	<i>4.44</i>	<i>4.39</i>	<i>4.70</i>	<b>4.80</b>	<i>4.26</i>	<i>4.65</i>
E. S. Central .....	<b>4.93</b>	<b>4.04</b>	<b>3.59</b>	<b>4.08</b>	<i>3.92</i>	<i>3.49</i>	<i>3.75</i>	<i>4.31</i>	<i>4.60</i>	<i>4.20</i>	<i>4.08</i>	<i>4.47</i>	<b>4.21</b>	<i>3.88</i>	<i>4.36</i>
W. S. Central .....	<b>3.47</b>	<b>2.88</b>	<b>2.53</b>	<b>2.64</b>	<i>2.24</i>	<i>2.06</i>	<i>2.48</i>	<i>2.69</i>	<i>2.88</i>	<i>2.63</i>	<i>2.73</i>	<i>2.82</i>	<b>2.89</b>	<i>2.37</i>	<i>2.77</i>
Mountain .....	<b>5.31</b>	<b>4.80</b>	<b>5.00</b>	<b>4.72</b>	<i>4.73</i>	<i>4.52</i>	<i>4.99</i>	<i>5.20</i>	<i>5.42</i>	<i>5.13</i>	<i>5.35</i>	<i>5.37</i>	<b>4.96</b>	<i>4.87</i>	<i>5.33</i>
Pacific .....	<b>7.68</b>	<b>6.66</b>	<b>6.49</b>	<b>6.83</b>	<i>6.72</i>	<i>5.61</i>	<i>5.73</i>	<i>5.95</i>	<i>6.49</i>	<i>6.02</i>	<i>6.12</i>	<i>6.17</i>	<b>6.97</b>	<i>6.05</i>	<i>6.22</i>
U.S. Average .....	<b>4.67</b>	<b>3.74</b>	<b>3.30</b>	<b>3.74</b>	<i>3.49</i>	<i>2.88</i>	<i>3.13</i>	<i>3.65</i>	<i>4.06</i>	<i>3.48</i>	<i>3.42</i>	<i>3.83</i>	<b>3.91</b>	<i>3.31</i>	<i>3.72</i>

- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Supply (million short tons)</b>															
Production .....	<b>170.3</b>	<b>174.9</b>	<b>179.7</b>	<b>165.2</b>	<i>156.0</i>	<i>117.3</i>	<i>156.2</i>	<i>143.9</i>	<i>161.7</i>	<i>119.7</i>	<i>153.2</i>	<i>146.6</i>	<b>690.1</b>	<i>573.5</i>	<i>581.1</i>
Appalachia .....	<b>47.4</b>	<b>49.3</b>	<b>46.6</b>	<b>44.3</b>	<i>44.2</i>	<i>33.7</i>	<i>37.4</i>	<i>33.2</i>	<i>36.1</i>	<i>30.3</i>	<i>34.6</i>	<i>32.3</i>	<b>187.6</b>	<i>148.6</i>	<i>133.3</i>
Interior .....	<b>31.0</b>	<b>32.2</b>	<b>32.4</b>	<b>30.6</b>	<i>30.3</i>	<i>25.4</i>	<i>33.5</i>	<i>32.0</i>	<i>36.4</i>	<i>25.6</i>	<i>31.8</i>	<i>32.6</i>	<b>126.2</b>	<i>121.3</i>	<i>126.4</i>
Western .....	<b>91.9</b>	<b>93.4</b>	<b>102.4</b>	<b>90.3</b>	<i>81.5</i>	<i>58.2</i>	<i>85.3</i>	<i>78.6</i>	<i>89.2</i>	<i>63.7</i>	<i>86.8</i>	<i>81.7</i>	<b>378.0</b>	<i>303.6</i>	<i>321.4</i>
Primary Inventory Withdrawals .....	<b>-1.5</b>	<b>1.3</b>	<b>-1.2</b>	<b>-1.4</b>	<i>-0.5</i>	<i>1.0</i>	<i>1.5</i>	<i>-2.2</i>	<i>-0.4</i>	<i>1.2</i>	<i>1.7</i>	<i>-2.2</i>	<b>-2.7</b>	<i>-0.1</i>	<i>0.3</i>
Imports .....	<b>1.7</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>	<i>1.3</i>	<i>1.3</i>	<i>1.5</i>	<i>1.4</i>	<i>1.2</i>	<i>1.3</i>	<i>1.5</i>	<i>1.4</i>	<b>6.7</b>	<i>5.5</i>	<i>5.4</i>
Exports .....	<b>25.2</b>	<b>25.3</b>	<b>21.9</b>	<b>20.4</b>	<i>22.3</i>	<i>18.9</i>	<i>18.6</i>	<i>18.3</i>	<i>21.8</i>	<i>20.2</i>	<i>20.4</i>	<i>20.4</i>	<b>92.9</b>	<i>78.1</i>	<i>82.8</i>
Metallurgical Coal .....	<b>13.9</b>	<b>15.1</b>	<b>13.5</b>	<b>12.6</b>	<i>13.9</i>	<i>11.4</i>	<i>11.2</i>	<i>10.8</i>	<i>13.3</i>	<i>12.1</i>	<i>12.2</i>	<i>11.9</i>	<b>55.1</b>	<i>47.2</i>	<i>49.5</i>
Steam Coal .....	<b>11.3</b>	<b>10.2</b>	<b>8.4</b>	<b>7.8</b>	<i>8.4</i>	<i>7.5</i>	<i>7.4</i>	<i>7.5</i>	<i>8.5</i>	<i>8.2</i>	<i>8.2</i>	<i>8.4</i>	<b>37.7</b>	<i>30.9</i>	<i>33.3</i>
Total Primary Supply .....	<b>145.3</b>	<b>152.4</b>	<b>158.3</b>	<b>145.2</b>	<i>134.5</i>	<i>100.7</i>	<i>140.6</i>	<i>124.9</i>	<i>140.6</i>	<i>101.9</i>	<i>136.0</i>	<i>125.5</i>	<b>601.2</b>	<i>500.7</i>	<i>504.0</i>
Secondary Inventory Withdrawals .....	<b>6.2</b>	<b>-21.0</b>	<b>6.4</b>	<b>-17.4</b>	<i>-3.0</i>	<i>3.9</i>	<i>7.8</i>	<i>-7.6</i>	<i>-0.3</i>	<i>3.4</i>	<i>7.7</i>	<i>-7.7</i>	<b>-25.9</b>	<i>1.1</i>	<i>3.1</i>
Waste Coal (a) .....	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.0</i>	<i>2.0</i>	<i>2.0</i>	<i>2.0</i>	<b>9.3</b>	<i>9.2</i>	<i>8.0</i>
Total Supply .....	<b>153.8</b>	<b>133.7</b>	<b>167.0</b>	<b>130.1</b>	<i>133.8</i>	<i>106.9</i>	<i>150.7</i>	<i>119.5</i>	<i>142.4</i>	<i>107.3</i>	<i>145.7</i>	<i>119.8</i>	<b>584.7</b>	<i>510.9</i>	<i>515.1</i>
<b>Consumption (million short tons)</b>															
Coke Plants .....	<b>4.5</b>	<b>4.7</b>	<b>4.5</b>	<b>6.8</b>	<i>5.8</i>	<i>5.6</i>	<i>5.4</i>	<i>6.4</i>	<i>5.4</i>	<i>5.2</i>	<i>4.9</i>	<i>6.0</i>	<b>20.4</b>	<i>23.2</i>	<i>21.6</i>
