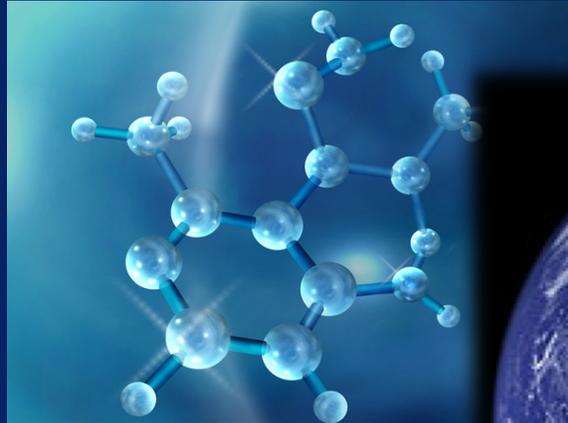


Brainfood for the Plastics Industry

Issue 22.01 – Jan 2022



Market Update

Crude Oil

WTI crude oil prices are up 8% these past two weeks to \$77.20/barrel. Brent crude oil prices are also up 8% over the past two weeks crossing over the \$80/barrel price point.

BlueClover has remained constructive crude oil pricing as continued global demand pulls from supply. Since the 3rd quarter of 2020 through the end of 2021 (18 months), oil stock withdrawals have averaged 1.7 million barrels/day in the USA. WTI crude oil pricing at \$77.20/barrel is very close to the price of \$78.50/barrel, which was the closing price on Nov 23 the day the Biden administration announced the release of crude oil from the Strategic Oil Reserve. This highlights that releasing some crude from the Strategic Reserve is more short-term price sensitive and politically motivated as opposed to it having a lasting supply effect.

OPEC nations and their allies have been consistent in announcing their monthly increases of 400k barrels/day since the middle of last year. Yesterday, Jan 4, they announced the same rate increase for February in a message that is consistent with their plan. The OPEC nations are confident the market can handle the increases in global supply. There have been very interesting reports over the past couple of weeks looking at crude exports from OPEC nations, showing that the OPEC nations may only be increasing supply by 300k barrels/day each month. This is a result of certain countries proclaiming one thing and doing another. It's a classic example of game theory. If your Iraq, why increase crude oil output and potentially make less money overall when you can assume the Saudi gov't will increase production. For this reason and others, we hold our view that WTI will reach \$100/barrel in 2022.

We wrote the following, two weeks ago, *“As omicron rips through the USA, it appears the commodity markets are pricing in continued demand, perhaps due to a spike in mild cases only to fall in case loads in the following months.”* What has been surprising in hindsight is how Omicron is causing such disruptions in worker productivity. For example, the huge increases in flight cancellations as airlines and airports struggle to keep employees at work. We do think this will be a short-term drop in demand for oil derived products that will pull oil prices lower in the short term (perhaps the next 2-3 weeks) only to rebound again after that.

Natural Gas

Natural gas prices are flat, only down 2% over the past two weeks to a spot price of \$3.77/mmbtu. This is the price for natural gas in Henry Hub, LA, which is just one geographic location and price.

For several reports we have been highlighting how tight supplies of gas will lead to price spikes when cold patterns hit parts of the country this winter. One example is the price of natural gas in NYC which saw the spot price increase to \$20/mmbtu on Monday Jan 3 (a 5x increase since Dec 30) as a result of freezing temperatures.

[BlueClover Website](#)

Market Update

Plastics Feedstocks (Naphtha, Ethane, and Propane)

- Naphtha prices (CIF Japan) continued their rally, increasing 6% to \$738/mt. Naphtha prices have jumped close to 10% in the past month.
- Ethane prices in Mont Belvieu, TX are stable around 33 cents per gallon (cpg)
- Propane prices increased around 9% to 110cpg.

Ethylene

- Ethylene prices in the Enterprise system in Mont Belvieu, TX have been stable around 34cpp

Propylene

- Physical PGP prices in Enterprise's system in Mont Belvieu, TX have been stable around 48cpp the past two weeks with many market participants out last week due to the holidays. The December monthly average for physical PGP was 48.9cpp according to the PetroChem Wire. This number was approx. 7cpp less than the December contract PGP price of 56cpp, which is historically a large spread,
- Thus far BlueClover has accurately called the strong demand for physical PGP in the upper 40s. We wrote the following in our abbreviated report which went out over the holiday week: *"we...estimate physical PGP pricing in the 1st quarter to average closer to 55cpp."*
- Pricing for RGP in pipeline in Mont Belvieu, TX has remained around 23cpp and propane feedstock costs have increased approx 3cpp for PDH units over the past two weeks.
- BlueClover is estimating that January contract PGP will be down 2cpp, which would result in a 54cpp number for January.

Polypropylene

- Polypropylene continues to be available relative to its August through October days. The theme of more widespec than prime remains in place. Producers have dedicated more time to finding contract homes for their prime products over the past year. This is a result of strong demand across the PP space and buyers unable to go into 2022 with a significant percentage of their needs in the spot market.
- For some pricing ranges, we see widespec Homopolymer railcars going between 65cpp and 70cpp for the domestic market. Premiums for impact copolymer railcars can be anywhere from 2cpp to 8cpp depending on melt flow and izod.
- We have seen an increase in the amount of PP exported over the December month.

