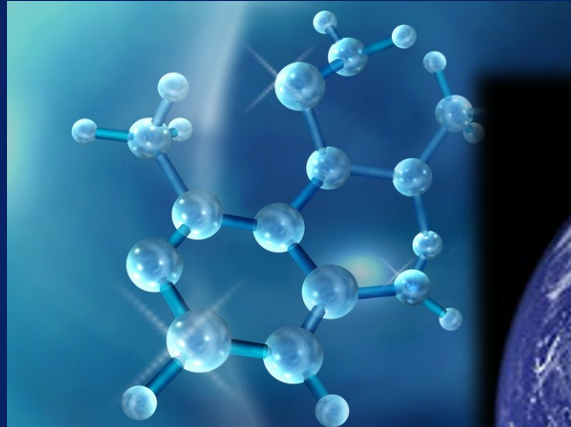


Brainfood for the Plastics Industry

Issue 23.03 – Feb 2023



Market Update

Plastics Feedstocks (Naphtha, Ethane, and Propane)

- Following the slight pull back in crude oil, naphtha prices (CIF Japan) are lower by about 3% over the past two weeks to a price of \$695/mt
- Propane pricing is up 10% to a spot price of 90.5 cents per gallon (cpg) in Mont Belvieu, TX. Propane's higher pricing is in the face of lower crude oil, natural gas, and naphtha pricing over the past two weeks. This rally may be due to some of the extreme cold temperatures experienced across the USA this week with the Northeast seeing temps drop significantly on Friday and Saturday.
- Ethane prices are unchanged around 25cpg from two weeks ago.

Ethylene

- Over the past two weeks, ethylene prices in the Enterprise system in Mont Belvieu, TX decreased by about 2cents per pound (cpp) to a spot price of 19pp.

Propylene

- Physical PGP prices in Enterprise's system are up less than 1cpp to a spot price of 44pp from 43.25cpp on Jan 17th but that doesn't tell the whole story.
- On account of two PDH units not running and multiple crackers that were down from the Texas freeze of late December, spot physical PGP prices rallied all the way up to 50.75cpp on Friday Jan 20th and Monday Jan 23rd. The lack of PGP supply lifted spot prices to levels not seen since May and June of 2022.
- The January 2023 monthly average price for physical PGP in Mont Belvieu, TX will settle around 42.9cpp according to the PetroChem Wire.
- At the time of writing there has not been a settlement for contract PGP for January. We have heard an increase of 9cpp from some folks. In early December 2022, BlueClover was expecting a PGP price rally and calling for contract PGP to settle between 37cpp and 40cpp. Over the past two weeks, BlueClover has revised our January contract PGP price to be up 10cpp to 42cpp.
- The supply constraint has created an immediate need for Jan pounds. Feb PGP trades have been transacting at a price discount to January the past several week. BlueClover expects PGP pricing to trade in the 36cpp to 42cpp range for February. Our guess for the Feb contract PGP settlement is a flat roll over from January.
- According to our friends at the PetroChem Wire, in January 2023 there were 215 mil lbs of physical PGP traded for delivery in the spot month of January. To put in perspective there were 95 mil lbs of physical PGP traded in December 2022 for delivery in December. When polymer grade propylene consumers have their contractual supply reduced or cut off as a result of maintenance or force majeure, these companies go to the spot physical market to buy pounds.

Polypropylene

- PP supply remains tight as we head into February. BlueClover estimates that widespec Homopolymer railcars are transacting in the 46-48cpp range. This is up 10-12cpp from the low pricing many buyers benefitted from in the November-December time frame.
- Polypropylene producers were cutting inventory rates for several months and that was before the January price rally in PGP. There simply is not a lot of excess PP material out in the market at this moment.
- Producers are also sending out PP price increase letters for February on top of whatever the price delta in PGP will be. Producers realize there is less product and while domestic demand may be subdued compared to the 1st half of 2022 it has not fallen off a cliff. It is prudent for producers to look to gain some margin at this tighter supply/demand point within an overall long market.

Crude Oil

- Prices for WTI crude oil are down a little over 3% to a spot price of \$77.63/barrel.
- The energy inflation of 2022, sparked by Russia's invasion of Ukraine, led ExxonMobil to its highest ever annual profit in 2022. The company recorded an annual profit of \$55.7 billion in 2022, trailing only Apple and Microsoft. This comes only two years after a \$22billion annual loss in 2020 as a result of the covid crisis.
- And its not just Exxon seeing great returns in the energy space. The S&P 500 energy sector is up about 37% over the past year compared with the broader S&P 500 which is down about 9% over the same time frame. We have mentioned this in past Brainfoods but the flight of capital away from fossil fuels these past several years has led to lower investment in new capacity yet still increasing demand for these products from the economy. This has led companies with existing fossil fuel assets in the exploration, production, refining, and transportation segments to experience high profits.

Natural Gas

- The fall out in natural gas continues as its down 28% the past two weeks to a spot price of \$2.67/mmbtu. It has been a blood bath for natural gas pricing at its central location in Henry Hub, LA. Natural gas prices are down over 50% the past month and down 72% from the August high of \$9.70/mmbtu. The equivalent drop in WTI crude oil would put crude around \$30/barrel (its currently \$78/barrel)
- The biggest reason of late for this drop is how warm January has been. The average temperature in January 2023 for the USA was warmer than any previous January since 2008.
- Several commodity research analysts, including Goldman Sachs, are calling for the start of another bear market for natural gas prices with lower prices for longer.