Electric Power Sector (b) .....	<b>145.3</b>	<b>118.0</b>	<b>156.2</b>	<b>119.9</b>	<i>114.7</i>	<i>94.1</i>	<i>138.3</i>	<i>105.9</i>	<i>129.8</i>	<i>95.3</i>	<i>134.1</i>	<i>106.9</i>	<b>539.4</b>	<i>453.1</i>	<i>466.1</i>
Retail and Other Industry .....	<b>8.1</b>	<b>7.2</b>	<b>7.2</b>	<b>7.5</b>	<i>7.5</i>	<i>7.2</i>	<i>7.0</i>	<i>7.2</i>	<i>7.2</i>	<i>6.8</i>	<i>6.6</i>	<i>6.8</i>	<b>30.0</b>	<i>28.9</i>	<i>27.5</i>
Residential and Commercial .....	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<b>0.9</b>	<i>0.7</i>	<i>0.7</i>
Other Industrial .....	<b>7.8</b>	<b>7.0</b>	<b>7.0</b>	<b>7.3</b>	<i>7.4</i>	<i>7.0</i>	<i>6.9</i>	<i>7.0</i>	<i>7.0</i>	<i>6.7</i>	<i>6.5</i>	<i>6.6</i>	<b>29.1</b>	<i>28.3</i>	<i>26.8</i>
Total Consumption .....	<b>157.9</b>	<b>129.9</b>	<b>167.8</b>	<b>134.2</b>	<i>128.1</i>	<i>106.9</i>	<i>150.7</i>	<i>119.5</i>	<i>142.4</i>	<i>107.3</i>	<i>145.7</i>	<i>119.8</i>	<b>589.8</b>	<i>505.3</i>	<i>515.1</i>
Discrepancy (c) .....	<b>-4.1</b>	<b>3.9</b>	<b>-0.8</b>	<b>-4.1</b>	<i>5.7</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>	<i>0.0</i>	<b>-5.1</b>	<i>5.7</i>	<i>0.0</i>
<b>End-of-period Inventories (million short tons)</b>															
Primary Inventories (d) .....	<b>23.2</b>	<b>21.9</b>	<b>23.1</b>	<b>24.4</b>	<i>24.9</i>	<i>23.9</i>	<i>22.4</i>	<i>24.6</i>	<i>25.0</i>	<i>23.8</i>	<i>22.1</i>	<i>24.3</i>	<b>24.4</b>	<i>24.6</i>	<i>24.3</i>
Secondary Inventories .....	<b>102.2</b>	<b>123.2</b>	<b>116.9</b>	<b>134.2</b>	<i>137.3</i>	<i>133.4</i>	<i>125.6</i>	<i>133.2</i>	<i>133.4</i>	<i>130.0</i>	<i>122.3</i>	<i>130.1</i>	<b>134.2</b>	<i>133.2</i>	<i>130.1</i>
Electric Power Sector .....	<b>97.1</b>	<b>117.7</b>	<b>111.0</b>	<b>128.5</b>	<i>131.6</i>	<i>127.4</i>	<i>119.4</i>	<i>127.2</i>	<i>127.6</i>	<i>123.8</i>	<i>116.0</i>	<i>123.9</i>	<b>128.5</b>	<i>127.2</i>	<i>123.9</i>
Retail and General Industry .....	<b>2.8</b>	<b>3.0</b>	<b>3.2</b>	<b>3.4</b>	<i>3.7</i>	<i>3.6</i>	<i>3.7</i>	<i>3.5</i>	<i>3.8</i>	<i>3.7</i>	<i>3.7</i>	<i>3.6</i>	<b>3.4</b>	<i>3.5</i>	<i>3.6</i>
Coke Plants .....	<b>2.0</b>	<b>2.3</b>	<b>2.5</b>	<b>2.1</b>	<i>1.8</i>	<i>2.2</i>	<i>2.3</i>	<i>2.3</i>	<i>1.9</i>	<i>2.3</i>	<i>2.4</i>	<i>2.4</i>	<b>2.1</b>	<i>2.3</i>	<i>2.4</i>
<b>Coal Market Indicators</b>															
Coal Miner Productivity															
(Tons per hour) .....	<b>6.37</b>	<b>6.37</b>	<b>6.37</b>	<b>6.37</b>	<i>6.37</i>	<i>6.37</i>	<i>6.37</i>	<i>6.37</i>	<i>6.32</i>	<i>6.32</i>	<i>6.32</i>	<i>6.32</i>	<b>6.37</b>	<i>6.37</i>	<i>6.32</i>
Total Raw Steel Production															
(Million short tons per day) .....	<b>0.273</b>	<b>0.271</b>	<b>0.264</b>	<b>0.265</b>	<i>0.274</i>	<i>0.270</i>	<i>0.260</i>	<i>0.259</i>	<i>0.256</i>	<i>0.254</i>	<i>0.246</i>	<i>0.252</i>	<b>0.268</b>	<i>0.266</i>	<i>0.252</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu) .....	<b>2.08</b>	<b>2.05</b>	<b>2.00</b>	<b>1.95</b>	<i>2.08</i>	<i>2.04</i>	<i>2.03</i>	<i>2.03</i>	<i>2.06</i>	<i>2.08</i>	<i>2.06</i>	<i>2.07</i>	<b>2.02</b>	<i>2.05</i>	<i>2.06</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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Electricity Supply (billion kilowatthours)</b>															
Electricity Generation .....	995	974	1,173	976	981	971	1,138	962	988	972	1,140	964	4,118	4,053	4,064
Electric Power Sector (a) .....	955	935	1,131	934	948	939	1,105	930	955	940	1,106	931	3,956	3,923	3,932
Industrial Sector (b) .....	37	36	38	38	31	29	31	30	30	30	31	31	149	120	121
Commercial Sector (b) .....	3	3	4	3	2	2	3	2	2	2	3	2	14	10	10
Net Imports .....	9	9	11	10	12	12	15	11	13	13	15	12	40	50	52
Total Supply .....	1,004	983	1,184	986	993	983	1,153	973	1,000	985	1,155	975	4,158	4,103	4,116
Losses and Unaccounted for (c) .....	57	72	74	59	51	71	63	59	50	71	63	59	262	245	244
<b>Electricity Consumption (billion kilowatthours unless noted)</b>															
Retail Sales .....	911	877	1072	889	905	877	1052	878	914	878	1054	879	3750	3713	3725
