

Welcome to the...

NAPM – New York Commodity Corner

June 2007 Edition

It is our intent to provide you with historic commodity pricing information, define trends, discuss forecasts, and most of all, help develop insights regarding materials pricing. Commodities will be updated each calendar quarter, or as the specific need arises. We hope you find this information useful and we are open to suggestions and questions to make this more relevant to your needs. Please send your questions and comments to: info@napm-ny.org

Crude Oil & Natural Gas

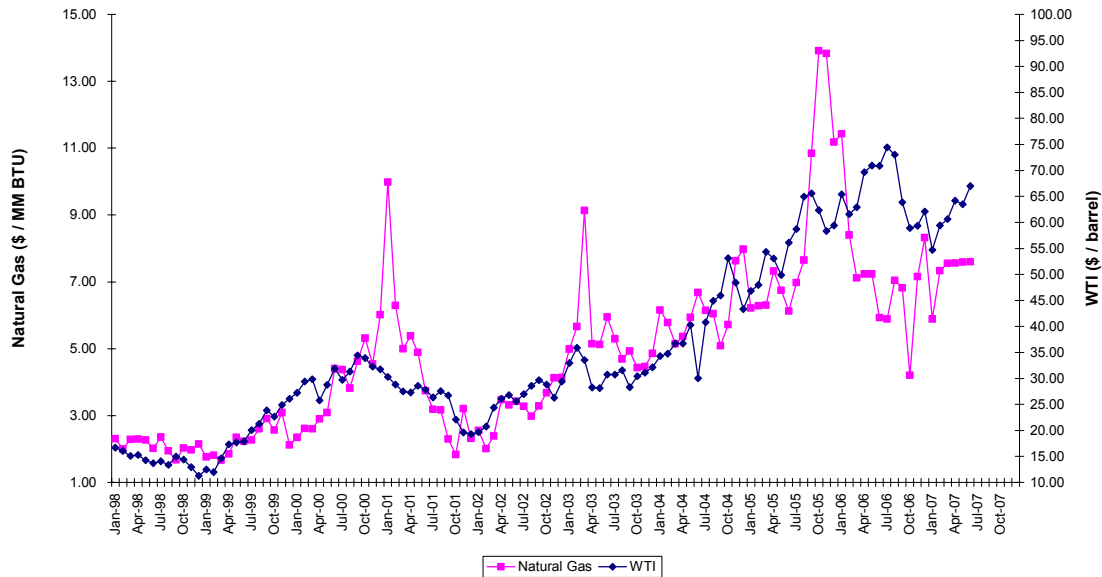
Crude Oil – Cost Drivers: World-wide supply and demand balance, gasoline refining conditions in the US, regional/geopolitical instability in nations like Nigeria and Venezuela, global and local weather, OPEC statements and actions.

Current Price Forecast: Year to date 2007, WTI crude oil price has averaged \$ 61.65 / barrel. Recent second half 2007 average price forecast for WTI crude is in the range of \$ 65-67 / barrel, driven largely by current concerns around US gasoline refining utilization, the hurricane season expectations, and supply outages in Nigeria. Current forecasts for 2008 are widely varied – from a low of \$ 55 / barrel up to \$ 72 / barrel for the full year average, with the average close to the second half 2007 figure. Moving into 2008, the expectation is for continued pressure on prices based on the factors already mentioned, as well as continued strong global economic growth.

Natural Gas – Cost Drivers: Natural Gas is largely a domestic natural resource. Cost drivers are supply / demand, weather, and to some extent, sympathetic movement to oil.

Current Price Forecast: Year to date 2007 average pricing is \$ 7.29 /MMBtu (Million British Thermal units), as historically high inventory levels have been discounted by the market, which has focused on longer term supply concerns and ‘sympathy’ with higher crude oil prices. For the rest of 2007, the hurricane season worries are a factor, with second half estimated pricing at \$ 8.42. The current 2008 full year price forecast has natural gas at \$ 8.35 /MMBtu for the full year average. Longer term, the pricing pressure on natural gas will continue, as an increasing amount of its usage in the US is for electric generation and residential heating and cooling, where there is less flexibility for alternative sources of energy.

