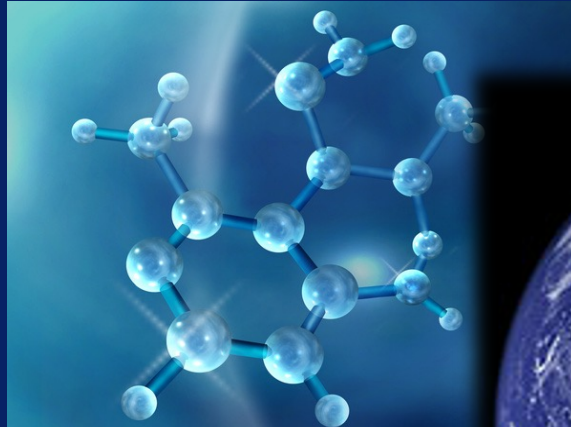


Brainfood for the Plastics Industry

Issue 22.17 – Aug 2022



Market Update

Plastics Feedstocks (Naphtha, Ethane, and Propane)

- Naphtha prices (CIF Japan) are down again since our last report, this time down about 6% to a spot price of \$690/mt.
- Propane prices are only down about 3.5% (compared to 5% for crude oil over the same time period) at 107cpg (cents per gallon) in Mont Belvieu, TX. One reason propane prices are staying somewhat high despite the large decrease in crude pricing is that over the past decade, a significant amount of propane comes from natural gas exploration and production. In the decades prior, crude refining was the predominant source of propane production.
- Ethane prices are up from 59cpg two weeks ago to 61cpg following the large price increases in natural gas.

Ethylene

- Ethylene prices in the Enterprise system in Mont Belvieu, TX are up small from 24.5 cents per pound (cpp) to 26.25cpp

Propylene

- Physical PGP prices in Enterprise's system are assessed at 46.5cpp, down from 49.25cpp two weeks ago.
- The current estimated monthly average for physical PGP in Mont Belvieu, TX is 47cpp.
- In our report from two weeks ago we wrote the following: *"BlueClover still expects physical PGP prices to break north of 50cpp in August...the PGP market appears slightly tight at the seams. Supply disruptions caused by unexpected outages or hurricanes could have a significant impact on price."*
- We also wrote: *"Counter to this, demand for PGP derivatives, specifically PP, is clearly down year on year as retail products line the store shelves for longer."*
- BlueClover has been incorrect in our price guess that PGP prices will break north of 50cpp this month. The pressures from an oversupplied polypropylene market remain in place as convertors and brands' inventories levels remain elevated as compared to previous quarters.
- At this point the selling pressure on PGP appears to be in command and looks set to retest its year-to-date lows in the low 40s. We do expect pricing to firm back up and possibly through 50cpp in the September time frame as sellers and buyers have worked through excess inventories of PP and consumer goods.
- BlueClover is revising its estimate for August contract PGP from an increase between 3cpp and 5cpp to only up 2cpp for the month. If this is correct, this would bring the contract PGP price to 49cpp.

Polypropylene

- BlueClover was expecting PP prices to firm up by this point in August but they continue to slide. Two weeks ago widespec HomoPP in railcar was in the upper 50s/low 60s depending on melt and quality but have since retreated to the mid 50s this month. This is a significant loss in producer margin for these spot pounds.
- While many folks in the market expect the PP oversupply to remain in place for the balance of the year, we expect inventories to normalize, producers to dial back operating rates, and PP prices to rally in the September/October time frame.

Crude Oil

After establishing our neutral price outlook on crude oil four weeks ago, WTI crude oil prices are lower by about 10% over that time frame. Prices are down 4.5% the past two weeks to a spot WTI price of \$90.16/barrel.

Two weeks ago, OPEC (Organization of the Petroleum Exporting Countries) nations and their allies agreed to increase production by 100K Barrels/day. This is an extremely small increase, and many considered it an attempt at appeasing the USA who has been calling for bigger increases in supply output from OPEC. The member nations highlight slowing global demand for crude and their inability to increase operating rates as the reasons for not increasing output more.

Despite President Biden's requests to Saudi Arabia to increase crude production, the Saudi government and their allies are careful to not tip the supply of oil into a market where prices crash. Since prices have been retreating, these nations are slowing down the amount of crude oil they pump into the market.

While USA crude oil producers remain disciplined in returning profits to shareholders instead of adding back supply capacity, there is still increasing USA crude oil supply hitting the market. Average daily US crude supply reached 12.2 million barrels during the first week of August. This is the highest supply amount since April 2020.

BlueClover continues its neutral view on crude oil with a view of greater upside pricing risk than downside.

Natural Gas

Natural gas prices are up 23% the past two weeks!! The current price for natural gas in Henry Hub, LA is \$9.06/mmbtu.

Natural gas prices are up more than 70% since the end of June and the highest prices have been this time of year since 2005!

Gone are the days of natural gas being a land locked product that was over-supplied in the USA. Now as Europe struggles to find more natural gas because Russia is holding hostage its normal supply, much of this supply is coming from the USA. The US is set to export about 115 kilotons/day to Europe in August 2022, which is 3.3 times the amount from August 2021 (35 kilotons/day).