Feedstock “Spot” Prices:

<u>Product</u>	<u>Location</u>	<u>Price as of Jan 4</u>	<u>Price as of Dec 21</u>	<u>Unit</u>
Brent Crude	North Sea, Europe	80.18	73.98	USD/barrel
WTI Crude	Cushing, OK	77.20	71.29	USD/barrel
Natural Gas	Henry Hub, LA	3.77	3.86	USD/MMBtu
Naphtha	C&F Japan	738	695	USD/mt
Ethane	Mont Belvieu, TX	33.625	32.75	Cents/Gal
Propane	Mont Belvieu, TX	110.375	101.5	Cents/Gal
Ethylene (Enterprise system)	Mont Belvieu, TX	34	34.5	Cents/Lb
PG Propylene (Enterprise)	Mont Belvieu, TX	48	48	Cents/Lb

* Sources – CME, Bloomberg

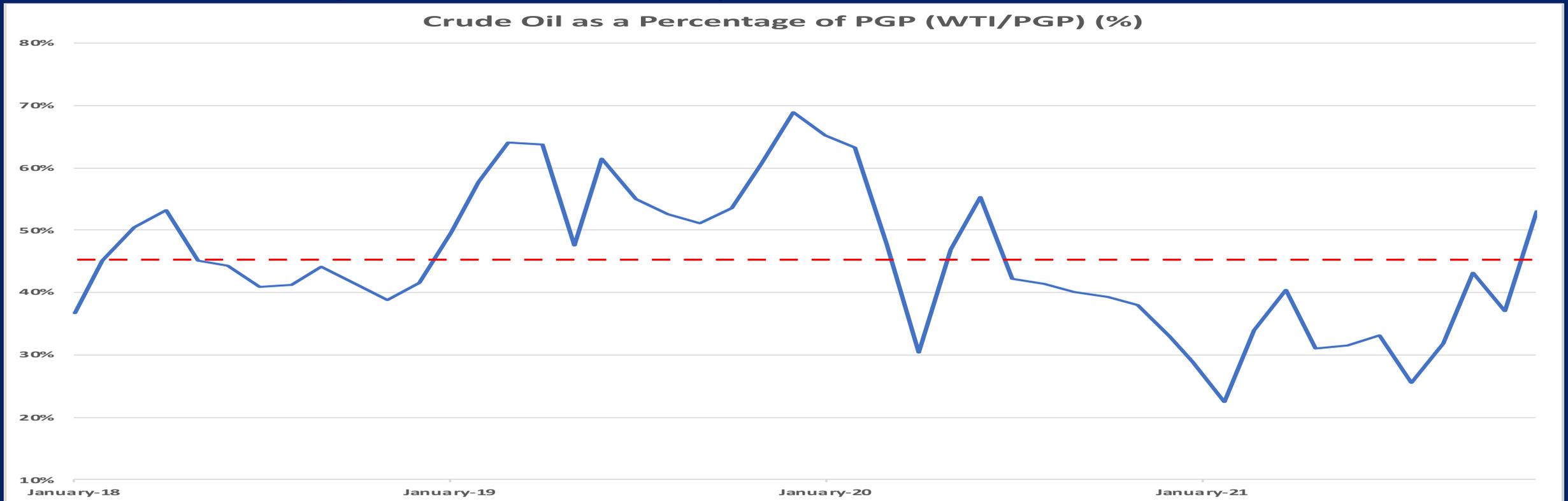
Inventory



HERO PRIME™		
Grade	Description	Location
HP12	12 melt Barefoot HoPP	Midwest

HERO FLEX™		
Grade	Description	Location
HG0406	4-6 melt Black PCR HomoPP (0% ethylene)	Midwest
H0810	9-10 melt Homopolymer Barefoot	Midwest

Trader Toolbox – Revisiting the PGP to Crude Relationship



Above is a 4 year historical chart of the % relationship between crude oil and PGP based on monthly prices. When this % is low (sub 40%), it implies PGP may be expensive relative to crude oil. When this % is high (north of 50%), it implies PGP may be cheap relative to crude oil. The average % over the past 4 years is 45% (the dotted red line).

Back in Brainfood 21.22 on Oct 27, we showed this same graph which ended in Oct 2021 at around 43%. We discussed how crude may continue to rally and PGP may continue to slide to bring this spread to about 55%. Well, as of December 2021, this spread was 53%. Obviously, its luck that the % is close, and it came as a result of PGP falling in price at a greater rate than crude which also dropped in price since Oct (versus our expectation that crude would rally).

BlueClover expects this relationship to average below 50% in the first 6 months of 2022 as a result of higher PGP prices, even though we think crude will rally as well.



Why BlueClover?

BlueClover is the informed sourcing solution– bridging the gap between upstream knowledge, resin procurement and price risk management.

- ❖ Trusting relationship with a professional distribution company that trades polypropylene across a wide range of qualities at a multitude of price points for both spot and contract business.
- ❖ Full access to our Price Risk Management Team.
 - ❖ Work closely with our price risk management team with decades of commodity trading experience to determine when fixed pricing programs make sense for your business.
 - ❖ Access to BlueClover’s internal research and analysis along with potential outsourcing to industry experts on commodity markets.

Please visit our website below for more information.



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