West Texas Oil vs NYMEX Natural Gas (\$ / MM btu)



Ethylene

Where Used: About 70% of North America's ethylene production is derived from natural gas (30% from crude oil). Ethylene is the building block for a variety of the plastics we use daily, as well as solvents, surfactants, and other significant chemical feedstocks.

Cost Drivers: Although tied to natural gas and oil costs, ethylene is also very subject to supply / demand swings, and in particular to the operating efficiency of the production facilities. Downstream end products (plastics, solvents, glycols, etc) can compete for the available pounds of ethylene, thus driving ethylene pricing.

Current Forecast: Year to date 2007, ethylene has averaged \$0.42 per pound, steadily increasing since the January bottom of \$0.39/lb.. Current 2007 second half average price forecast is about \$0.43 per pound, 2008 full year forecast is in the area of \$0.42 per pound. The slow, steady increases earlier this year were driven in part by pressure from natural gas pricing, offset in part by a relatively balanced supply/demand picture for ethylene production.

HDPE

Where Used: High density polyethylene is used in wide variety of applications; most common include plastic milk containers, liquid detergent bottles, etc... and industrial applications such as plastic pipe for natural gas transmission and a myriad of automotive applications.

Cost Drivers: High density polyethylene is heavily influenced by ethylene costs, and it also has its own supply / demand cost influences.

Current Forecast: Year to date 2007 average price is \$0.65/pound for bottle grade material, with the second half forecast is running at approximately \$0.70/pound. The full year 2008 average price forecast is in the \$0.68/pound range. The HDPE market is in a three-year band of pricing in the \$0.65-0.69 range, as little new capacity has been added, and demand has been relatively flat in the US.

PET

Where Used: This is the plastic used to make soda bottles, water bottles, plastic beer bottles... and is also used in the manufacture of carpeting, clothing, etc...

Cost Drivers: PET pricing is tied to ethylene and to xylene markets, supply / demand balances, and it has historically had a “seasonal” influence (increased consumption during the summer due to water and soda bottle demand).

Current Forecast: Average year to date 2007 price is \$0.78/pound, with a second half forecast of \$0.77/lb. The first half saw steady increases based on both seasonality and feedstock cost increases. For 2008, forecasts are running in the \$0.73/pound range based on expected feedstock cost decreases with new feedstock capacity coming onstream.

Glycerine

Where Used: Glycerine is used in cosmetics, foods, pharmaceuticals, and a variety of personal care and oral care products, as well as in other applications including animal feed, antifreeze and certain energy uses.

Cost Drivers: As glycerine is a byproduct of the production of various other products, its cost is principally driven by the demand for glycerine for its various uses – the supply remains driven largely by the production of other products such as soaps, fatty alcohols and fatty acids, so it is the demand for glycerine generally that drives its pricing.

However, over the past few years the increasing use of biodiesel as a fuel in Europe, which has resulted in significant increases in the supply of byproduct glycerine globally, has driven glycerine market pricing lower. This in turn has led to glycerine uses expanding, bringing the market pricing back into balance.

Current Forecast: Refined glycerine in the US has averaged roughly \$0.35-40/lb. in 2007, and is forecast to increase into the range of \$0.48/lb. in 2008. The key driver here relates to the biodiesel fuel mentioned above – as global prices for vegetable oils have skyrocketed this year (in some cases up 100%), biodiesel fuel production from these oils has become uneconomical, and hence the supply of biodiesel-driven glycerine is declining.

Linerboard

Where Used: Linerboard is the main component and cost driver in the manufacture of corrugated shipping containers, which are used in a broad variety of consumer industries as well as the automotive industry.

Cost Drivers: Linerboard is heavily influenced by supply / demand balances, inventories, conversion cost (energy), exports (foreign exchange driven) and industry consolidations (fewer, bigger players).

Current Forecast: Prices have remained stable in 1H 2007, at an average of \$ 500 / ton in late 2006 and 1H 2007; for the second half of 2007, expectation is for prices in the range of \$ 540 /ton, continuing into 2008 in the same range, reflecting firm but stable demand and continued improved management of supply capacity.

