

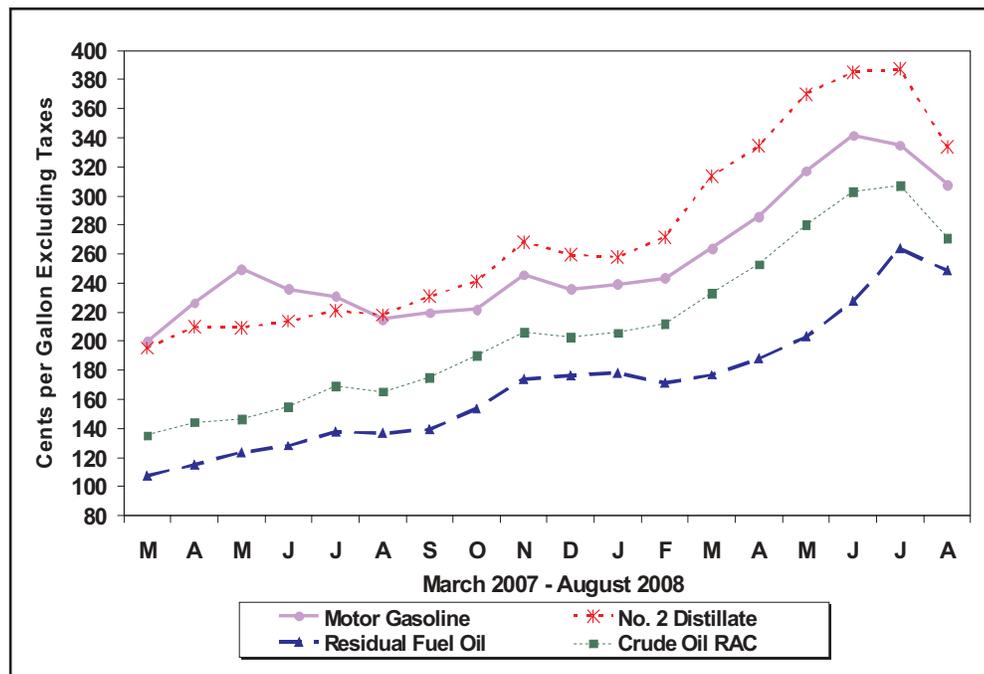
# Highlights

International crude oil prices fell in August, continuing the steep decline that began in mid-July. While episodes of political tension and inclement weather bolstered prices periodically, growing worries about decelerating economies and slackening demand for oil played significant roles in fostering the decrease in August. At the start of the month, prices were briefly underpinned by supply disruptions in Nigeria stemming from militant attacks on two pipelines and by continuing international tension surrounding Iran's nuclear fuels program. However, prices moved firmly downward during the following weeks. During that time, circumstances that may have otherwise lent support to prices appeared to have negligible effects. Tropical Storm Edouard passed through the Gulf of Mexico, making landfall just south of Port Arthur, Texas on August 5, but did little damage to oil industry infrastructure in the region. On August 6, an explosion on a portion of the Baku-Tblisi-Ceyhan (BTC) pipeline in Turkey, for which the Kurdistan Workers Party (PKK) claimed responsibility, caused a suspension of crude oil shipments on the line through August 25, but had little effect on world crude oil prices. The conflict between Russia and Georgia also failed to outweigh ongoing news about the widening scope of economic troubles. Further, news that China's crude oil imports fell 7 percent in July also weighed on prices. China's demand for oil in recent years has played a role in the tightening global oil demand and supply balance and the accompanying rise in price levels. Prices did find support in the latter part of August as political tensions between Russia and the United States heated up over plans to place munitions in

Poland as part of a U.S. missile defense system. They also found some support from Hurricane Gustav moving into the Gulf of Mexico and from talk of the possibility of OPEC cutting production levels to stem the decline in prices during its upcoming meeting in September. Despite that, prices for all key streams showed significant declines at the end of August from the record-setting highs seen in July.

