

Welcome to the...

NAPM – New York Commodity Corner

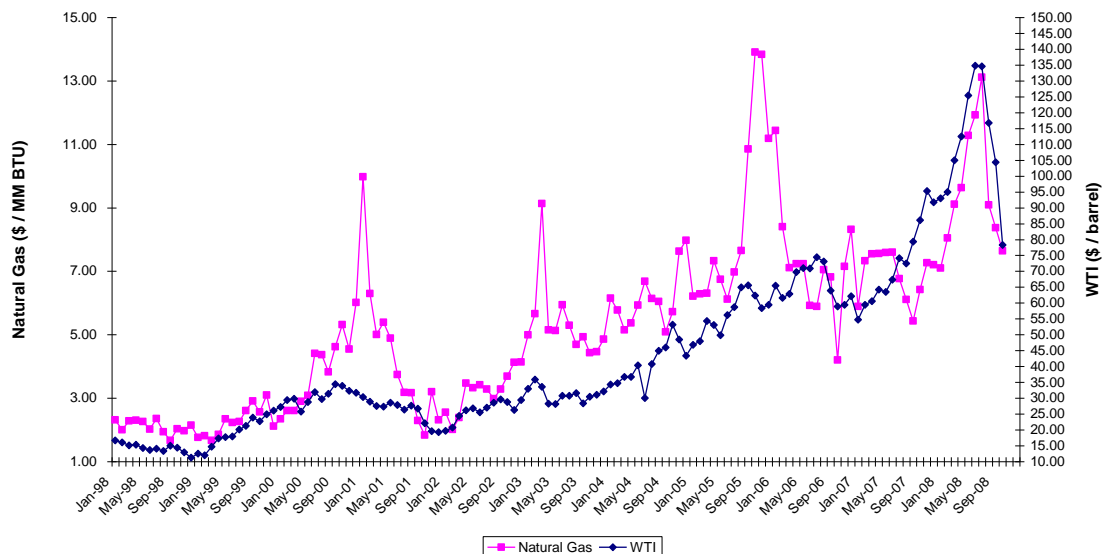
October 2008 Edition

It is our intent to provide you with historic commodity pricing information, define trends, discuss forecasts, and most of all, to 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

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



Crude Oil – Cost Drivers: World-wide supply and demand balance, gasoline refining conditions in the US, regional/geopolitical instability and issues, commodity investment/speculation, global and local weather, OPEC statements and actions.

Current Price Forecast: For full year 2007, WTI crude oil price averaged \$ 72.39 / barrel, driven largely by concerns around global demand exceeding supply on an ongoing basis, driven principally by increasing demand in the developing world and by financial market investor participation in the commodity futures markets.

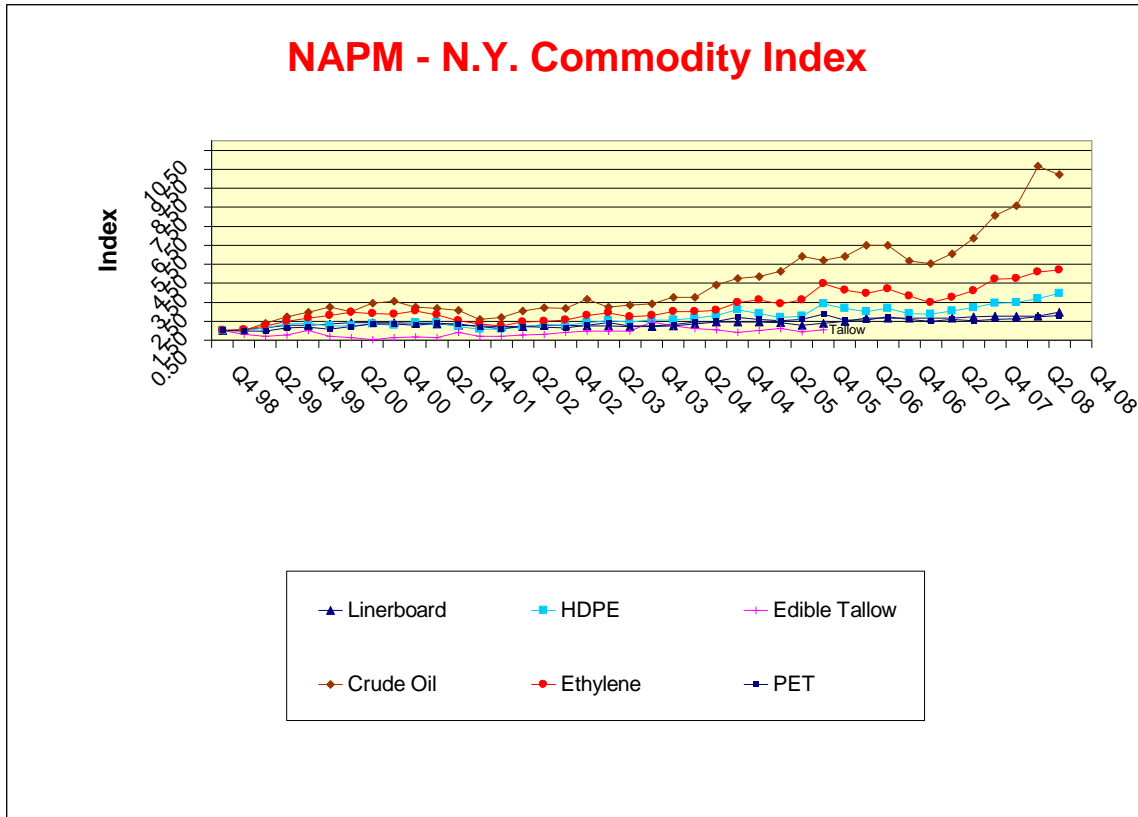
For 2008, YTD average has been \$114.85, with the recent sharp declines driven by the expectation of global recession curtailing demand, as well as the overall movement out of

