

# Energy

## Oil Prices Fall Despite Global Uncertainty

### Third Quarter 2014

Oil prices declined to yearly lows at the beginning of the fourth quarter, reflecting weak demand and ample supply, despite geopolitical uncertainty surrounding Iraq, Syria and Ukraine. Global consumption growth forecasts were revised downward due to weak demand in Asia and countries belonging to the Organization for Economic Cooperation and Development (OECD). Meanwhile surging production in the U.S. pushed up the supply of oil, offsetting supply disruptions in the Middle East.

### Prices

Global and domestic prices both fell significantly in the third quarter (*Chart 1*). West Texas Intermediate (WTI) crude finished the quarter at \$93 per barrel, a decrease of \$12 from the end of the second quarter. Brent crude fell 16 percent from its second-quarter peak to end at \$95 per barrel—the lowest price seen since mid-2012. Prices continued to drop in October, falling to nearly \$80 per barrel by mid-month. The U.S. Energy Information Administration (EIA) has lowered its 2014 oil price forecast by \$2 per barrel for WTI and \$3 for Brent.

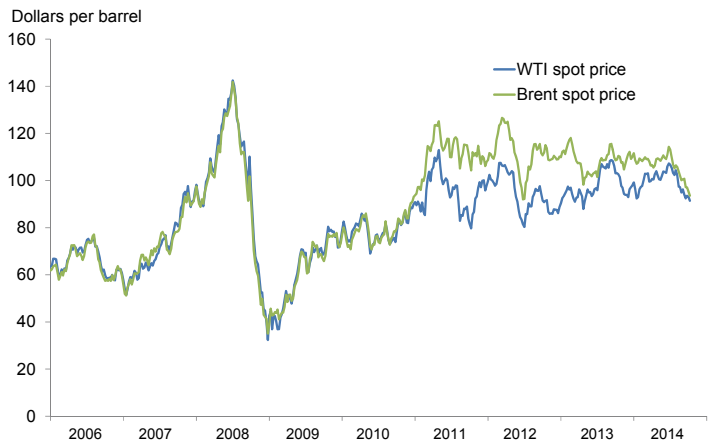
Retail gasoline prices fell 9 percent from their second-quarter peak to \$3.35 per gallon by the end of the third quarter. Gasoline prices are expected to continue falling, reaching \$3.14 in December, according to the EIA. Diesel prices also inched down, finishing the quarter at \$3.78 per gallon.

### International Supply and Demand

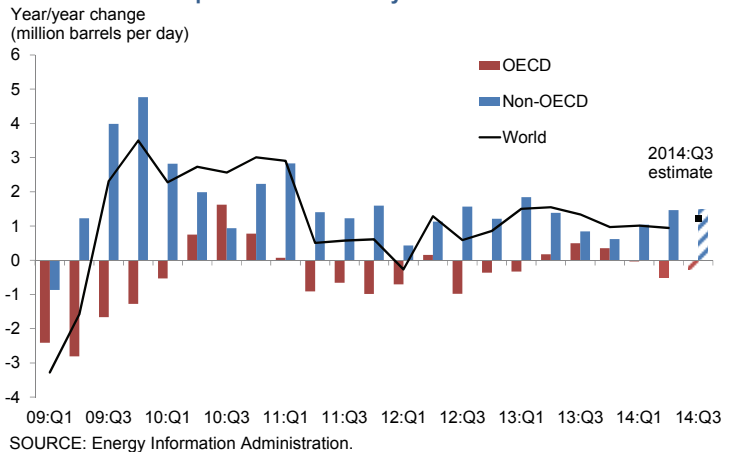
The global oil demand growth forecast for 2014 was revised down by the International Energy Agency. Demand is now expected to grow by 1 million barrels per day (mb/d) in 2014, a 20 percent drop from the previous estimate. Much of the decline can be attributed to efficiency gains in transportation and manufacturing in OECD countries and slower economic growth in Europe and Asia. Moreover, a sales tax hike in Japan in the second quarter lowered gasoline consumption. In the U.S., demand for oil products rose strongly in July and August.