In U.S. markets, crude oil and refined product prices continued to tumble in August. The combination of record high prices and growing economic uncertainty has had an appreciable effect on demand for oil products. At the start of the month, Tropical Storm Edouard underpinned prices modestly. Operations at several refineries located along the Gulf Coast were curtailed briefly, as was shipping activity at several ports in the region. Despite those events, oil product prices continued on a declining

**Figure HL1. Crude Oil and Petroleum Product Wholesale Prices**



Sources: Energy Information Administration. Crude oil refiner acquisition cost: Form EIA-14, "Refiners' Monthly Cost Report"; petroleum product prices: Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

**Table HL1. U.S. Refiner Prices and Volumes of Petroleum Products**

(Prices: Cents per Gallon Excluding Taxes, Volumes: Million Gallons per Day)

Products	Sales to End Users						Sales for Resale					
	August 2008		July 2008		August 2007		August 2008		July 2008		August 2007	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b> .....	327.8	56.0	356.7	55.1	232.0	60.2	307.8	311.6	334.8	303.0	215.2	330.2
<b>Conventional</b> .....	323.7	34.9	351.1	34.1	230.3	36.7	306.6	219.7	331.6	215.1	214.6	237.6
Regular .....	321.4	30.8	349.1	30.3	228.1	31.7	305.0	195.8	330.3	190.9	212.3	207.6
Midgrade .....	335.8	2.1	361.8	2.1	239.5	2.7	309.6	9.9	331.0	10.2	226.1	11.6
Premium .....	346.9	1.9	373.5	1.7	249.4	2.4	325.7	14.1	349.7	14.0	233.2	18.4
<b>Reformulated</b> .....	334.6	21.1	365.7	21.0	234.5	23.4	311.0	91.9	342.7	87.9	216.5	92.6
Regular .....	330.3	16.9	361.8	16.9	230.1	18.1	308.4	79.4	340.1	76.0	213.5	77.3
Midgrade .....	345.8	1.9	375.9	1.9	243.2	2.5	319.6	2.1	351.9	2.1	223.3	2.9
Premium .....	356.7	2.3	386.8	2.2	255.1	2.9	328.9	10.4	361.0	9.8	233.8	12.4
<b>Aviation Gasoline</b> .....	379.2	0.2	395.5	0.2	282.3	0.1	373.7	0.4	394.6	0.5	282.8	0.6
<b>Kerosene-Type Jet Fuel</b> .....	342.6	43.7	400.9	43.5	216.0	42.5	339.3	15.4	397.8	18.9	215.1	15.2
<b>Propane (Consumer Grade)</b> .....	185.7	2.7	205.5	2.3	138.9	2.2	167.0	24.6	183.3	25.1	116.7	36.0
<b>Kerosene</b> .....	404.8	0.0	438.5	0.0	246.7	NA	345.6	0.6	398.0	0.9	222.2	0.7
<b>No. 1 Distillate</b> .....	382.3	0.0	419.0	0.0	232.2	0.1	343.0	0.4	392.2	0.4	237.3	0.5
<b>No. 2 Distillate</b> .....	357.4	19.5	401.9	20.7	227.9	24.4	333.6	152.1	387.1	152.9	218.1	153.7
No. 2 Fuel Oil .....	339.9	0.6	393.9	0.7	215.0	0.5	328.7	9.3	380.2	10.3	202.1	10.5
No. 2 Diesel Fuel .....	357.9	18.9	402.2	20.0	228.2	23.9	333.9	142.9	387.6	142.6	219.3	143.2
Ultra Low Sulfur .....	357.6	12.0	403.1	11.6	229.7	13.2	334.6	121.0	388.0	122.3	220.8	114.0
Low Sulfur .....	357.7	5.2	403.9	6.8	227.5	8.2	330.2	20.3	385.4	19.2	213.2	22.4
High Sulfur .....	360.8	1.7	389.3	1.6	222.2	2.5	330.2	1.6	387.0	1.1	213.2	6.7
<b>No. 4 Fuel<sup>a</sup></b> .....	W	W	W	W	189.7	0.2	W	W	W	W	151.8	0.3
<b>Residual Fuel Oil</b> .....	269.4	7.4	272.4	7.6	146.2	9.7	248.6	8.4	263.6	10.1	136.7	9.5
Sulfur Content not > 1 % .....	NA	2.3	294.5	1.8	158.4	2.6	254.6	3.4	283.3	3.2	143.6	3.6
Sulfur Content > 1 % .....	255.4	5.1	265.7	5.8	141.9	7.2	244.5	5.0	254.2	6.8	132.6	5.9

NA = Not available.

W = Withheld to avoid disclosure of individual company data.

<sup>a</sup> Includes No. 4 fuel oil and No. 4 diesel fuel.

Note: Beginning January 2007, oxygenated gasoline is included in conventional gasoline.