Residential Sector .....	361	309	434	331	354	312	423	324	369	314	425	325	1435	1413	1433
Commercial Sector .....	320	328	382	325	322	330	376	323	321	330	377	323	1355	1351	1351
Industrial Sector .....	228	238	254	232	227	234	251	229	222	233	250	229	952	941	934
Transportation Sector .....	2	2	2	2	2	2	2	2	2	2	2	2	8	7	7
Direct Use (d) .....	36	34	38	38	37	35	38	36	36	35	38	37	146	145	147
Total Consumption .....	948	911	1110	927	942	912	1090	914	950	914	1092	916	3896	3858	3872
Average residential electricity usage per customer (kWh) .....	2,677	2,290	3,213	2,450	2,598	2,288	3,100	2,373	2,677	2,280	3,086	2,362	10,631	10,359	10,406
<b>Prices</b>															
<b>Power Generation Fuel Costs (dollars per million Btu)</b>															
Coal .....	2.08	2.05	2.00	1.95	2.08	2.04	2.03	2.03	2.06	2.08	2.06	2.07	2.02	2.05	2.06
Natural Gas .....	3.71	2.73	2.51	2.79	2.29	1.88	2.17	2.63	3.08	2.53	2.46	2.80	2.88	2.23	2.69
Residual Fuel Oil .....	12.21	13.39	12.79	12.35	11.99	9.03	8.17	8.42	9.26	10.89	10.70	10.99	12.68	9.38	10.45
Distillate Fuel Oil .....	14.88	15.75	15.01	15.27	13.54	10.49	10.90	11.75	12.04	13.37	13.76	14.39	15.21	11.80	13.31
<b>Retail Prices (cents per kilowatthour)</b>															
Residential Sector .....	12.67	13.32	13.25	12.85	12.78	13.27	13.23	12.90	12.83	13.59	13.59	13.25	13.02	13.05	13.32
Commercial Sector .....	10.41	10.65	11.00	10.53	10.28	10.47	10.86	10.47	10.32	10.64	11.12	10.74	10.66	10.54	10.72
Industrial Sector .....	6.67	6.72	7.24	6.65	6.48	6.61	7.26	6.71	6.66	6.81	7.40	6.81	6.83	6.78	6.93
<b>Wholesale Electricity Prices (dollars per megawatthour)</b>															
ERCOT North hub .....	28.41	28.34	139.81	28.40	20.61	24.99	29.98	27.37	30.04	27.78	28.55	29.36	56.24	25.74	28.93
CAISO SP15 zone .....	50.42	23.30	37.32	41.57	30.43	28.29	32.79	36.04	36.51	29.98	35.54	36.72	38.15	31.88	34.69
ISO-NE Internal hub .....	47.40	27.15	29.52	35.48	29.00	24.34	25.59	30.48	40.22	25.30	26.56	32.32	34.89	27.35	31.10
NYISO Hudson Valley zone .....	41.77	25.68	27.76	27.04	24.58	23.30	25.25	25.59	28.69	24.94	26.38	25.68	30.56	24.68	26.42
PJM Western hub .....	33.79	28.54	31.17	29.89	24.80	27.90	31.00	27.79	30.35	28.47	31.54	28.17	30.85	27.87	29.63
Midcontinent ISO Illinois hub .....	31.44	27.81	30.71	28.09	26.17	27.04	30.05	26.74	27.92	27.73	30.43	26.99	29.51	27.50	28.27
SPP ISO South hub .....	29.15	27.14	31.51	23.64	22.18	23.79	28.89	24.86	24.39	24.98	29.47	24.90	27.86	24.93	25.93
SERC index, Into Southern .....	30.74	29.87	31.08	29.31	26.55	28.82	32.39	29.09	30.54	30.05	32.80	29.24	30.25	29.21	30.66
FRCC index, Florida Reliability .....	30.71	29.57	30.64	29.47	27.07	26.69	29.11	29.69	30.96	29.33	29.80	30.42	30.10	28.14	30.13
Northwest index, Mid-Columbia .....	55.74	18.55	32.74	37.47	24.13	22.05	27.69	30.55	30.65	22.48	29.57	31.00	36.12	26.11	28.42
Southwest index, Palo Verde .....	44.23	18.45	42.00	36.37	23.35	25.70	31.21	30.81	32.66	28.16	33.54	32.09	35.26	27.77	31.61

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

kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

- (a) Generation supplied by power plants with capacity of at least 1 megawatt operated by electric utilities and independent power producers.
- (b) Generation supplied by power plants with capacity of at least 1 megawatt 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 collocated facilities for which revenue information is not available. See Table 7.6 of the EIA *Monthly Energy Review*.

**Historical data sources:**

- (1) Electricity supply, consumption, fuel costs, and retail electricity prices: Latest data available from U.S. Energy Information Administration databases supporting the following reports: Electric Power Monthly, DOE/EIA-0226; and Electric Power Annual, DOE/EIA-0348
  - (2) Wholesale electricity prices (except for PJM RTO price): S&P Global Market Intelligence, SNL Energy Data
  - (3) PJM ISO Western Hub wholesale electricity prices: PJM Data Miner website
- Minor discrepancies with published historical data are due to independent rounding.