commodities by investors globally. In addition, non-OPEC supply of crude has been increasing since mid-year. Current forecasts for 2009 are widely varied – from the mid \$80s up to \$200 / bbl, with an average in the \$110-120 range. In 2009, the expectation is for continued pressure on prices based on continued increasing demand from developing nations including China and India, combined with the likelihood of a pullback in supply by OPEC. The potential for a protracted recession may offset these pressures to some degree.

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, in particular given its recent upward volatility.

Current Price Forecast: Full year 2007 average pricing was \$ 6.91 /MMBtu (Million British Thermal units), as historically high inventory levels were discounted by the market, which focused on longer term supply concerns and ‘sympathy’ with higher crude oil prices.

The current 2008 full year price forecast has natural gas at \$ 9.35/MMBtu for the full year average, consistent with YTD pricing averaging \$9.71 and the expectation of a modest decline in the historically higher-priced fourth quarter, consistent with crude oil and other commodities. 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. Nevertheless, the current forecast for natural gas for 2009, which clearly reflect the expectation of recession in North America, are for pricing of \$8.80.



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: Full year 2007, ethylene averaged \$0.49 per pound, and YTD 2008 has averaged \$ 0.65/lb., with a forecast for fourth quarter of a reduction to \$0.59 – see the factors above in the natural gas discussion. The third quarter spiked due to the impact of two hurricanes in the Gulf Coast production area. Moving forward, the expectation is for decreased demand as the economy cools, ethylene feedstock pricing eases, and demand for products downstream from ethylene, including polyethylene, decreases. The 2009 forecast is for average pricing of \$0.60.

HDPE

Where Used: High density polyethylene is used in wide variety of applications, including 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 the factors driving ethylene costs, and it also has its own supply / demand cost influences.

Current Forecast: Full year 2007 average price was \$0.71/lb. for bottle grade material, and YTD 2008 average price is \$0.90 /lb., increasing during the year from a January level of \$0.83/lb. The third quarter represents a peak (\$0.99) – again, driven by crude pricing and Gulf coast hurricanes. The expectation for the fourth quarter 2008 is for a significant demand- and feedstock cost-driven decline, with inventories already on the increase – the current estimate is around \$0.87 cents. For 2009, the forecast continues for moderating prices – the estimate is \$0.77.

PET

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

Cost Drivers: PET pricing is tied to ethylene glycol 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: Full year 2007 average price was \$0.79 /lb. for the mid-size buyer of bottle grade PET, and YTD 2008 average is \$0.88 /lb., driven once again by feedstock costs. The forecast for the fourth quarter is in the \$0.82 range as cost-driven surcharges from earlier in the year are removed. The pressure from feedstock costs for PET, including ethylene glycol and para xylene, is expected to abate, and the mediocre demand is expected to continue to decline. The forecast for 2009 is in the 0.86 range, consistent with the full year 2008 average, reflecting upward price pressure as capacity is reduced based upon planned facility shutdowns.

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, fatty acids and biodiesel fuels.

Over the past few years the increasing use of biodiesel as a fuel in Europe, and increasing from small volumes in North America, has resulted in significant increases in the supply of byproduct glycerine globally, which has driven glycerine market pricing lower.

Current Forecast: Refined glycerine prices in the US have declined from roughly \$0.70-0.80/lb. in late 2007 to \$0.50-0.60/lb. in YTD 2008 for tallow quality refined glycerine. Availability of material in the US (going to feed applications) and from Europe has increased significantly, loosening market pricing conditions. More recently, as biodiesel-driven glycerine production has increased, the cost of the bio-feedstocks, such as soybean oil and palm oils, has been on the decline, putting further downward pressure on the glycerine prices.

Forecasts for 2009 show prices in the range of \$0.40-0.45/lb range on average, as demand is expected to moderate due to economic conditions, biodiesel industry capacity in North America has increased, and downward price pressure from imported European material continues.

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 and industry consolidation.

Current Forecast: Prices remained stable in much of 2007, with a full year average of \$ 517/ton, and with pricing flat from September 2007 to June 2008 at \$540 /ton. July 2008 price increases of more than 10% to \$600/ton were combined with continued tight inventory management and capacity reductions. However, the timing appears poor given the economic slowdown that has accelerated since July. For 2009, the current forecast is for a full year average of \$ 585/ton, but this is based upon the price increase 'sticking' for the balance of the year, which looks questionable at this time. With containerboard shipments down YTD in the US, and forecast for further reduction in 2009, the pricing pressure will continue downward, and the ability of the producers to manage their capacity will be the potential balancing factor going forward.