Chart 2 shows that demand growth year over year has been driven primarily by non-OECD countries, which saw 3.2 percent growth in third quarter 2014. Chinese demand growth estimates were revised down from 3.3 to 2.9 percent, but China is still expected to be the top contributor to global consumption growth this year.

**Chart 1**  
Oil Prices Weaken

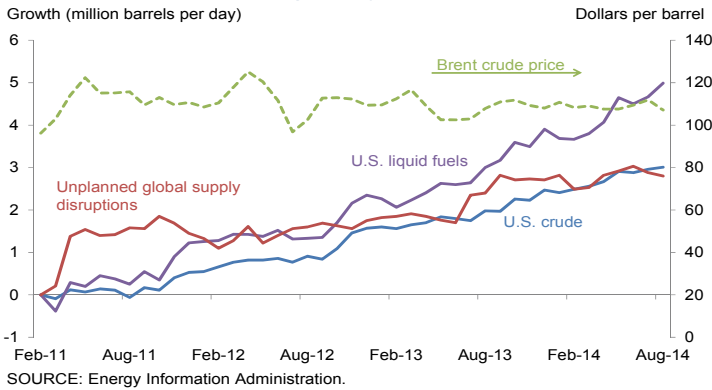


**Chart 2**  
World Oil Consumption Growth Led by Non-OECD Countries

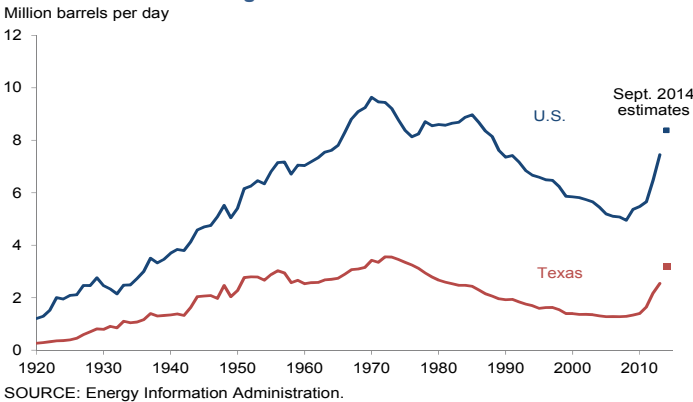


World oil production increased about 800,000 barrels per day to 92.2 mb/d during the third quarter, with the U.S. and Canada accounting for much of that growth. Crude production in the Organization of the Petroleum Exporting Countries (OPEC) rose 200,000 b/d in the third quarter, despite increasing unplanned outages. Higher production in Saudi Arabia and Libya offset declines in Iran, Iraq and Nigeria. Iraqi output in particular fell 300,000 b/d to 3.12 mb/d in July. Production from the country's southern fields continues uninterrupted, but the northern fields, which have come under the control of the ISIS militant group, have sharply reduced production.

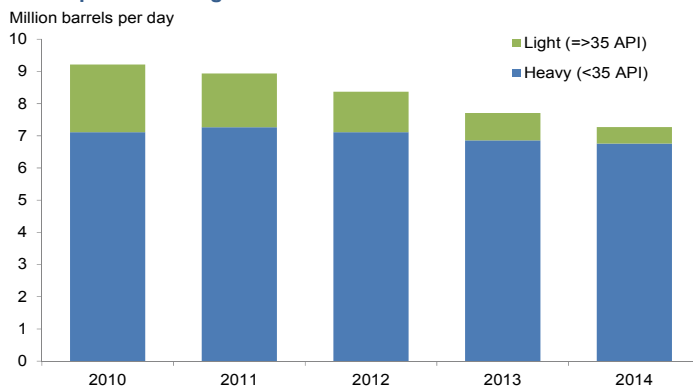
**Chart 3**  
**U.S. Oil Production Offsetting Supply Disruptions**



**Chart 4**  
**Crude Oil Production Highest Since 1986**



**Chart 5**  
**U.S. Imports Less Light Crude**



**Chart 6**  
**Natural Gas Prices Low**



Non-OPEC production edged up to 56.3 mb/d. Declines in Russia, Brazil and Mexico were offset by rising U.S. production, which has become a stabilizing factor in the global oil market (*Chart 3*).