**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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Electric Power Sector</b>															
Geothermal .....	<b>0.037</b>	<b>0.035</b>	<b>0.037</b>	<b>0.033</b>	0.037	0.035	0.038	0.031	0.032	0.033	0.038	0.031	<b>0.142</b>	0.141	0.134
Hydroelectric Power (a) .....	<b>0.650</b>	<b>0.745</b>	<b>0.554</b>	<b>0.537</b>	0.653	0.776	0.609	0.568	0.647	0.747	0.584	0.561	<b>2.486</b>	2.607	2.539
Solar (b) .....	<b>0.122</b>	<b>0.201</b>	<b>0.208</b>	<b>0.128</b>	0.146	0.245	0.267	0.170	0.196	0.335	0.363	0.226	<b>0.659</b>	0.829	1.120
Waste Biomass (c) .....	<b>0.059</b>	<b>0.058</b>	<b>0.059</b>	<b>0.060</b>	0.053	0.058	0.060	0.060	0.055	0.059	0.061	0.060	<b>0.236</b>	0.232	0.236
Wood Biomass .....	<b>0.053</b>	<b>0.052</b>	<b>0.058</b>	<b>0.048</b>	0.029	0.050	0.056	0.052	0.043	0.051	0.055	0.054	<b>0.211</b>	0.187	0.203
Wind .....	<b>0.683</b>	<b>0.724</b>	<b>0.610</b>	<b>0.745</b>	0.782	0.830	0.672	0.874	0.919	0.935	0.766	0.953	<b>2.762</b>	3.159	3.573
Subtotal .....	<b>1.604</b>	<b>1.815</b>	<b>1.527</b>	<b>1.550</b>	1.702	1.996	1.702	1.756	1.892	2.160	1.868	1.885	<b>6.496</b>	7.155	7.805
<b>Industrial Sector</b>															
Biofuel Losses and Co-products (d) .....	<b>0.194</b>	<b>0.203</b>	<b>0.199</b>	<b>0.203</b>	0.203	0.202	0.201	0.202	0.195	0.200	0.202	0.202	<b>0.800</b>	0.809	0.800
Geothermal .....	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	<b>0.004</b>	0.004	0.004
Hydroelectric Power (a) .....	<b>0.003</b>	<b>0.003</b>	<b>0.002</b>	<b>0.003</b>	0.003	0.003	0.002	0.003	0.003	0.003	0.002	0.003	<b>0.010</b>	0.010	0.010
Solar (b) .....	<b>0.006</b>	<b>0.008</b>	<b>0.009</b>	<b>0.006</b>	0.006	0.009	0.010	0.007	0.007	0.011	0.011	0.008	<b>0.029</b>	0.032	0.036
Waste Biomass (c) .....	<b>0.042</b>	<b>0.038</b>	<b>0.037</b>	<b>0.043</b>	0.040	0.039	0.039	0.041	0.040	0.039	0.039	0.041	<b>0.160</b>	0.160	0.160
Wood Biomass .....	<b>0.373</b>	<b>0.363</b>	<b>0.369</b>	<b>0.368</b>	0.351	0.343	0.352	0.353	0.341	0.338	0.349	0.351	<b>1.473</b>	1.399	1.379
Subtotal .....	<b>0.617</b>	<b>0.613</b>	<b>0.614</b>	<b>0.622</b>	0.603	0.593	0.600	0.605	0.585	0.586	0.598	0.603	<b>2.466</b>	2.401	2.371
<b>Commercial Sector</b>															
Geothermal .....	<b>0.006</b>	<b>0.006</b>	<b>0.006</b>	<b>0.006</b>	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	<b>0.024</b>	0.024	0.024
Solar (b) .....	<b>0.022</b>	<b>0.032</b>	<b>0.032</b>	<b>0.022</b>	0.025	0.037	0.038	0.026	0.030	0.042	0.042	0.030	<b>0.108</b>	0.127	0.144
Waste Biomass (c) .....	<b>0.010</b>	<b>0.008</b>	<b>0.009</b>	<b>0.009</b>	0.010	0.008	0.009	0.009	0.010	0.008	0.009	0.009	<b>0.036</b>	0.036	0.036
Wood Biomass .....	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	<b>0.021</b>	0.021	0.020	0.022	0.021	0.021	0.020	0.022	0.021	<b>0.084</b>	0.084	0.084
Subtotal .....	<b>0.065</b>	<b>0.074</b>	<b>0.075</b>	<b>0.065</b>	0.069	0.079	0.081	0.069	0.073	0.084	0.086	0.072	<b>0.279</b>	0.298	0.315
<b>Residential Sector</b>															
Geothermal .....	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	<b>0.040</b>	0.040	0.040
Solar (e) .....	<b>0.050</b>	<b>0.076</b>	<b>0.078</b>	<b>0.052</b>	0.057	0.089	0.091	0.064	0.069	0.107	0.110	0.077	<b>0.256</b>	0.301	0.363
Wood Biomass .....	<b>0.130</b>	<b>0.132</b>	<b>0.133</b>	<b>0.132</b>	0.130	0.132	0.133	0.132	0.130	0.132	0.133	0.132	<b>0.528</b>	0.528	0.528
Subtotal .....	<b>0.190</b>	<b>0.218</b>	<b>0.221</b>	<b>0.195</b>	0.197	0.231	0.235	0.206	0.209	0.249	0.253	0.219	<b>0.824</b>	0.868	0.930
<b>Transportation Sector</b>															
Biomass-based Diesel (f) .....	<b>0.058</b>	<b>0.071</b>	<b>0.070</b>	<b>0.066</b>	0.074	0.082	0.072	0.078	0.090	0.099	0.085	0.093	<b>0.265</b>	0.306	0.367
Ethanol (f) .....	<b>0.275</b>	<b>0.293</b>	<b>0.291</b>	<b>0.296</b>	0.279	0.293	0.296	0.290	0.271	0.292	0.295	0.288	<b>1.155</b>	1.158	1.146
Subtotal .....	<b>0.333</b>	<b>0.365</b>	<b>0.361</b>	<b>0.361</b>	0.353	0.375	0.369	0.368	0.361	0.391	0.380	0.381	<b>1.420</b>	1.464	1.514
<b>All Sectors Total</b>															
Biomass-based Diesel (f) .....	<b>0.058</b>	<b>0.071</b>	<b>0.070</b>	<b>0.066</b>	0.074	0.082	0.072	0.078	0.090	0.099	0.085	0.093	<b>0.265</b>	0.306	0.367
Biofuel Losses and Co-products (d) .....	<b>0.194</b>	<b>0.203</b>	<b>0.199</b>	<b>0.203</b>	0.203	0.202	0.201	0.202	0.195	0.200	0.202	0.202	<b>0.800</b>	0.809	0.800
Ethanol (f) .....	<b>0.285</b>	<b>0.305</b>	<b>0.302</b>	<b>0.307</b>	0.289	0.304	0.308	0.301	0.282	0.303	0.306	0.298	<b>1.199</b>	1.202	1.190
Geothermal .....	<b>0.054</b>	<b>0.052</b>	<b>0.054</b>	<b>0.050</b>	0.054	0.052	0.055	0.048	0.049	0.050	0.055	0.048	<b>0.209</b>	0.209	0.201
