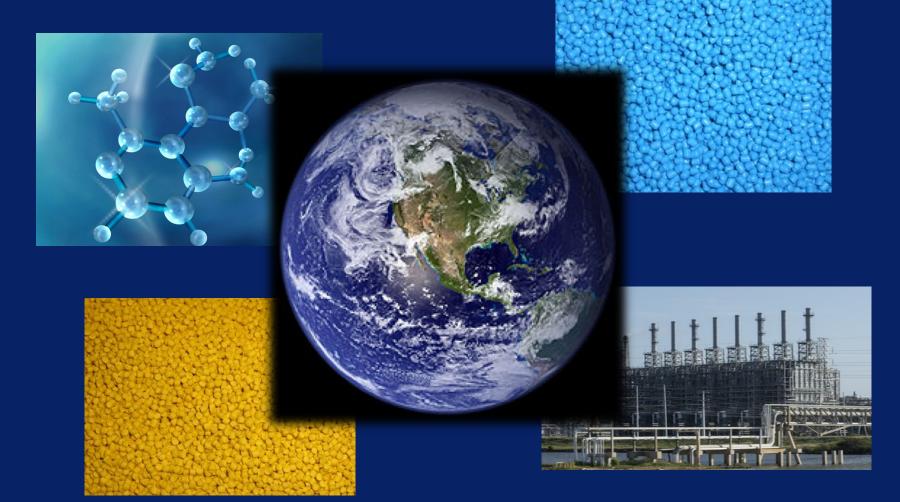
Brainfood for the Plastics Industry

Issue 23.01 – Jan 2023





Market Update

Plastics Feedstocks (Naphtha, Ethane, and Propane)

- Naphtha prices (CIF Japan) crept higher by 2% over the past month to a price of \$648/mt
- Propane prices increased by 9.6% this past month to a spot price of 77cpg (cents per gallon) in Mont Belvieu, TX. This was mostly likely due to the extreme cold temperatures across the country over the Dec 20-24th period. These prices are expected to fall over the next couple of weeks due to the much milder weather.
- Ethane prices decreased by 20% since early December to a spot price of 28cpg in Mont Belvieu. This is a result of a significant number of cracker outages due to the Texas freeze last month resulting in reduced demand for ethane as a feedstock.

Ethylene

• Ethylene prices in the Enterprise system in Mont Belvieu, TX are unchanged at 19cpp from price levels one month ago.

Propylene

- Physical PGP prices in Enterprise's system traded at 35cpp on Wednesday Jan 4th. PGP prices were closer to 30cpp in early December.
- The December calendar average price for physical PGP in Mont Belvieu, TX was 31.2cpp.
- The reason for the price increase to start the month of January in physical PGP is a result of the TX freeze. There have been a significant number of outages to olefin crackers (which make ethylene and PGP) along with refineries which supply refinery grade propylene (as feedstock for PGP). PetroChem Wire has done an amazing job of staying on top of all the outages in the space.
- In our early December report on Wed Dec 7th, we wrote "BlueClover is revising its December forecast for contract PGP from 40cpp to 32cpp". Well, this revision came true as the December contract PGP price settled at 32cpp, down 1cpp from the November settlement of 33cpp.
- In that same report we wrote, "BlueClover is expecting PGP prices to rally to start the year in Jan 2023 and contract PGP for January to settle between 37cpp and 40cpp." So the rally in January has commenced but to be fair we were expecting PGP prices to rally for other reasons (stronger PP market, reduced supply as a result of negative PDH economics, and a strengthening crude market). We were not expecting another Texas freeze event only two years after the Feb 2021 event.
- BlueClover does still estimate that January contract PGP pricing will settle between 37cpp and 40cpp.

Polypropylene

- In our last report in early December BlueClover expected prices for PP to rally in January. Again we expected this not as a result of a freeze in TX but rather reduced supply from lower operating rates (planned reduction in supply), more exports to balance out the long market, and customer restocking.
- In just the first couple of business days this month we are seeing strong demand from customers who are concerned about the reduction in supply as a
 result of PP producers' Force Majeure events and such.
- BlueClover remains bullish PP pricing in January.

Crude Oil

WTI and Brent Crude Oil are basically unchanged from their price levels one month ago. WTI pricing is around \$74/barrel and Brent pricing is around \$79/barrel. WTI pricing had rallied to a high of \$80/barrel on December 30th (an increase of 8% from today's pricing), only to crumble back down to \$74/barrel.