Feedstock “Spot” Prices:

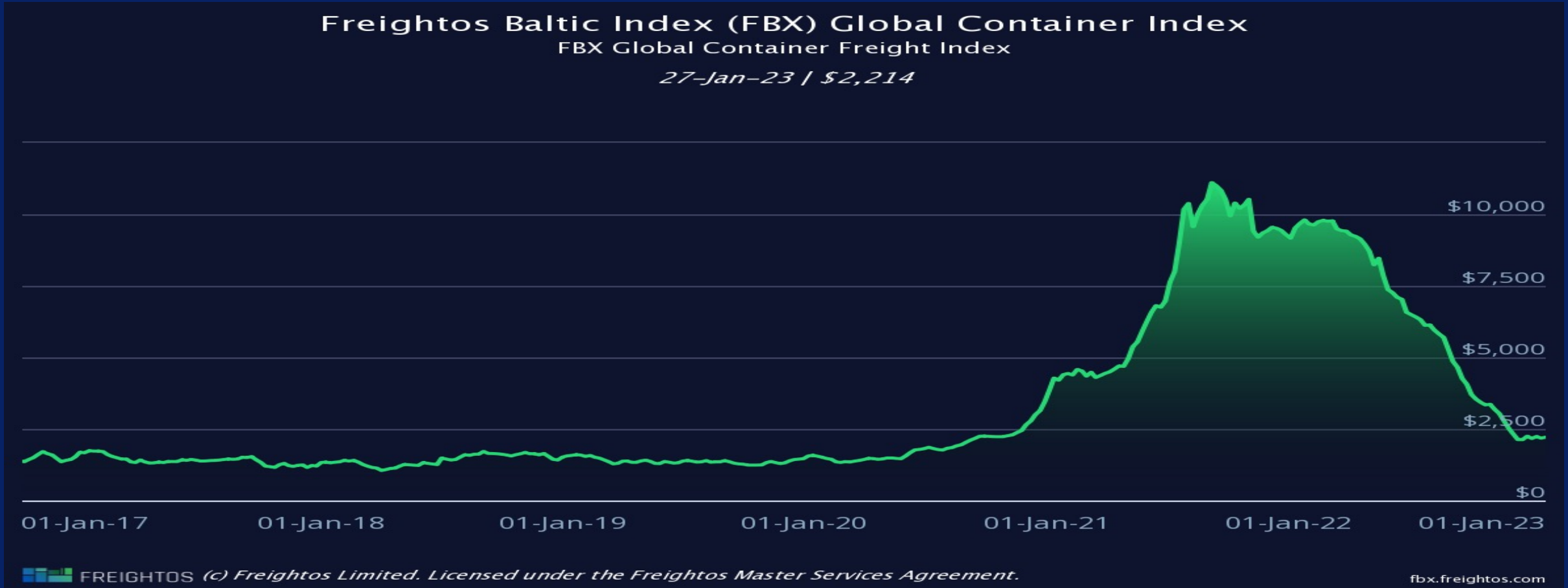
<u>Product</u>	<u>Location</u>	<u>Price as of Jan 31</u>	<u>Price as of Jan 17</u>	<u>Unit</u>
Brent Crude	North Sea, Europe	84.24	86.34	USD/barrel
WTI Crude	Cushing, OK	77.63	80.83	USD/barrel
Natural Gas	Henry Hub, LA	2.67	3.69	USD/MMBtu
Naphtha	C&F Japan	695	715	USD/mt
Ethane	Mont Belvieu, TX	24.75	25.25	Cents/Gal
Propane	Mont Belvieu, TX	90.5	82	Cents/Gal
Ethylene (Enterprise system)	Mont Belvieu, TX	19	21.25	Cents/Lb
PG Propylene (Enterprise)	Mont Belvieu, TX	44	43.25	Cents/Lb

* Sources – CME, Bloomberg

Inventory

HERO GREEN™ (Post Consumer PP Repro)		
Grade	Description	Location
HG7BK1	7 melt HomoPP - Black (SOLD OUT)	Midwest
HG3GR1	3 melt HomoPP - Grey	Midwest
HG16GR1	16 melt HomoPP - Grey	Midwest
HG22GR1	22 melt HomoPP - Grey (ONE LOAD LEFT)	Midwest
HG3GR3	3 melt CoPP 3.6 izod - Grey (TWO LOADS LEFT)	Midwest
HG35GR3	35 melt CoPP 1.4 izod - Grey	Midwest





The above chart shows how pricing for global trade routes of 40ft containers has come back down to reality after two years (2021 and 2022) of crazy prices. The above price index is a combination of different price points across various global trade routes for ocean bound 40ft containers.

Many global companies were forced to raise prices as a result of the jump in shipping costs that hit their businesses. Today these costs have come back to close to pre-Covid levels so hopefully global container shipping costs will no longer be a reason for consumer inflation.



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