

EnerCom Dallas Apr 19, 2023

Crude Refining Capacity
Natural Gas Storage Capacity

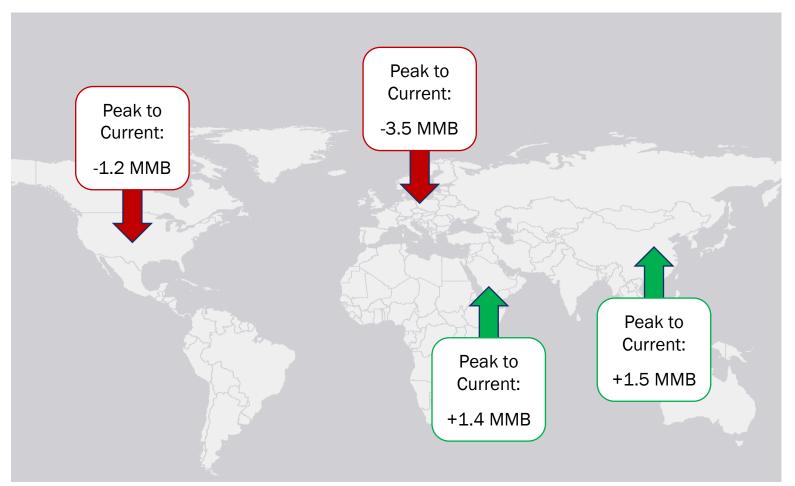
Today's Volatility Drivers

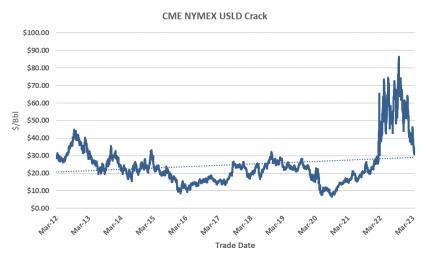
Disclaimer

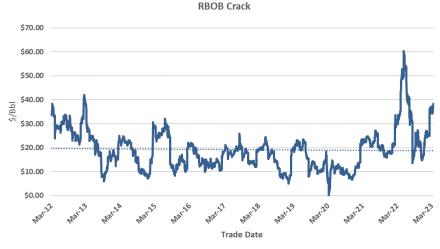
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Global Refining Capacity & Domestic Crack Spreads







