

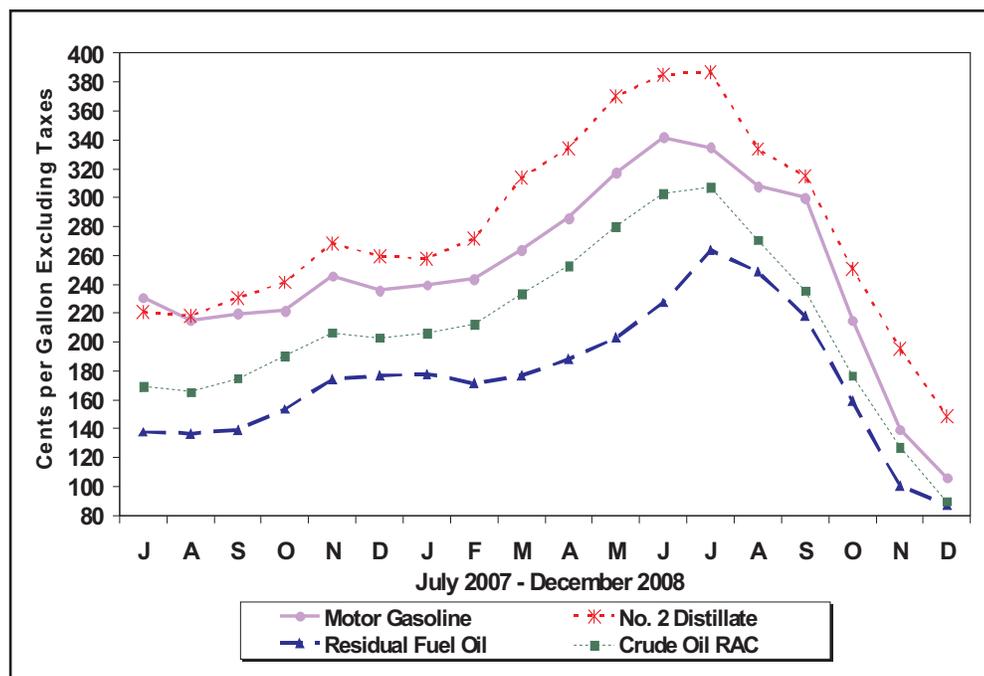
# Highlights

International crude oil prices fell again in December as economic troubles deepened throughout world markets. Enervated demand for crude oil and refined petroleum products along with the subsequent growth in stocks has played a central role in the significant drop in prices during recent months, and continued to do so during December. Along with those factors, other data indicative of economic health also affected prices and helped set the tone for crude oil prices during the following weeks. Independent reports released at the start of the month presented both evidence of further contraction in U.S. manufacturing activity during November and that the U.S. economy has been in recession since December 2007. Talk of additional production cuts from the Organization of Petroleum Exporting Countries (OPEC) to stem the decline in prices also moved through the market before the group's upcoming meeting in Oran, Algeria. OPEC instituted a 1.5 million barrels-per-day production cut on November 1, but that reduction was viewed as not efficacious in the current market atmosphere. A modicum of support for prices came from a 12-day strike by workers beginning on December 4 at the Fos-Lavera port, a major oil hub in France. The action led to a reduction in operations at several refineries in the region. Prices were also underpinned at mid-month by reports that Saudi Arabia was telling customers that it would significantly reduce oil shipments in January. Nevertheless, prices resumed their downward trend during the second half of the month. The decision by OPEC during its December 17 meeting to cut production by 2.2 million barrels per day—the largest output cut the group has ever made—as of

January 1, was mostly shrugged off by markets. While the move was seen as not enough to do much in immediate terms in light of growing expectations of more demand contraction, some market watchers expected the cuts could help underpin prices for key streams sometime during the first quarter of the new year as the new production rates actually affect exports. Prices closed 2008 on a very modest upswing, due to a combination of typical year-end market factors and geopolitical concerns.