The steep drop in crude prices over the first two business days of 2023 is the largest decrease since 1991. The two main reasons for the falling prices to start the year are a rapidly spreading Covid outbreak in China as its government has removed its zero covid policy along with the Federal Reserve continuing to raise interest rates.

One sign of reduced Chinese demand for refined products is their government increased export quotes of refined oil products by 50% in 2023 in order to keep domestic China refineries running. This increase in export quotas helps the refineries in China run even though Chinese internal demand for refined products is much lower year on year.

In a statement released Wed Jan 4th that pertained to a December Fed Reserve meeting, Fed officials stated additional interest rate hikes in the coming months would be "appropriate" to help tame inflation (see Trader Toolbox on page 5).

Both events are destructive to the overall demand of the two largest economies in the the world.

Natural Gas

Due to the extremely warm temperatures to end December and start January across much of the USA, the spot price of Natural Gas has dropped 25% over the month of December to \$4.06/mmbtu. Prices are down almost 60% from this past summer and current pricing is about the same as it was one year ago.

Feedstock "Spot" Prices:

<u>Product</u>	<u>Location</u>	Price as of Jan 4	Price as of Dec 6	<u>Unit</u>
Brent Crude	North Sea, Europe	79.10	79.25	USD/barrel
WTI Crude	Cushing, OK	74.10	73.88	USD/barrel
Natural Gas	Henry Hub, LA	4.06	5.42	USD/MMBtu
Naphtha	C&F Japan	648	635	USD/mt
Ethane	Mont Belvieu, TX	27.875	35	Cents/Gal
Propane	Mont Belvieu, TX	77.25	70.5	Cents/Gal
Ethylene (Enterprise system)	Mont Belvieu, TX	18.875	19	Cents/Lb
PG Propylene (Enterprise)	Mont Belvieu, TX	34.5	29.5	Cents/Lb

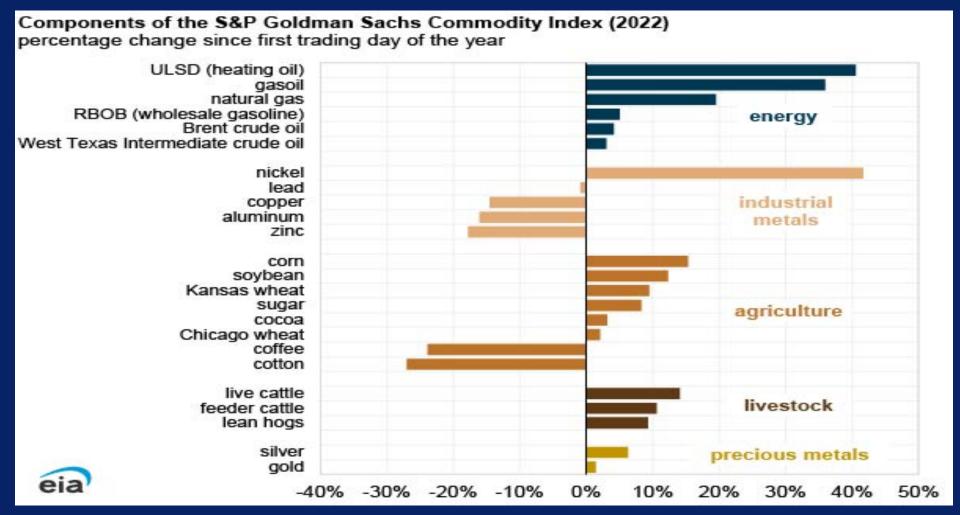


Inventory

HERO GREEN™ (Post Consumer PP Repro)				
Grade	Description	Location		
HG3GR1	3 melt HomoPP - Grey	Midwest		
HG16GR1	16 melt HomoPP. Grey	Midwest		
HG22GR1	22 melt HomoPP - Grey	Midwest		
HG6BK1	6 melt HomoPP - Black	Midwest		
HG3GR3	3 melt CoPP 3.6 izod - Grey	Midwest		
HG35GR3	35 melt CoPP 1.4 izod - Grey	Midwest		



Trader Toolbox - 2022 - The Year of Pain in the Wallet!



The above chart highlights the increase in commodity costs in 2022. As a nation, we are still paying significantly more for energy, most farmed products, and meat. This remains the concern for the Federal Reserve. While inflation has been trending lower in the 4th quarter of 2022, on an annualized basis inflation remains high.

At least customers may start to see some relief for their coffee prices, although I would not expect Starbucks pricing to be coming down anytime soon.

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