While the higher natural gas prices here are increasing the price of power in the form of electricity for many US citizens, the Europeans have it worse. Last week, the Dutch TTF natural gas futures price was \$62/mmbtu, which is almost 7 times the price of natural gas in Louisiana listed above.

Feedstock “Spot” Prices:

<u>Product</u>	<u>Location</u>	<u>Price as of Aug 16</u>	<u>Price as of Aug 2</u>	<u>Unit</u>
Brent Crude	North Sea, Europe	95.55	100.87	USD/barrel
WTI Crude	Cushing, OK	90.16	94.59	USD/barrel
Natural Gas	Henry Hub, LA	9.06	7.8	USD/MMBtu
Naphtha	C&F Japan	690	735	USD/mt
Ethane	Mont Belvieu, TX	61	59	Cents/Gal
Propane	Mont Belvieu, TX	107	111	Cents/Gal
Ethylene (Enterprise system)	Mont Belvieu, TX	26.25	24.5	Cents/Lb
PG Propylene (Enterprise)	Mont Belvieu, TX	46.5	49.25	Cents/Lb

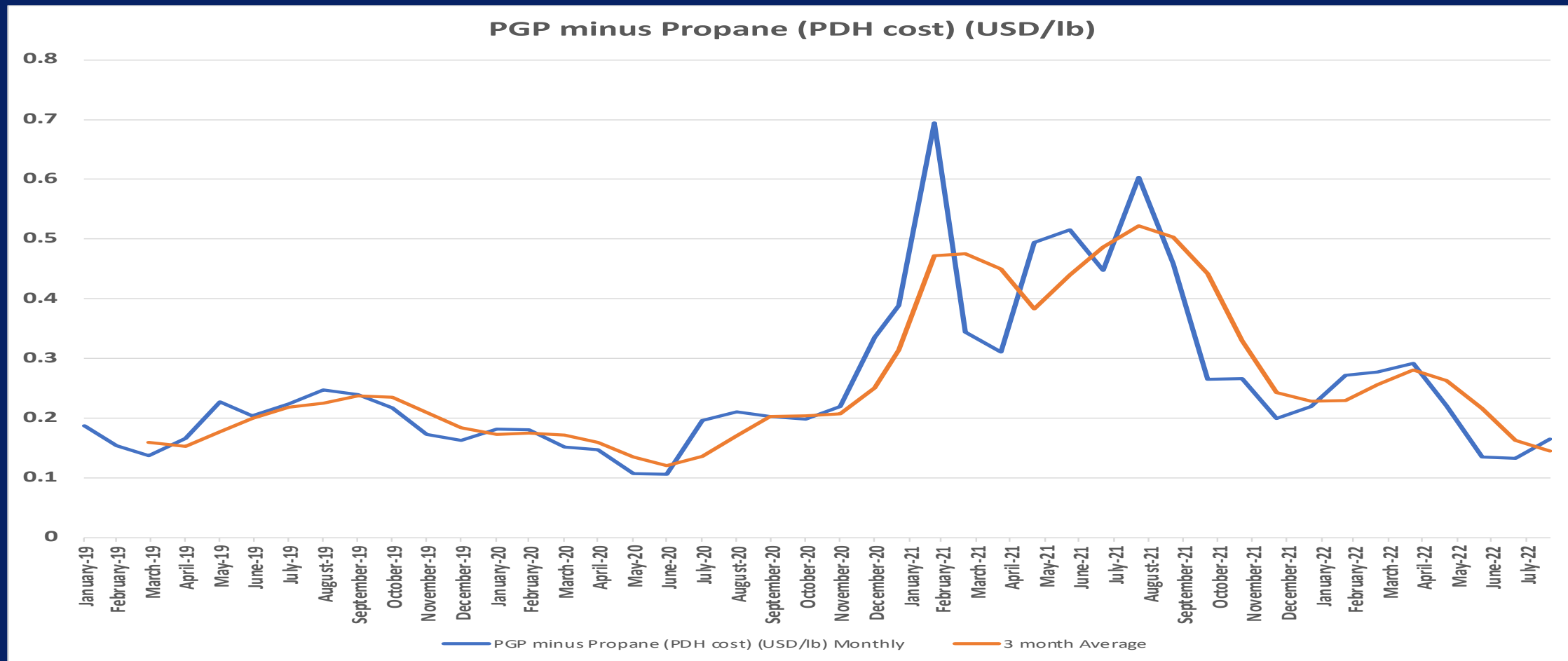
* Sources – CME, Bloomberg

Inventory

HERO PRIME™		
Grade	Description	Location
	SOLD OUT	

Post Consumer PP Repro		
Melt	Description	Location
3	Black 3 melt HomoPP	Midwest
16	Grey 16 melt HomoPP	Midwest
22	Grey 22 melt HomoPP	Midwest





The above chart is a monthly chart starting in Jan 2019 that displays the spread between polymer grade propylene and the propane feedstock cost for a PDH unit in \$/lb. The blue line is the monthly data and the orange line is the rolling 3 month average. Since the middle of 2021, propane prices are almost unchanged from that time period, but PGP prices are down anywhere from 35 to 45% from that time period. This is causing the spread to decrease from mid 2021 through August 2022.

Right now PDH margins are close to the lows experienced in 2019 and the first half of 2020. If propane prices can remain steady, there may be room for PDH units to gain back some margin going into 2023, which would provide a price bump higher for PGP.



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