Note: In January 2007, ultra low-sulfur diesel fuel was added.

Notes: Values shown for the current month are preliminary. Values shown for previous months are revised. Data are final upon publication in the *Petroleum Marketing Annual*. Total volumes may not equal the sum of the components due to rounding.

Source: Energy Information Administration Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report."

path. Further, while weekly inventory data showed a substantial decrease in gasoline stocks, prices showed little deviation from the overall downward trend seen during the preceding weeks. Notably, demand for gasoline remained flat in July compared with June, whereas a more typical trend is for demand to rise in July. Compared with year-ago data, demand for gasoline was 5.9 percent below the rate seen in July 2007. Additionally, demand for distillates was 8.8 percent lower in July 2008 compared with the previous year's level. Weekly supply data for August show demand for these products remained below year-ago levels. Many market watchers consider high prices to be the principal reason behind the demand destruction. Although prices rebounded moderately during the latter half of August, thanks to

heightened tensions between the U.S. and Russia and the threat of another storm in the Gulf of Mexico, Hurricane Gustav, a look at spot market prices highlights some of the changes in the U.S. petroleum products marketplace in August. The average spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma fell \$16.70 (12.5 percent) per barrel to \$116.67 per barrel in August 2008. That price, however, remains \$44.31 (61.2 percent) above the August 2007 price of \$72.36 per barrel. The spot price for regular gasoline at New York Harbor averaged \$2.897 per gallon in August 2008, compared with \$3.148 per gallon last month, reflecting a 25.1-cents (8.0 percent) decline.

## Petroleum Products

### *Motor Gasoline*

Following July's substantial decrease, the daily spot price for regular gasoline at New York Harbor moved along an unsettled path during August. After opening the month at \$2.991 per gallon, the price immediately marked the month's high of \$3.011 per gallon on August 1. While a number of issues including inclement weather, refinery problems, and inventory draws underpinned the price, ongoing worries about the economy and gasoline demand quickly offset the effects of those issues. Driven by expectations of continued weak demand for gasoline, the price dropped to the month's low of \$2.814 per gallon on August 12, its lowest point since the beginning of May. Affected by geopolitical issues and supply and demand concerns, the price continued on its inconstant course through the end of the month. Closing August at \$2.900 per gallon, the price was 9.1 cents below its starting point for the month.

- Monthly average prices for finished gasoline experienced significant declines in August. The average price for retail sales of motor gasoline by refiners slid 28.9 cents to \$3.278 per gallon, while the average wholesale price fell 27.0 cents to \$3.078 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets decreased 28.8 cents to \$3.276 per gallon. The average wholesale price for gasoline fell 26.9 cents to \$3.079 per gallon. The average dealer tank wagon (DTW) price dropped 27.6 cents to \$3.162 per gallon, while the average rack price fell 25.5 cents to \$3.067 per gallon. The average bulk sale price tumbled 29.5 cents to \$2.980 per gallon. Reformulated gasoline prices were 8.0 cents higher than conventional gasoline prices at retail, and 1.9 cents more at wholesale.
- Refiner sales of motor gasoline rose modestly during August. Total sales increased 9.5 million gallons per day (2.7 percent) to an average of 367.6 million gallons per day. Retail sales rose 900,000 gallons per day (1.6 percent), while wholesales climbed 8.6 million gallons per day (2.8 percent.) DTW sales accounted for 12.3 percent of wholesales, while rack and bulk sales made up 72.0 percent and 15.7 percent, respectively.

Compared with the August 2007 average, the current price remains 89.3 cents (44.6 percent) higher than the year-ago level of \$2.004 per gallon. Finally, the August 2008 spot price for No. 2 fuel oil at New York Harbor averaged \$3.169 per gallon, reflecting a decline of 59.0 cents (15.7 percent) from last month's average of \$3.759 per gallon. Compared with the August 2007 price of \$1.984 per gallon, the August 2008 price is \$1.185 (59.7 percent) higher.

Additional August market and sales activity for crude oil and the principal petroleum products are summarized in the following sections.