**U.S. Energy Indicators**

U.S. crude oil production rose to 8.8 mb/d at the end of September, averaging 8.6 mb/d in the third quarter, a 1 mb/d increase from last year. The September figure is the highest level of production since 1986 (*Chart 4*).

Nearly all of the increase is from light sweet oils produced from shales. Light oils have an API gravity, or weight, above 35 and little sulfur content. The Eagle Ford Shale and Permian Basin in Texas and the Northern Great Plains (which includes the Bakken Shale) together generate over half of U.S. crude oil—and all three produce more than 70 percent light oil.

As a result, U.S. imports of light crude have decreased significantly in recent years (*Chart 5*), changing the mix of countries from which the U.S. sources crude oil. Imports from Algeria, Angola and Nigeria, which predominantly produce light sweet crude, fell to zero or near zero in August. Additionally, increased heavy crude imports from Canada are displacing imports from Saudi Arabia.

Crude refining reached record highs during the third quarter, peaking at 16.6 mb/d in July, up 2.4 percent from a year ago. Third-quarter refinery utilization in the U.S. was up 1.5 percent to 92.8 percent of capacity. In the Gulf Coast region, refineries processed 8.6 mb/d of crude and operated at 94.5 percent capacity. To accommodate higher Texas production, many Gulf Coast refineries are undergoing capacity expansions. The consulting firm IHS estimates that an additional 400,000 b/d of capacity will be added by 2018.

Demand for motor gasoline averaged 9 mb/d during the third quarter, down slightly from the 2013 third-quarter level of 9.1 mb/d. Gasoline consumption has been trending downward due to improved vehicle efficiency and an increase in urban living.

**Natural Gas**

Natural gas prices dropped further during the third quarter due to a relatively cool summer and tepid demand. The Henry Hub spot price fell below \$4 per million British thermal units (MMBtu) to average \$3.95, a 14 percent decrease from the second-quarter average (*Chart 6*).

Domestic natural gas demand averaged 68 million cubic feet per day during the quarter, slightly higher than in third quarter 2013. While industrial, residential and commercial demand for natural gas fell, electric power demand for natural gas ticked up. Low prices encouraged electricity generators to increase the use of natural gas at the expense of coal, and the use of natural gas in electricity generation is expected to increase go-

ing forward as a number of coal plants are taken offline starting April 2015.

Despite low prices, domestic production of natural gas continues to rise. In particular, production in the Marcellus Shale in the eastern U.S. has doubled in the past two years (*Chart 7*). Marcellus accounts for nearly 22 percent of total U.S. natural gas production. Eagle Ford Shale production is up about 60 percent over the same period, mainly due to associated gas that is a byproduct of oil production.

—Kristin Shepard and Mine Yücel

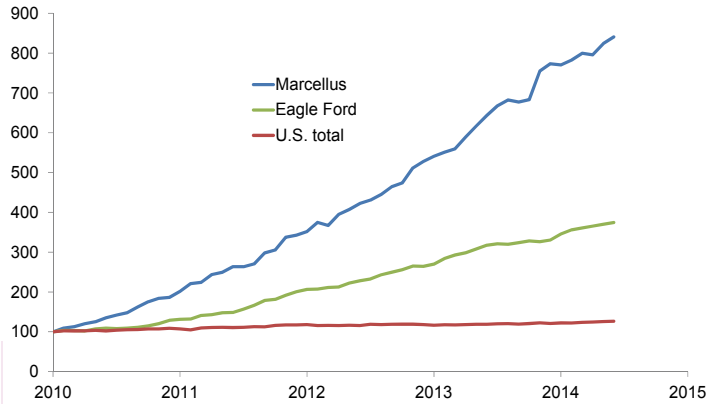
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### About the Authors

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**Chart 7**  
**Natural Gas Output Up Despite Weak Prices**

Index, January 2010 = 100



SOURCE: Energy Information Administration.