Hydroelectric Power (a) .....	<b>0.653</b>	<b>0.748</b>	<b>0.557</b>	<b>0.540</b>	0.657	0.779	0.612	0.571	0.650	0.750	0.587	0.564	<b>2.498</b>	2.619	2.551
Solar (b)(e) .....	<b>0.198</b>	<b>0.315</b>	<b>0.324</b>	<b>0.207</b>	0.235	0.381	0.406	0.267	0.302	0.495	0.526	0.339	<b>1.044</b>	1.289	1.663
Waste Biomass (c) .....	<b>0.111</b>	<b>0.105</b>	<b>0.105</b>	<b>0.112</b>	0.103	0.106	0.108	0.111	0.105	0.107	0.109	0.110	<b>0.433</b>	0.428	0.432
Wood Biomass .....	<b>0.578</b>	<b>0.568</b>	<b>0.582</b>	<b>0.569</b>	0.532	0.545	0.563	0.559	0.535	0.540	0.560	0.558	<b>2.296</b>	2.199	2.193
Wind .....	<b>0.683</b>	<b>0.724</b>	<b>0.610</b>	<b>0.745</b>	0.782	0.830	0.672	0.874	0.919	0.935	0.766	0.953	<b>2.762</b>	3.159	3.573
<b>Total Consumption</b> .....	<b>2.809</b>	<b>3.085</b>	<b>2.798</b>	<b>2.793</b>	2.923	3.273	2.987	3.004	3.120	3.470	3.185	3.160	<b>11.486</b>	12.186	12.935

- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Renewable Energy Electric Generating Capacity (megawatts, end of period)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	6,969	6,934	6,832	6,896	6,896	6,830	6,864	6,867	6,867	6,886	6,886	6,886	6,896	6,867	6,886
Waste .....	4,135	4,114	4,102	4,100	4,100	4,034	4,068	4,071	4,071	4,090	4,090	4,090	4,100	4,071	4,090
Wood .....	2,835	2,820	2,730	2,795	2,795	2,795	2,795	2,795	2,795	2,795	2,795	2,795	2,795	2,795	2,795
Conventional Hydroelectric .....	79,569	79,550	79,378	79,386	79,500	79,511	79,639	79,718	79,736	79,747	79,747	79,787	79,386	79,718	79,787
Geothermal .....	2,359	2,410	2,410	2,410	2,410	2,410	2,410	2,410	2,410	2,410	2,410	2,410	2,410	2,410	2,410
Large-Scale Solar (b) .....	32,704	33,190	33,843	36,909	39,022	42,001	43,444	50,917	51,911	58,539	59,916	64,624	36,909	50,917	64,624
Wind .....	96,653	98,128	99,707	103,466	108,081	109,457	112,315	123,906	124,351	125,816	126,274	129,528	103,466	123,906	129,528
<b>Other Sectors (c)</b>															
Biomass .....	6,588	6,537	6,537	6,541	6,565	6,565	6,565	6,565	6,577	6,569	6,569	6,569	6,541	6,565	6,569
Waste .....	846	847	847	847	863	863	863	863	875	874	874	874	847	863	874
Wood .....	5,742	5,690	5,690	5,694	5,702	5,702	5,702	5,702	5,702	5,694	5,694	5,694	5,694	5,702	5,694
Conventional Hydroelectric .....	290	290	290	290	290	290	290	290	290	291	289	289	290	290	289
Large-Scale Solar (b) .....	409	415	426	431	439	441	443	443	443	443	444	444	431	443	444
Small-Scale Solar (d) .....	20,284	21,137	22,103	23,211	24,210	25,276	26,415	27,618	28,890	30,241	31,670	33,184	23,211	27,618	33,184
Residential Sector .....	12,271	12,840	13,526	14,229	14,966	15,761	16,621	17,538	18,516	19,563	20,680	21,873	14,229	17,538	21,873
Commercial Sector .....	6,402	6,609	6,841	7,186	7,397	7,615	7,840	8,072	8,313	8,561	8,818	9,083	7,186	8,072	9,083
Industrial Sector .....	1,611	1,688	1,736	1,796	1,848	1,901	1,954	2,007	2,062	2,117	2,172	2,229	1,796	2,007	2,229
Wind .....	118	118	118	118	127	353	353	353	353	353	353	353	118	353	353
<b>Renewable Electricity Generation (billion kilowatthours)</b>															
<b>Electric Power Sector (a)</b>															
Biomass .....	7.2	7.0	7.6	6.9	5.3	7.0	7.4	7.2	6.3	7.1	7.5	7.3	28.8	27.0	28.2
Waste .....	3.9	3.9	4.0	3.9	3.5	3.9	4.0	4.0	3.7	3.9	4.1	4.0	15.7	15.5	15.7
Wood .....	3.3	3.1	3.6	3.0	1.8	3.1	3.4	3.2	2.6	3.1	3.4	3.3	13.0	11.6	12.5
Conventional Hydroelectric .....	71.2	81.7	60.8	58.7	74.2	85.2	67.2	62.3	72.6	81.7	64.3	61.6	272.4	288.8	280.1
Geothermal .....	4.0	3.9	4.1	3.6	4.1	3.9	4.2	3.4	3.5	3.7	4.1	3.4	15.6	15.5	14.7
Large-Scale Solar (b) .....	13.3	21.8	22.6	13.9	15.9	26.6	29.0	18.5	21.3	36.4	39.4	24.5	71.5	90.0	121.6
Wind .....	74.2	78.6	66.2	80.8	84.9	90.1	72.9	94.9	99.7	101.4	83.2	103.5	299.8	342.9	387.8
<b>Other Sectors (c)</b>															
Biomass .....	7.4	7.3	7.6	7.4	7.5	7.3	7.6	7.4	7.4	7.3	7.6	7.4	29.7	29.7	29.7
Waste .....	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	2.8	2.8	2.8
Wood .....	6.7	6.6	6.9	6.6	6.7	6.6	6.9	6.6	6.7	6.6	6.9	6.6	26.8	26.9	26.8
Conventional Hydroelectric .....	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	1.3	1.3	1.3
Large-Scale Solar (b) .....	0.1	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.7	1.0	1.3
Small-Scale Solar (d) .....	6.9	10.4	10.6	7.1	8.0	12.3	12.6	8.7	9.8	14.8	15.1	10.5	35.0	41.6	50.3
Residential Sector .....	4.0	6.2	6.4	4.3	4.8	7.5	7.7	5.4	6.1	9.4	9.7	6.8	20.9	25.4	32.0
Commercial Sector .....	2.3	3.3	3.3	2.2	2.6	3.8	3.8	2.6	3.0	4.3	4.3	2.9	11.1	12.8	14.4
Industrial Sector .....	0.6	0.9	0.9	0.6	0.7	1.0	1.0	0.7	0.8	1.1	1.1	0.8	3.0	3.4	3.9
Wind .....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	0.4

-- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Macroeconomic</b>															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR) .....	18,927	19,022	19,121	19,220	19,316	19,422	19,528	19,626	19,711	19,775	19,850	19,934	19,073	19,473	19,817