In the United States, adverse economic conditions, soft demand, and growing inventories in many regional markets led to lower prices for crude oil and refined products during December. Over the past several months, the contracting economy has directly affected demand for petroleum products. Because of robust demand and certain production capacity constraints, oil product prices spiraled upwards;

**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					
	December 2008		November 2008		December 2007		December 2008		November 2008		December 2007	
	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume	Price	Volume
<b>Motor Gasoline</b> .....	121.8	53.8	161.3	54.0	255.2	54.7	106.1	303.8	139.3	295.5	235.8	321.6
<b>Conventional</b> .....	119.7	33.7	155.5	34.4	251.7	32.9	103.9	211.1	135.9	204.0	233.1	231.1
Regular .....	117.5	29.7	153.1	30.5	249.5	28.6	102.3	186.5	134.5	180.7	231.7	203.9
Midgrade .....	129.6	2.1	167.4	2.0	260.9	2.4	108.8	9.6	137.6	9.3	235.0	11.1
Premium .....	142.1	2.0	180.3	2.0	272.8	1.9	120.2	15.0	152.7	14.0	249.3	16.0
<b>Reformulated</b> .....	125.2	20.0	171.6	19.6	260.5	21.7	111.2	92.8	146.8	91.5	242.6	90.5
Regular .....	120.6	15.5	166.7	15.3	256.0	16.9	108.4	78.6	143.7	78.1	239.8	76.3
Midgrade .....	134.3	1.8	183.1	1.8	270.1	2.3	118.5	2.1	157.2	2.0	250.2	2.6
Premium .....	145.0	2.8	193.7	2.5	282.2	2.5	128.2	12.0	166.0	11.4	259.3	11.6
<b>Aviation Gasoline</b> .....	181.4	0.1	223.0	0.1	297.5	0.1	179.8	0.2	214.0	0.3	292.7	0.3
<b>Kerosene-Type Jet Fuel</b> .....	151.8	37.5	198.8	37.4	268.5	37.1	147.0	15.6	197.4	15.6	265.5	18.9
<b>Propane (Consumer Grade)</b> .....	164.4	3.0	165.2	2.3	NA	3.9	91.8	45.5	100.5	36.4	146.1	54.7
<b>Kerosene</b> .....	277.6	0.1	308.8	0.1	330.3	0.1	175.5	1.5	234.0	1.1	282.5	2.1
<b>No. 1 Distillate</b> .....	200.2	0.2	245.9	0.1	279.9	0.2	176.6	2.6	223.9	1.7	292.9	1.7
<b>No. 2 Distillate</b> .....	170.8	19.0	214.7	19.3	270.1	21.2	148.5	159.7	195.5	144.5	259.4	157.0
No. 2 Fuel Oil .....	192.9	1.5	229.3	1.0	277.0	1.1	157.9	21.4	194.7	13.8	257.0	25.8
No. 2 Diesel Fuel .....	168.9	17.5	213.9	18.3	269.7	20.1	147.0	138.4	195.5	130.7	259.9	131.2
Ultra Low Sulfur .....	170.9	12.2	215.3	12.5	270.8	11.7	147.6	118.9	196.1	111.0	260.2	107.5
Low Sulfur .....	166.0	4.1	210.6	4.4	269.5	7.1	142.5	17.3	192.1	17.0	259.1	19.5
High Sulfur .....	157.7	1.2	212.4	1.4	261.6	1.4	149.1	2.2	193.8	2.7	256.2	4.2
<b>No. 4 Fuel<sup>a</sup></b> .....	W	W	W	W	W	W	W	W	W	W	205.4	0.3
<b>Residual Fuel Oil</b> .....	103.7	9.9	122.5	8.1	184.2	9.1	87.6	9.3	100.4	8.7	176.5	8.7
Sulfur Content not > 1 % .....	128.5	3.9	165.4	2.3	194.8	2.7	100.3	4.0	103.6	4.5	194.8	2.5
Sulfur Content > 1 % .....	87.6	6.0	105.5	5.8	179.7	6.3	78.0	5.3	97.1	4.2	169.0	6.2

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."

