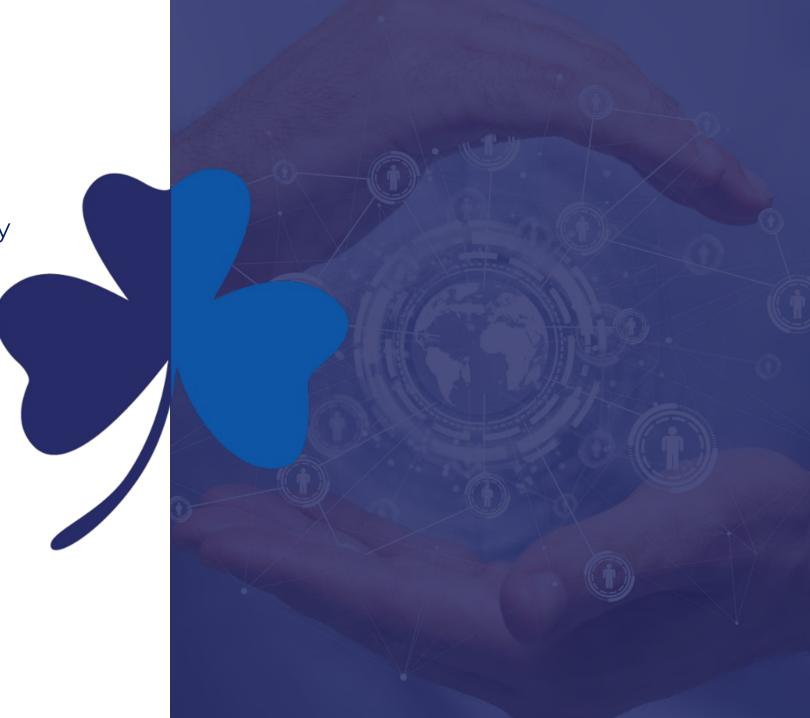
BlueClover

All Things PP

Brainfood for the Plastics Industry

Issue 23.21 – Nov 2023



Market Update

Plastics Feedstocks (Oil, Naphtha, Propane)

- Since our last report, oil prices are significantly lower, naphtha is slightly lower and propane is unchanged. So, all upstream PP feedstock streams are either flat or lower in price.
- WTI crude oil prices are lower by over 9% the past two weeks to \$77.48 /barrel. WTI crude oil prices are now 13% lower than its mid
 October peak. Pricing is now the lowest it's been since the end of July.
- Global demand for oil remains subdued. Demand is not able to consume the oil supplied to the market by the USA and OPEC. OPEC (led by Saudi Arabia) crude oil exports are up by about 1 million barrels per day since August because of lower demand in the Middle East.
- Naphtha prices (CIF Japan) are 3% lower to \$647/mt
- Physical propane prices in Mont Belvieu, TX are unchanged since our last report at 65 cents per gallon (cpg).

Propylene

- Physical PGP prices are up over 6% to a spot price of 48.25cpp from 45.25cpp on Tuesday Oct 24th. Physical PGP prices are up over 19% the past four weeks when pricing was at 40.5cpp on October 10th.
- The October contract PGP market settled up 4cpp to a settlement price of 43cpp. This surprised us at BlueClover as we would have expected the contract PGP price to increase by 5cpp. The October cal average for physical PGP as reported by PetroChem Wire was 43.34cpp. So last month the physical cal average was higher than the contract PGP which does not happen too often.
- BlueClover has been incorrect in that we expected pricing for PGP to top out in the low 40s. In late September we wrote that "PGP pricing may rally into the low 40s in October, but we expect pricing to slide back into the 30s in November and December". In reality, PGP pricing rallied into the upper 40s between the end of October and the first week of November and has yet to reverse course. Also from a timing perspective, its now 8 days into November and the pricing remains elevated. Therefore the duration of higher PGP pricing has lasted longer than we had expected.
- BlueClover still believes that PGP pricing will slide lower to finish the year. If that happens it will be sliding from a higher price point than we thought in previous weeks. Reasons we are expecting a price slide in PGP to finish the year is that demand for PP in North America remains weak as compared to August and September and that upstream pricing in propane and naphtha continue to trend lower.
- BlueClover is revising our estimates for Nov Contract PGP to 43cpp (up from 38cpp in our last report) and December contract PGP at 39cpp (up from 36cpp in our last report).