Real Personal Consumption Expend. (billion chained 2012 dollars - SAAR) .....	13,103	13,250	13,353	13,412	13,504	13,591	13,674	13,740	13,805	13,862	13,922	13,987	13,280	13,627	13,894
Real Private Fixed Investment (billion chained 2012 dollars - SAAR) .....	3,349	3,337	3,330	3,331	3,341	3,358	3,392	3,436	3,456	3,468	3,481	3,497	3,337	3,382	3,476
Business Inventory Change (billion chained 2012 dollars - SAAR) .....	113	75	67	12	35	33	36	27	37	37	38	40	67	33	38
Real Government Expenditures (billion chained 2012 dollars - SAAR) .....	3,258	3,297	3,310	3,332	3,341	3,369	3,370	3,375	3,381	3,386	3,389	3,392	3,299	3,364	3,387
Real Exports of Goods & Services (billion chained 2012 dollars - SAAR) .....	2,554	2,517	2,523	2,532	2,543	2,554	2,601	2,644	2,662	2,678	2,698	2,720	2,532	2,585	2,690
Real Imports of Goods & Services (billion chained 2012 dollars - SAAR) .....	3,498	3,498	3,514	3,434	3,495	3,533	3,600	3,656	3,693	3,721	3,743	3,769	3,486	3,571	3,731
Real Disposable Personal Income (billion chained 2012 dollars - SAAR) .....	14,878	14,934	15,043	15,100	15,191	15,299	15,352	15,422	15,517	15,591	15,672	15,745	14,989	15,316	15,631
Non-Farm Employment (millions) .....	150.2	150.6	151.2	151.8	152.3	152.9	153.1	153.3	153.6	153.9	154.0	154.2	150.9	152.9	153.9
Civilian Unemployment Rate (percent) .....	3.9	3.6	3.6	3.5	3.5	3.4	3.4	3.4	3.4	3.4	3.5	3.6	3.7	3.4	3.5
Housing Starts (millions - SAAR) .....	1.21	1.26	1.28	1.45	1.43	1.39	1.37	1.35	1.32	1.30	1.27	1.27	1.30	1.38	1.29
<b>Industrial Production Indices (Index, 2012=100)</b>															
Total Industrial Production .....	109.8	109.2	109.5	109.5	109.2	109.5	109.6	109.7	110.1	110.2	110.5	111.0	109.5	109.5	110.4
Manufacturing .....	106.5	105.7	105.9	105.8	105.8	105.7	106.3	106.4	106.6	106.5	106.8	107.3	106.0	106.1	106.8
Food .....	115.1	115.3	114.6	115.9	116.2	116.5	116.9	117.2	117.5	117.9	118.3	118.9	115.2	116.7	118.1
Paper .....	94.2	91.8	92.6	93.3	92.9	91.7	91.1	90.3	89.8	89.4	89.2	89.3	93.0	91.5	89.4
Petroleum and Coal Products .....	106.3	104.9	106.7	104.8	106.0	105.6	105.6	105.5	105.2	104.9	104.7	104.3	105.6	105.7	104.8
Chemicals .....	101.4	99.9	100.6	100.2	100.5	100.9	101.4	101.8	102.4	102.9	103.5	104.2	100.5	101.2	103.2
Nonmetallic Mineral Products .....	119.7	119.0	119.7	119.1	119.3	118.3	118.0	117.8	117.7	117.7	117.8	118.1	119.4	118.3	117.8
Primary Metals .....	97.9	96.7	96.4	96.4	96.0	94.2	93.2	91.5	90.4	89.3	89.1	89.6	96.9	93.7	89.6
Coal-weighted Manufacturing (a) .....	106.9	105.6	106.1	106.3	106.5	105.9	106.1	106.0	106.1	106.2	106.5	107.2	106.2	106.1	106.5
Distillate-weighted Manufacturing (a) .....	98.5	97.9	98.3	98.3	98.4	97.9	97.8	97.5	97.4	97.2	97.3	97.5	98.3	97.9	97.3
Electricity-weighted Manufacturing (a) .....	106.5	105.3	105.6	105.8	105.8	105.1	105.2	104.9	104.7	104.6	104.8	105.5	105.8	105.2	104.9
Natural Gas-weighted Manufacturing (a) .....	108.7	107.7	108.0	108.2	108.5	108.0	108.2	107.9	108.0	108.0	108.5	109.2	108.2	108.2	108.4
<b>Price Indexes</b>															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00) .....	2.53	2.55	2.56	2.58	2.59	2.60	2.61	2.62	2.64	2.65	2.67	2.68	2.56	2.61	2.66
Producer Price Index: All Commodities (index, 1982=1.00) .....	2.01	2.00	1.99	2.00	1.99	2.00	2.02	2.03	2.04	2.05	2.06	2.06	2.00	2.01	2.05
Producer Price Index: Petroleum (index, 1982=1.00) .....	1.81	2.08	1.96	1.96	1.75	1.40	1.47	1.53	1.52	1.70	1.75	1.76	1.95	1.53	1.68
GDP Implicit Price Deflator (index, 2012=100) .....	111.5	112.2	112.7	113.1	113.5	114.0	114.7	115.4	116.1	116.8	117.4	118.1	112.4	114.4	117.1
<b>Miscellaneous</b>															
Vehicle Miles Traveled (b) (million miles/day) .....	8,298	9,333	9,289	8,888	8,387	9,411	9,361	9,017	8,477	9,472	9,409	9,051	8,955	9,045	9,104
Air Travel Capacity (Available ton-miles/day, thousands) .....	643	685	707	682	640	676	687	666	647	681	690	667	679	667	671
Aircraft Utilization (Revenue ton-miles/day, thousands) .....	380	426	427	406	396	435	443	423	404	439	445	425	410	424	429
Airline Ticket Price Index (index, 1982-1984=100) .....	255.7	278.3	263.8	263.8	253.0	271.2	267.3	275.6	269.8	291.2	286.8	296.1	265.4	266.8	286.0
Raw Steel Production (million short tons per day) .....	0.273	0.271	0.264	0.265	0.274	0.270	0.260	0.259	0.256	0.254	0.246	0.252	0.268	0.266	0.252
<b>Carbon Dioxide (CO2) Emissions (million metric tons)</b>															
Petroleum .....	575	587	597	596	565	580	601	597	575	581	596	592	2,355	2,342	2,344
Natural Gas .....	507	350	384	444	521	383	389	442	506	367	384	440	1,684	1,735	1,697
Coal .....	290	239	307	248	237	199	277	222	262	199	267	222	1,084	935	951