when demand faltered due to record high prices and more recently to broader economic troubles, petroleum product prices, particularly for gasoline, dropped precipitously. Recent forecasts from various sources predict demand for crude oil will continue to decline in major markets including the United States during the first half of 2009, in contrast with predictions from earlier in the year. The decline in prices and demand for refined products have directly affected crude oil prices and have contributed to discretionary production runs cuts at some refineries. Notably, while EIA estimates that the monthly average refiner acquisition cost for domestic crude oil will be lower again in January 2009 (thanks in part to brimming stocks at Cushing, Oklahoma, the delivery point for the benchmark, West Texas Intermediate crude oil stream), it estimates the refiner

acquisition cost for imported crude oil will increase next month. Additionally, EIA estimates that the average price for regular gasoline sold through retail outlets will increase in all regional markets in January. A review of December monthly average spot market prices reflects the significant changes taking place in the oil products marketplace during 2008. The spot price for West Texas Intermediate (WTI) crude oil at Cushing, Oklahoma averaged \$41.12 per barrel in December compared with \$92.97 per barrel in January of this year, reflecting a decline of \$51.85 (55.8 percent) over the course of the year. The December price differs by \$16.19 (28.2 percent) from the November price of \$57.31 per barrel. The monthly average spot price for regular gasoline at New York Harbor was \$2.334 per gallon at the start of

## Petroleum Products

### *Motor Gasoline*

Spurred by lower demand and robust inventories, the daily spot price for regular gasoline at New York Harbor continued to fall during December. Opening at the month's highest level, \$1.218 per gallon, the price quickly dropped, falling below one dollar per gallon for the first time since February 2004. Although the price was lifted briefly by crude oil prices at mid-month, it continued to drop, reaching its low of 78.8 cents per gallon on December 24. Regaining some ground during the final days of the month, the price closed December at 89.1 cents per gallon, and 32.7 cents lower than its opening level.

- While not experiencing the very large declines seen in November, monthly average prices for finished gasoline still registered appreciable decreases in December. The average price for retail sales of motor gasoline by refiners fell 39.5 cents to \$1.218 per gallon, while the average wholesale price decreased 33.2 cents to \$1.061 per gallon. Including data reported by a sample of motor gasoline marketers, the national average price at company-operated retail outlets dropped 39.0 cents to \$1.221 per gallon. The average wholesale price for gasoline fell 32.8 cents to \$1.080 per gallon. The average dealer tank wagon (DTW) price declined 35.7 cents to \$1.143 per gallon, while the average rack price decreased 30.8 cents to \$1.062 per gallon. The average bulk sale price fell 35.5 cents to \$1.028 per gallon. Reformulated gasoline prices were 5.7 cents higher than conventional gasoline prices at retail, and 7.3 cents more at wholesale.
- December refiner sales of motor gasoline increased overall from November levels. Total sales rose 8.1 million gallons per day (2.3 percent) to an average of 357.6 million gallons per day. Retail sales fell 200,000 gallons per day (0.4 percent), while wholesales increased 8.3 million gallons per day (2.8 percent.) DTW sales accounted for 12.8 percent of wholesales, while rack and bulk sales made up 73.2 percent and 14.0 percent, respectively.

the year, in contrast to December's average of 95.6 cents per gallon, reflecting a decrease of \$1.378 (59.0 percent) during 2008. Last month, the average price was \$1.283 per gallon, a difference of 32.7 cents (25.5 percent) from December's level. The January 2008 average price for No. 2 fuel oil at New York Harbor was \$2.558 per gallon, \$1.156 (45.2 percent) higher than December's average of \$1.402 per gallon. The December price also declined 44.2 cents (24.0 percent) from the November average of \$184.4 per gallon.

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

### Crude Oil

At Cushing, Oklahoma, the daily spot price for West Texas Intermediate (WTI) crude continued its downward journey during December. After opening at \$55.21 per barrel, its highest point for the month, the price declined steadily during the following days on pessimistic economic news and robust inventories. Despite a brief increase at mid-month due to reports of Saudi Arabia cutting deliveries, the price continued to drop in response to fundamental market factors, hitting the month's low of \$30.28 per barrel on December 23. Climbing again during the final days of the month, thanks in part to year-end book squaring, the price closed December at \$44.60 per barrel, \$10.61 below its opening level for the month.

