

Refinery Chill?

New York Times: Industry in crisis as gasoline demand down sharply

Only a few years ago, the word was that the United States needed more oil refineries, said *The New York Times*. President George W. Bush even offered disused military bases as sites for building them. Now the reverse is now happening, the report said. The business of oil refining is mired in a deep crisis, with five refineries having shut down this year, including plants in Delaware, New Jersey, California and New Mexico.

Gasoline demand, which many analysts had long expected to keep rising for decades, is down sharply in the recession. And refiners are increasingly convinced that even after the economy recovers, demand will not grow much in coming years because of the rise of alternative fuel supplies and the advent of tougher efficiency standards for automobiles, according to the *Times*.

The recent closings signal the end of a period from roughly 2004 to 2008, when demand soared, refineries operated near capacity and profits swelled. For drivers, that meant gasoline prices at \$3 or \$4 a gallon, especially when hurricanes knocked out refining capacity on the Gulf Coast. For refiners, this "gilded" period turned out to have been an anomaly, said the report.

Plagued by boom-and-bust cycles of rapid expansion followed by sharp belt-tightening, refining companies have often struggled to operate at a profit. That is a contrast to the production side of the oil business, long a "road to riches."

"Oil production creates wealth, but oil refining has often destroyed it," Costanza Jacazio, an analyst at Barclays Capital, told the newspaper.

Even so, these are unusually harsh times for oil refiners, the report

added. The recent drop in gasoline demand could result in more refineries being closed in the coming year, it speculated.

"We have too much capacity," Lynn D. Westfall, the chief economist at the Tesoro Corp., a midsized San Antonio based refiner-marketer, told the paper. Westfall estimated that the industry's capacity of 18 million barrels a day must be cut 5% to 8%. "We need refineries to be shut down."

Refineries, especially smaller ones, have been closing for many years. The number of refineries in the United States fell to about 150 in recent years from more than 300 in 1982, according to the report. At the same time, the nation's refining capacity grew by about 13%, as companies expanded their most efficient refineries.

But the shutdowns are now coming so fast that the United States is losing capacity as refiners struggle to match their output to falling demand, said the report. Some energy experts have said that gasoline consumption most likely peaked in 2007, when it reached 9.7 million barrels a day, and will not rise to that level again.

Even as demand has dropped, gasoline is still relatively expensive because of high oil prices. Gasoline prices have dropped to an average of \$2.58 a gallon, according to the motorist group AAA, with many analysts predicting further declines this winter.

Gasoline consumption fell 3.5% last year, the steepest decline since 1965, while diesel consumption fell 6.8%, the most in 28 years. Both are set to fall again this year, said the report.

Government mandates for ethanol, meanwhile, are expected to grow through 2022. Biofuel supplies, which were negligible a few years ago, are set to reach 15 billion gallons in 2012 and 36 billion gallons in 2022. As production grows, ethanol and other biofuels displace gasoline and diesel; at many gasoline pumps ethanol is now 10% of the blend, and the ethanol industry is pushing to raise the percentage.

The refining industry is also faced with a new political reality. Unlike the Bush administration, which offered support and incentives to petroleum producers, the goal of the Obama administration is to encourage alternative fuels and reduce the use of gasoline.

Refiners are complaining about the climate change legislation is making its way through Congress, fearing that it will impose higher costs on the petroleum industry and result in more gasoline imports from lower-cost refiners overseas.

The increase in automobile fuel-efficiency standards—by 2016, the fleet average will rise to 35.5 miles per gallon from an average of about 25 miles per gallon for vehicles on the road today — is expected to reduce oil consumption by a total of 1.8 billion barrels between 2012 and 2016. Automakers from GM to Nissan are also betting on a new generation of electric cars that will become available in the next few years, the report said.

In a speech this month at the Los Angeles auto show, Robert A. Lutz, GM's vice chairman for marketing, said, "The automobile industry simply can no longer rely on oil to supply 98% of the world's automotive energy requirements."

That leaves refiners with difficult choices, according to the *Times*: cut costs and hope to survive the downturn, try to sell plants or shut down unprofitable refineries. "The industry is on its collective knees right now," Charles T. Drevna, president of the National Petrochemical & Refiners Association (NPRA) told the paper.

About 700,000 barrels per day (bpd) of refining capacity have been idled or shut down in North America in the last year, Aaron Brady, an oil expert at IHS Cambridge Energy Research Associates, told the paper.

The industry is expanding elsewhere around the world, especially in Asia, where gasoline demand is expected to rise in the coming decades.

Thanks to multibillion dollar projects in China, India and Saudi Arabia, the industry is expected to add two million bpd of refining capacity this year, even as global oil demand drops by around 1.7 million barrels a day, or about 2%, according to Barclays.

American refiners are bearing much of the brunt of the downturn. Last year, the American industry operated at 85.3% of capacity, the lowest level since 1988, according to the report, citing the U.S. Department of Energy. The utilization level is on track to sink to 75% this year, compared with highs above 90% just five years ago.

Valero Energy Corp., the nation's largest refiner, announced this month that it had shut down its refinery in Delaware City, Del., which could process 210,000 bpd of oil. Once the industry's highflier, Valero, San Antonio, has seen its stock price plummet as a result of the economic downturn. The stock is down 22% this year, after a 69% drop in 2008.

"The golden age of refining—if it ever existed—didn't last very long," Valero spokesperson Bill Day told the *Times*.

Two other refineries were shut down since October: Sunoco's Eagle Point plant, in Westville, N.J., and Western Refining's plant in Bloomfield, N.M., with a combined capacity of about 160,000 bpd. Refineries in California and Aruba, the latter operating primarily to supply the United States market, were also closed earlier this year.

Oil majors, like independent refiners, are also suffering, said the report. Exxon Mobil's domestic refineries lost \$203 million in the third quarter, a period when earnings at its global refining business dropped by \$2.7 billion, to \$325 million. Chevron earned \$34 million at its domestic refineries in the last quarter, compared with more than \$1 billion a year earlier.

In a bid to diversify its supplies, Valero, which has 15 refineries in the United States, Aruba and Canada, has recently bought a handful of ethanol refineries. Even though ethanol refiners have also struggled in

the recession, mandates passed by Congress ensure that increasing amounts of that fuel are likely to be mixed into the nation's gasoline supply in coming years.

"We recognize that ethanol is an important side of the fuel mix that is not going to go anywhere," said Day. "That's where the future of demand growth and transportation fuels will be."