Total Energy (c) .....	1,374	1,178	1,291	1,291	1,326	1,164	1,270	1,264	1,346	1,150	1,250	1,257	5,135	5,024	5,003

- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Real Gross State Product (Billion \$2009)</b>															
New England .....	996	999	1,004	1,010	1,016	1,023	1,026	1,030	1,034	1,036	1,040	1,044	1,002	1,024	1,038
Middle Atlantic .....	2,772	2,782	2,791	2,805	2,820	2,837	2,845	2,854	2,862	2,865	2,872	2,881	2,788	2,839	2,870
E. N. Central .....	2,528	2,535	2,545	2,552	2,571	2,583	2,591	2,601	2,608	2,611	2,618	2,626	2,540	2,586	2,616
W. N. Central .....	1,181	1,187	1,193	1,197	1,203	1,209	1,214	1,219	1,224	1,228	1,233	1,239	1,190	1,211	1,231
S. Atlantic .....	3,353	3,367	3,383	3,402	3,420	3,445	3,468	3,489	3,510	3,523	3,539	3,557	3,376	3,455	3,532
E. S. Central .....	832	835	840	842	847	851	855	859	863	866	869	872	837	853	867
W. S. Central .....	2,347	2,370	2,392	2,406	2,420	2,431	2,437	2,444	2,452	2,468	2,482	2,494	2,379	2,433	2,474
Mountain .....	1,252	1,261	1,269	1,276	1,285	1,294	1,301	1,309	1,315	1,322	1,329	1,335	1,264	1,297	1,325
Pacific .....	3,700	3,719	3,739	3,763	3,770	3,784	3,826	3,856	3,878	3,891	3,905	3,923	3,731	3,809	3,899
<b>Industrial Output, Manufacturing (Index, Year 2012=100)</b>															
New England .....	98.9	97.7	97.6	97.1	96.8	96.7	96.9	96.9	96.9	96.8	97.0	97.4	97.8	96.8	97.0
Middle Atlantic .....	98.8	97.5	97.2	97.0	97.0	96.9	97.1	97.1	97.0	96.9	97.0	97.4	97.6	97.0	97.1
E. N. Central .....	108.7	107.4	107.1	105.9	106.1	105.8	106.4	106.6	106.5	106.3	106.4	107.0	107.3	106.2	106.5
W. N. Central .....	106.1	105.1	105.2	104.8	104.7	104.4	105.2	105.5	105.7	105.8	106.1	106.7	105.3	105.0	106.1
S. Atlantic .....	110.6	109.9	110.0	110.2	110.2	110.2	110.7	110.8	110.8	110.8	111.0	111.5	110.2	110.5	111.0
E. S. Central .....	111.4	110.4	110.8	110.5	110.5	110.4	111.0	111.3	111.4	111.3	111.5	112.0	110.8	110.8	111.5
W. S. Central .....	101.5	100.6	101.2	102.1	102.2	102.0	102.4	102.4	102.5	102.6	102.9	103.4	101.4	102.2	102.8
Mountain .....	116.1	116.3	117.6	117.4	117.6	117.9	118.7	119.1	119.5	119.6	120.0	120.6	116.9	118.3	119.9
Pacific .....	105.9	105.2	105.5	106.2	106.1	106.1	106.7	106.9	107.1	107.1	107.4	108.0	105.7	106.5	107.4
<b>Real Personal Income (Billion \$2009)</b>															
New England .....	904	904	906	910	917	924	926	929	933	937	940	944	906	924	938
Middle Atlantic .....	2,302	2,316	2,320	2,329	2,346	2,361	2,366	2,373	2,382	2,389	2,396	2,403	2,317	2,361	2,392
E. N. Central .....	2,428	2,432	2,447	2,451	2,467	2,482	2,488	2,496	2,507	2,515	2,524	2,533	2,439	2,483	2,519
W. N. Central .....	1,146	1,147	1,163	1,163	1,166	1,174	1,177	1,182	1,190	1,196	1,204	1,210	1,155	1,175	1,200
S. Atlantic .....	3,214	3,232	3,246	3,264	3,291	3,320	3,334	3,352	3,375	3,394	3,414	3,432	3,239	3,324	3,404
E. S. Central .....	888	890	895	899	903	909	912	916	921	924	928	931	893	910	926
W. S. Central .....	1,984	1,992	2,004	2,016	2,031	2,049	2,058	2,069	2,083	2,094	2,105	2,115	1,999	2,052	2,099
Mountain .....	1,168	1,177	1,181	1,187	1,197	1,209	1,215	1,223	1,231	1,239	1,247	1,254	1,178	1,211	1,243
Pacific .....	2,807	2,835	2,848	2,860	2,881	2,907	2,919	2,932	2,947	2,961	2,977	2,991	2,837	2,910	2,969
<b>Households (Thousands)</b>															
New England .....	5,936	5,941	5,957	5,966	5,973	5,979	5,987	5,994	6,001	6,009	6,016	6,023	5,966	5,994	6,023
Middle Atlantic .....	16,243	16,263	16,305	16,328	16,346	16,360	16,377	16,395	16,414	16,432	16,452	16,471	16,328	16,395	16,471
E. N. Central .....	19,087	19,112	19,166	19,197	19,224	19,253	19,284	19,315	19,346	19,374	19,403	19,430	19,197	19,315	19,430
W. N. Central .....	8,688	8,708	8,740	8,760	8,777	8,793	8,811	8,828	8,845	8,863	8,881	8,897	8,760	8,828	8,897
S. Atlantic .....	25,689	25,762	25,877	25,965	26,050	26,130	26,215	26,300	26,385	26,473	26,557	26,640	25,965	26,300	26,640
E. S. Central .....	7,651	7,663	7,689	7,706	7,721	7,735	7,751	7,767	7,782	7,798	7,815	7,830	7,706	7,767	7,830
W. S. Central .....	14,813	14,856	14,923	14,974	15,023	15,069	15,119	15,170	15,220	15,271	15,323	15,373	14,974	15,170	15,373
Mountain .....	9,404	9,448	9,506	9,551	9,594	9,635	9,678	9,719	9,759	9,799	9,836	9,873	9,551	9,719	9,873
Pacific .....	18,903	18,932	18,994	19,034	19,073	19,109	19,152	19,197	19,242	19,286	19,330	19,374	19,034	19,197	19,374
<b>Total Non-farm Employment (Millions)</b>															
New England .....	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.6
Middle Atlantic .....	19.9	20.0	20.0	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.0	20.2	20.2
E. N. Central .....	22.3	22.3	22.3	22.4	22.4	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.3	22.5	22.5
W. N. Central .....	10.8	10.8	10.8	10.8	10.9	10.9	10.9	10.9	10.9	10.9	10.9	11.0	10.8	10.9	10.9