- Monthly average crude oil prices decreased significantly again in December. The average domestic crude oil first purchase price declined \$16.92 (31.5 percent), to \$36.75 per barrel.
- The average free-on-board (f.o.b.) cost of imported crude oil dropped \$10.98 (24.4 percent), to \$33.95 per barrel. The average landed cost of foreign crude oil fell \$11.00 (23.2 percent), to \$36.42 per barrel.
- The average refiner acquisition cost for domestic crude oil plunged \$20.23 (32.8 percent), to \$41.42 per barrel. The average cost of imported crude oil fell \$13.51 (27.5 percent), to \$35.59 per barrel. The composite refiner acquisition cost for crude oil decreased \$15.66 (29.4 percent), to \$37.67 per barrel.

## No. 2 Distillate

While the decline was less pronounced than those seen in other prices in the complex, the daily spot price for No. 2 heating oil at New York Harbor continued to fall during December. After opening at its highest level for the month, \$1.693 per gallon, the price proceeded to decrease firmly during the first half of the month, lacking much support from temperatures in the Northeast, the country's largest heating oil consuming region. Robust inventories also pressured the price downward during the month, with the price reaching its low of \$1.213 per gallon on December 24 following a report of an increase in stock levels. Closing the month at \$1.314 per gallon, the price was 37.9 cents lower than its opening level for December.

- Monthly average prices for No. 2 distillates fell again in December. The national average residential sales price decreased 33.0 cents to \$2.450 per gallon, while the average wholesale price declined 45.8 cents to \$1.528 per gallon. The average price for No. 2 diesel fuel at company-operated retail outlets dropped 41.5 cents, while the average wholesale price fell 47.9 cents. Ultra low-sulfur diesel fuel prices were 1.0 cent lower than low-sulfur diesel fuel prices at retail, but 2.3 cents higher at wholesale.
- Refiner sales of No. 2 distillates rose in December. Total sales increased 15.0 million gallons per day (9.2 percent), to 178.8 million gallons per day. Sales of No. 2 fuel oil climbed 8.1 million gallons per day (54.7 percent), while sales of No. 2 diesel fuel rose 6.9 million gallons per day (4.6 percent). Ultra low-sulfur diesel fuel made up 84.1 percent of all refiner diesel fuel sales, while total diesel fuel sales accounted for 87.2 percent of all refiner No. 2 distillate sales.

### *Residual Fuel Oil*

- December monthly average residual fuel oil prices decreased from November levels. Refiner prices for

low-sulfur residual fuel oil declined 36.9 cents to \$1.285 per gallon at retail, and 3.3 cents to \$1.003 per gallon at wholesale. Refiner prices for high-sulfur residual fuel oil fell 17.9 cents to 87.6 cents per gallon at retail, and 19.1 cents to 78.0 cents per gallon at wholesale. Including data reported by a sample of residual fuel oil marketers, average prices for low-sulfur residual fuel oil dropped 26.2 cents to \$1.298 per gallon at retail, and 10.0 cents to 99.4 cents per gallon at wholesale. Prices for high-sulfur residual fuel oil decreased 14.7 cents to 89.5 cents per gallon at retail, and 23.1 cents to 76.8 cents per gallon at wholesale.

- Sales of residual fuel oil by refiners rose in December. Total sales increased 2.4 million gallons (14.3 percent) to 19.2 million gallons per day. Low-sulfur residual fuel oil sales climbed 1.1 million gallons (16.2 percent), while high-sulfur residual fuel oil sales rose 1.3 million gallons (13.0 percent).

### *Other Products*

- Prices for the remaining surveyed products fell in December. The refiner retail sales price for propane declined 0.8 cent per gallon, while the wholesale price fell 8.7 cents per gallon. Including data from a sample of propane marketers, the average residential price decreased 9.1 cents per gallon, while the average retail price dropped 4.0 cents per gallon. The average wholesale price for propane fell 8.9 cents per gallon. Prices for aviation gasoline, kerosene, kerosene-type jet fuel, and No. 1 distillate fell at both retail and wholesale.
- Refiner sales of these products generally increased in December. Sales of propane and kerosene-type jet fuel, kerosene and No. 1 distillate climbed at both retail and wholesale, while aviation gasoline sales fell at both levels.