### Crude Oil

The daily spot price for WTI crude oil at Cushing, Oklahoma continued its decline during August. After opening at \$124.17 per barrel, the price moved immediately to the month's high of \$125.03 per barrel on August 1 due to political tensions in the Middle East and news of pipeline explosions in Nigeria. Nevertheless, the price reverted to a downward course during the coming weeks as high petroleum products prices continued to dampen demand. Despite international conflicts, the price reached the month's low of \$112.92 on August 18. Although it rebounded shortly after that due to Russian grievances over U.S. intentions to place missiles in Poland, the price subsided quickly. Closing the month at \$115.55 per barrel, the price was \$8.62 below its opening level for the month.

- August monthly average crude oil prices show considerable decreases from July levels. The average domestic crude oil first purchase price fell \$15.25 (11.9 percent), to \$112.83 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil declined \$14.67 (11.9 percent), to \$108.39 per barrel. The average landed cost of foreign crude oil dropped \$13.38 (10.7 percent), to \$112.02 per barrel.
- The average refiner acquisition cost for domestic crude oil fell \$13.15 (10.0 percent), to \$118.32 per barrel. The average cost of imported crude oil declined \$16.56 (13.0 percent), to \$111.21 per barrel. The composite refiner acquisition cost for crude oil dropped \$15.32 (11.9 percent), to \$113.71 per barrel.

## **No. 2 Distillate**

Overall, the daily spot price for No. 2 heating oil at New York Harbor registered an appreciable decline during August. Opening at its highest point for the month, \$3.435 per gallon, the price continued on a steeply downward course until it reached the month's low of \$3.043 per gallon on August 12. Falling crude oil prices fueled the decrease along with declining demand and the accompanying growth in stocks. The price moved along a more inconstant path during the latter half of the month thanks to political issues and worries about Hurricane Gustav's impact on the Gulf Coast region. Closing August at \$3.150 per gallon, the price was 28.5 cents below the opening level for the month.

- Prices for No. 2 distillates dropped sharply in August. The national average residential sales price fell 42.6 cents to \$3.872 per gallon, while the average wholesale price declined 52.4 cents to \$3.355 per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets decreased 39.9 cents, while the average wholesale price declined 52.5 cents. Ultra low-sulfur diesel fuel prices were 1.1 cents higher than low-sulfur diesel fuel at retail, and 2.7 cents more at wholesale.
- Refiner sales of No. 2 distillates declined in August. Total sales fell 1.9 million gallons per day (1.1 percent), to 171.7 million gallons per day. Sales of No. 2 fuel oil decreased 1.1 million gallons per day (9.9 percent), while sales of No. 2 diesel fuel fell 800,000 gallons per day (0.5 percent). Ultra low-sulfur diesel fuel made up 82.2 percent of all refiner diesel fuel sales, while total diesel fuel sales accounted for 94.2 percent of all refiner No. 2 distillate sales.

## **Residual Fuel Oil**

- Residual fuel oil prices were also on the decline during August. Refiner prices for low-sulfur residual fuel oil

fell 28.7 cents to \$2.546 per gallon at wholesale. Refiner prices for high-sulfur residual fuel oil decreased 10.3 cents to \$2.554 per gallon at retail, and 9.7 cents to \$2.445 per gallon at wholesale. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil fell 26.5 cents to \$2.458 per gallon at wholesale. Prices for high-sulfur residual fuel oil declined 15.0 cents to \$2.509 per gallon at retail, and 11.0 cents to \$2.405 per gallon at wholesale.

- Overall, refiner sales of residual fuel oil decreased in August. Total sales dropped 1.9 million gallons (10.7 percent) to 15.8 million gallons per day. Low-sulfur residual fuel oil sales rose 700,000 gallons (14.0 percent), while high-sulfur residual fuel oil sales fell 2.5 million gallons (19.8 percent).

## **Other Products**

- Prices for the remaining surveyed products dropped in August, precipitously so in some cases. The refiner retail sales price for propane fell 19.8 cents per gallon, while the wholesale price declined 16.3 cents per gallon. Including data from a sample of propane marketers, the average residential price fell 3.5 cents per gallon, while the average retail price declined 9.1 cents per gallon. The average wholesale price for propane dropped 14.9 cents per gallon. Prices for kerosene-type jet fuel fell significantly at both the retail and wholesale levels, while prices for aviation gasoline, kerosene, and No. 1 distillate also showed appreciable declines at both levels.
- August refiner sales of the products included in this section declined in many instances. Sales of propane, kerosene-type jet fuel, and aviation gasoline increased at retail but fell at the wholesale level. Sales of kerosene and No. 1 distillate decreased at both the retail and wholesale levels.