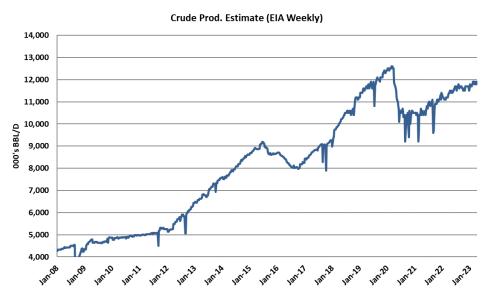


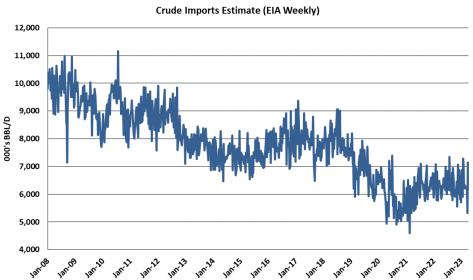
WTI Term Structure Volatility

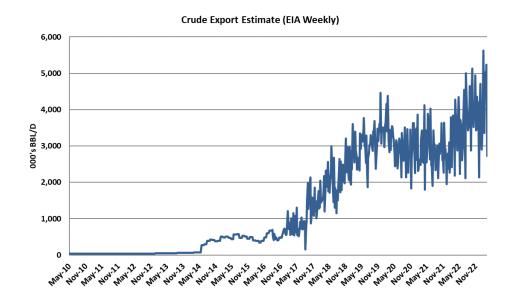




Domestic Production/Exports/Imports



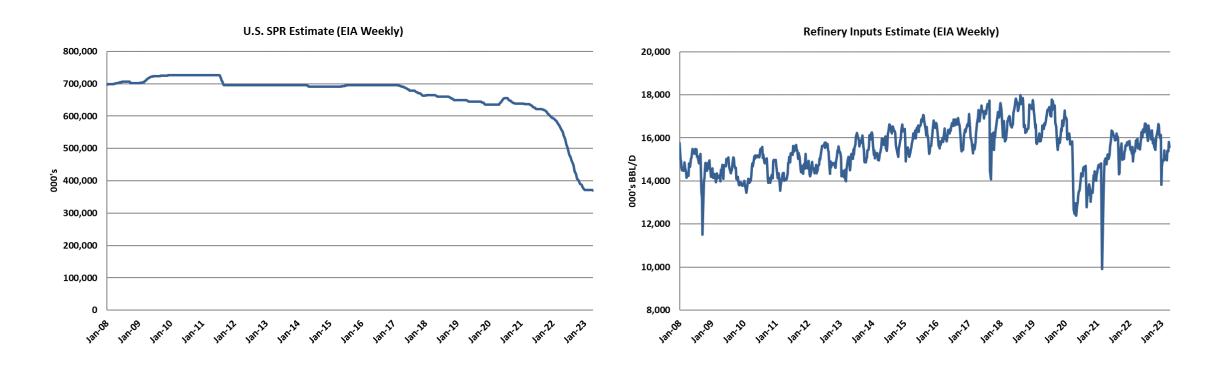




 With domestic production 500K Bpd or so away from the historical high water mark, exports maxing out, and limits to how much import volume we can offset, does the domestic market really need more crude production?



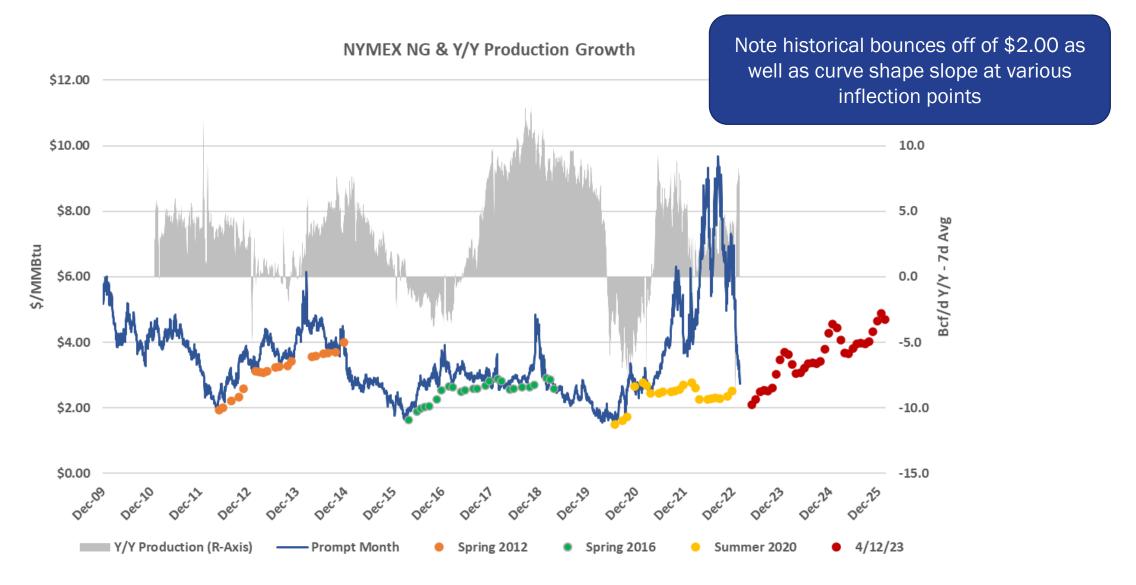
SPR & U.S. Refinery Inputs



• With limited refining capacity SPR withdrawals are either A) a political stunt or B) aid foreign markets as much or more than domestic markets