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Market Update

Polypropylene

- Given another pop in PGP pricing, the pricing imbalance between what suppliers are requesting and what customers can pay has grown wider..
- Same as last week:
- "PP producers feel PGP prices moving higher which impacts their cost of production and are therefore raising prices for widespec and prime PP. Also we are coming off a slightly reduced supply period where certain PP reactors were down. These are the primary reasons for the higher PP price offers out there today."
- "However the demand from the buy side remains weak." Some customers still have cars on their tracks from September purchases and are in a solid inventory position for the next 30 days and are hoping to source cheaper material in December.

Feedstock "Spot" Prices:

<u>Product</u>	<u>Location</u>	Price as of Nov 7	Price as of Oct 24	<u>Unit</u>
Brent Crude	North Sea, Europe	81.76	89.79	USD/barrel
WTI Crude	Cushing, OK	77.48	85.45	USD/barrel
Natural Gas	Henry Hub, LA	3.14	2.97	USD/MMBtu
Naphtha	C&F Japan	647	665	USD/mt
Ethane	Mont Belvieu, TX	25.5	26.25	Cents/Gal
Propane	Mont Belvieu, TX	64.75	65.75	Cents/Gal
Ethylene (Enterprise system)	Mont Belvieu, TX	20	21.5	Cents/Lb
PG Propylene (Enterprise)	Mont Belvieu, TX	48.25	45.25	Cents/Lb

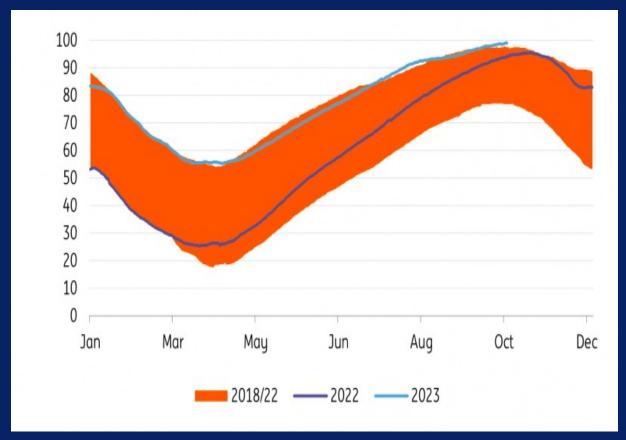
Repro Supply Options

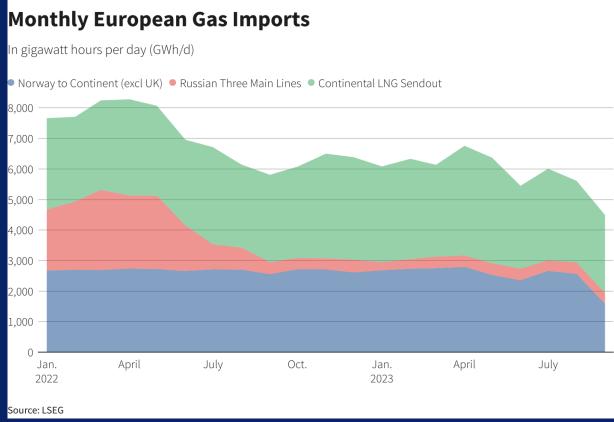


Still working on it..the repro line card that should be available in our next report.



Trader Toolbox – European Gas Storage at Record Levels (% Full)





One year ago, European nations were not as prepared to deal with Russian natural gas supplies being shut off. This year the region is in better shape with more storage (see graph above), lower overall energy prices and new sources of fuel.

The above graph on the left represents the average % of storage for natural gas that is filled in European storage facilities within the 2018 – 2023 range. You can see that as of early October, European storage of Natural Gas had reached 100% for the first time in the last five years.

The European nations do not want to be held hostage by Russia for their gas supplies and building significant inventories is a way to help reduce any supply shocks throughout the winter. Also, you can see in the chart in the top right how much Europe has reduced its reliance on Russian natural gas (the pink area).

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