S. Atlantic .....	29.0	29.0	29.2	29.3	29.4	29.6	29.6	29.7	29.8	29.9	30.0	30.0	29.1	29.6	29.9
E. S. Central .....	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.4	8.4	8.5	8.5	8.5	8.3	8.4	8.5
W. S. Central .....	17.6	17.7	17.8	17.9	18.0	18.0	18.1	18.1	18.2	18.2	18.3	18.3	17.7	18.1	18.2
Mountain .....	11.0	11.0	11.1	11.2	11.2	11.3	11.3	11.4	11.4	11.5	11.5	11.5	11.1	11.3	11.5
Pacific .....	23.7	23.8	23.9	24.0	24.1	24.2	24.2	24.3	24.3	24.4	24.4	24.4	23.9	24.2	24.4

- = 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 - March 2020

	2019				2020				2021				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2019	2020	2021
<b>Heating Degree Days</b>															
New England .....	3,224	896	135	2,280	2,891	862	127	2,159	3,180	893	127	2,159	<b>6,535</b>	6,039	6,358
Middle Atlantic .....	2,983	633	68	2,062	2,636	678	76	1,984	2,947	721	76	1,983	<b>5,746</b>	5,373	5,727
E. N. Central .....	3,327	764	66	2,280	2,927	724	122	2,238	3,154	740	122	2,238	<b>6,436</b>	6,010	6,254
W. N. Central .....	3,646	772	107	2,548	3,182	712	161	2,424	3,236	707	162	2,425	<b>7,073</b>	6,480	6,529
South Atlantic .....	1,335	128	2	918	1,215	184	12	956	1,421	198	12	954	<b>2,382</b>	2,367	2,585
E. S. Central .....	1,712	193	1	1,275	1,633	240	20	1,295	1,818	248	20	1,295	<b>3,182</b>	3,188	3,381
W. S. Central .....	1,207	90	0	852	1,064	76	4	790	1,144	82	4	789	<b>2,150</b>	1,934	2,019
Mountain .....	2,429	787	127	1,968	2,245	662	143	1,809	2,184	684	143	1,808	<b>5,311</b>	4,860	4,818
Pacific .....	1,691	578	96	1,184	1,451	562	85	1,179	1,496	576	85	1,180	<b>3,550</b>	3,276	3,337
U.S. Average .....	2,210	481	57	1,559	1,962	475	72	1,516	2,112	491	72	1,514	<b>4,307</b>	4,025	4,189
<b>Heating Degree Days, Prior 10-year Average</b>															
New England .....	3,166	820	111	2,122	3,152	822	105	2,128	3,149	845	108	2,116	<b>6,218</b>	6,207	6,217
Middle Atlantic .....	2,956	650	76	1,941	2,948	644	69	1,944	2,929	661	71	1,926	<b>5,623</b>	5,605	5,587
E. N. Central .....	3,196	697	112	2,198	3,198	698	102	2,198	3,171	719	104	2,184	<b>6,203</b>	6,196	6,178
W. N. Central .....	3,255	702	140	2,380	3,287	702	131	2,379	3,261	719	132	2,378	<b>6,477</b>	6,500	6,491
South Atlantic .....	1,480	176	11	964	1,459	169	10	951	1,404	174	10	922	<b>2,631</b>	2,589	2,510
E. S. Central .....	1,861	222	17	1,292	1,850	214	15	1,278	1,787	222	16	1,256	<b>3,392</b>	3,357	3,280
W. S. Central .....	1,183	85	4	808	1,199	83	3	794	1,149	83	3	792	<b>2,079</b>	2,079	2,027
Mountain .....	2,164	714	139	1,856	2,192	718	135	1,844	2,185	700	135	1,847	<b>4,873</b>	4,890	4,868
Pacific .....	1,444	582	83	1,175	1,456	580	85	1,162	1,454	556	83	1,157	<b>3,283</b>	3,284	3,249
U.S. Average .....	2,151	475	68	1,518	2,149	472	64	1,509	2,117	475	65	1,494	<b>4,212</b>	4,194	4,151
<b>Cooling Degree Days</b>															
New England .....	0	67	467	0	0	85	418	1	0	83	417	1	<b>534</b>	504	502
Middle Atlantic .....	0	144	629	8	0	156	549	5	0	152	549	5	<b>781</b>	710	706
E. N. Central .....	0	175	648	6	0	215	532	7	0	213	532	7	<b>829</b>	754	752
W. N. Central .....	0	222	729	2	3	258	657	10	3	260	656	10	<b>954</b>	927	929
South Atlantic .....	153	757	1,301	308	154	666	1,173	236	119	651	1,174	236	<b>2,519</b>	2,228	2,180
E. S. Central .....	29	548	1,212	86	32	517	1,045	67	27	513	1,044	67	<b>1,874</b>	1,661	1,652
W. S. Central .....	73	821	1,697	170	104	897	1,504	201	90	874	1,504	201	<b>2,760</b>	2,706	2,669
Mountain .....	10	342	985	59	14	439	941	79	18	433	942	79	<b>1,397</b>	1,472	1,472
Pacific .....	21	166	589	67	28	171	592	59	27	169	591	58	<b>843</b>	848	846
U.S. Average .....	46	399	953	105	52	408	858	94	43	401	859	95	<b>1,502</b>	1,411	1,398
<b>Cooling Degree Days, Prior 10-year Average</b>															
New England .....	0	79	455	1	0	83	470	1	0	79	461	1	<b>536</b>	554	541
Middle Atlantic .....	0	165	589	6	0	170	609	6	0	163	596	6	<b>760</b>	785	765
E. N. Central .....	3	242	548	7	3	240	578	8	3	234	564	7	<b>799</b>	829	808
W. N. Central .....	7	298	669	11	7	296	697	11	7	291	686	11	<b>985</b>	1,011	994
South Atlantic .....	120	684	1,180	239	127	696	1,202	247	139	685	1,190	254	<b>2,224</b>	2,273	2,268
E. S. Central .....	36	555	1,049	67	36	557	1,081	72	38	541	1,062	73	<b>1,706</b>	1,746	1,714
W. S. Central .....	103	897	1,552	205	100	892	1,576	207	107	886	1,568	209	<b>2,758</b>	2,775	2,770
Mountain .....	25	438	932	81	24	433	939	81	24	442	940	82	<b>1,476</b>	1,476	1,488
Pacific .....	31	185	631	76	31	185	624	78	31	190	635	79	<b>923</b>	918	935
U.S. Average .....	46	417	873	97	47	420	892	100	50	416	886	102	<b>1,433</b>	1,459	1,454

- = 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](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>).