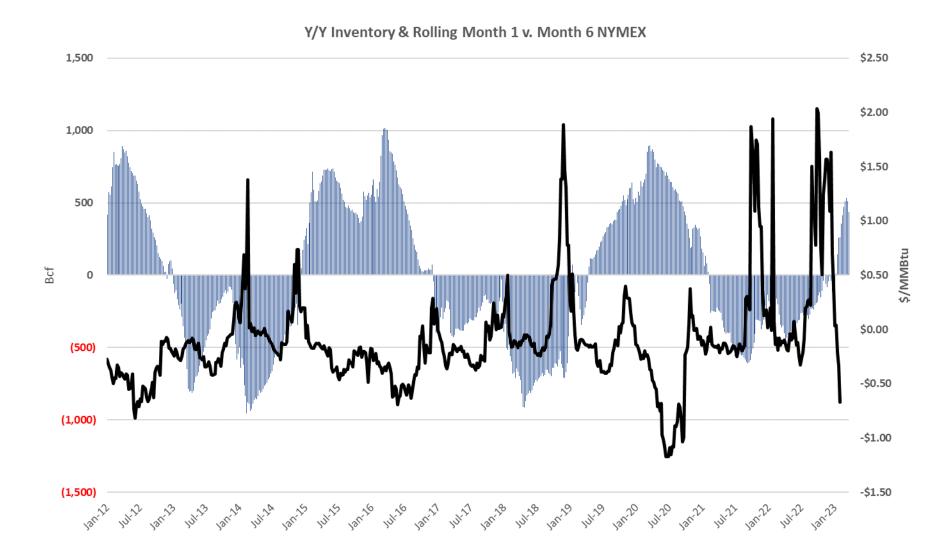


Historical Price & Production Responses



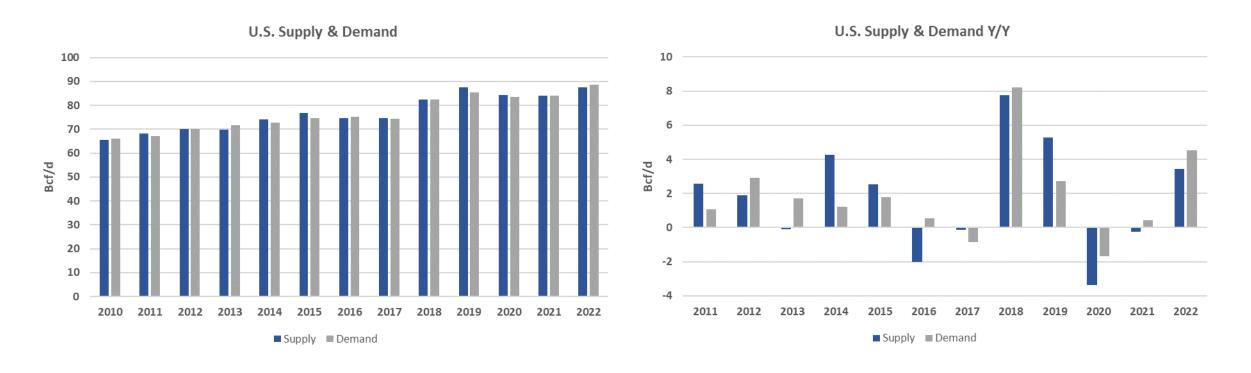


Year-Over-Year Inventory & Curve Shape





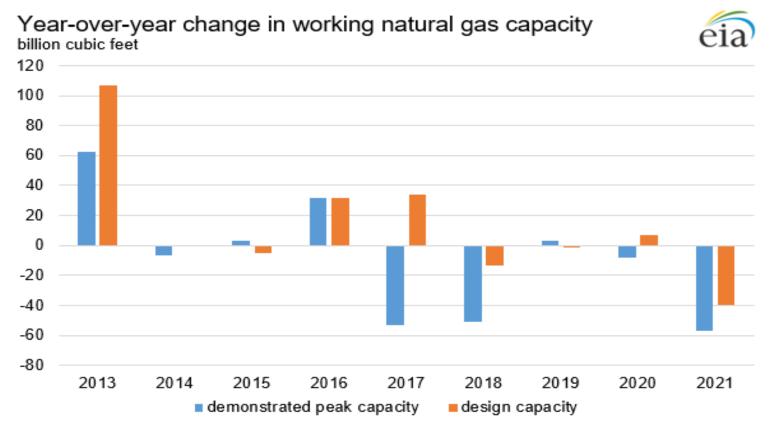
Domestic Supply and Demand



• Supply in the charts above include domestic production netted with collective net imports/exports (from Canada, to Mexico, and to global markets via LNG)



Storage Capacity Changes



Data source: U.S. Energy Information Administration, Form EIA-191, *Monthly Natural Gas Underground Storage Report, Underground Natural Gas Storage Capacity Report* **Note:** Measures of capacity reflect final revised values as published in the *Underground Natural Gas Storage Capacity Report*.

- While domestic supply and demand of natural gas continue to climb storage capacity is contracting
- Where will we put the volumes when we need to and where will we get them from when what is in the ground is not enough?



Managing Exposure in a Hyper Volatile Environment

- Have clearly defined objectives and avoid mitigating risk based on a price view
- Understand what term structure, vol surface, and market liquidity opportunities best suit defined risk mitigation strategy
- Obtain the authority to re-orient positions quickly without elongated decision time
- Do not assume benchmark risk mitigation satisfies expected cash flow management
- Have a fundamental understanding of upstream/downstream/ancillary markets
- Buckle your seatbelt

Questions to Consider

- Do I have substantial asymmetry between my benchmark and basis/diff hedges?
- Am I certain my financial risk strategy aligns with my physical sale/procurement process?
- Do I have access to enough information to ascertain when/if inflection points are approaching?
- Is my credit capacity and counterparty roster capable of allowing for swift position changes?
- Is my seatbelt securely fastened?

