

TO THE MOON!
**Extreme Tightness Setting Up
Natural Gas Markets for
Explosive Winter Pricing**

**LDC Gas Forums – Midcontinent
September 14, 2021**

Natural Gas Intelligence

40 YEARS OF MARKET PRICE TRANSPARENCY

- **Established in 1981**
- **Debuted the industry's first** natural gas wellhead price table in 1983
- **Weekly & Bidweek Gas Price Indexes** services launched (1988)
- **Daily Gas Price Index** launched (1993)
- **Shale Daily** launched (2010)
- Started receiving trade data from the **Intercontinental Exchange** (2008)
- Debuted **NGI's Forward Look** (2012)
- **Mexico Gas Price Index** launched (2017)
- **LNG Insight** launched (2019)
- **NGI (2020) offers:**

- **Forward Curves**
at 60 Hubs out 10 years
- **Daily Indexes**
at 170 Hubs
- **Weekly Averages**
at 170 Hubs

- **Bidweek Indexes**
at 142 Hubs
- **Preliminary Spot Prices**
at 158 Hubs
- **Mexico Gas Prices**
at 27 Hubs + Flow Data

Bidweek Data

First-of-Month natural gas price indexes for 150 locations in North America

Forward Look Data

Monthly forward curves out 10 years (updated daily) at 60 key natural gas hubs

Daily Data

Natural gas spot price indexes for 170+ locations in North America

Mexico NatGas Price & Flow Data

Mexico's trusted and transparent natural gas pricing and pipeline flow data

Weekly Data

Weekly averages of spot natural gas price indexes for 170+ locations in North America

Daily Preliminary Prices

Indicative natural gas price data service based on actual trade data

LNG Data

Key LNG data across the globe that may influence demand for North American natural gas exports

Bidweek Preliminary Prices

Indicative natural gas bidweek pricing based on actual trade data

Key Members of NGI's Price Index Team

Dexter Steis – Executive Publisher, NGI (Sterling, VA)
dexter.steis@naturalgasintel.com (703) 318-8848

Patrick Rau, CFA – Director, Strategy & Research; Price Editor, NGI (New York)
pat.rau@naturalgasintel.com (347) 385-8412

Leticia Gonzales – Price & Markets Editor, NGI (Sterling, VA)
Leticia.gonzales@naturalgasintel.com (713) 502-7085

Nathan Harrison – Senior Systems Engineer, NGI (Sterling, VA)
nathan.harrison@naturalgasintel.com (703) 318-8848

Our Mission & Thought Leaders

Natural Gas Intelligence serves as a trusted information source in the North American natural gas market, helping businesses across the value chain understand market fundamentals, news events and price discovery to aid in their business decisions.

We leverage a deep roster of thought leaders across the US, Canada and Mexico and collaborate with our clients to provide an array of business intelligence products and services to the global energy marketplace.



Calgary



Minneapolis
Sioux Falls



Pittsburgh



New York



Washington



Houston



Mexico City



Santiago

Today's Agenda

- What is the State of the U.S. Natural Gas Market & How Did We Get Here?
- Storage is Running Out of Time to Refill
- A Look at Natural Gas Prices
- Competition is Heating Up for U.S. Gas This Winter
- Q&A

How We Got Here & Where We're Going

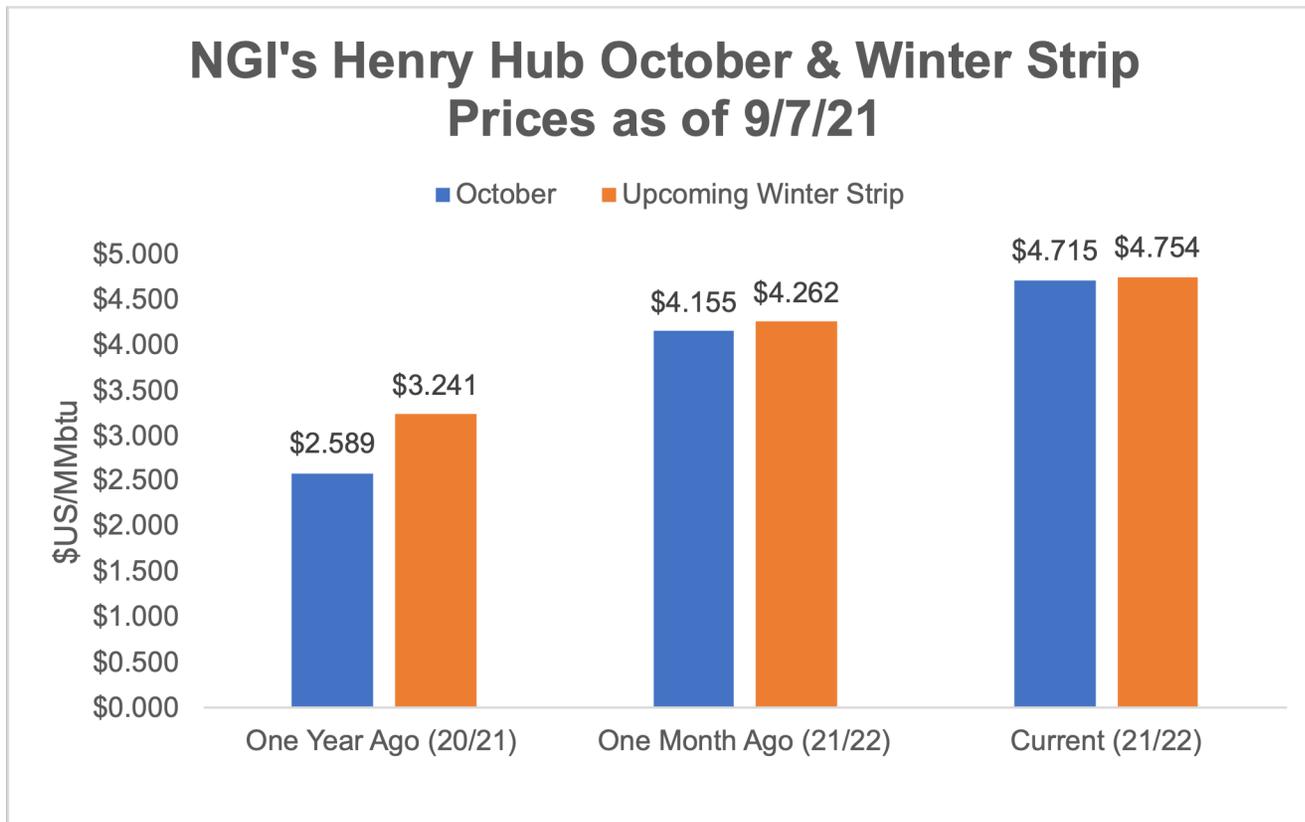
Weather

Storage

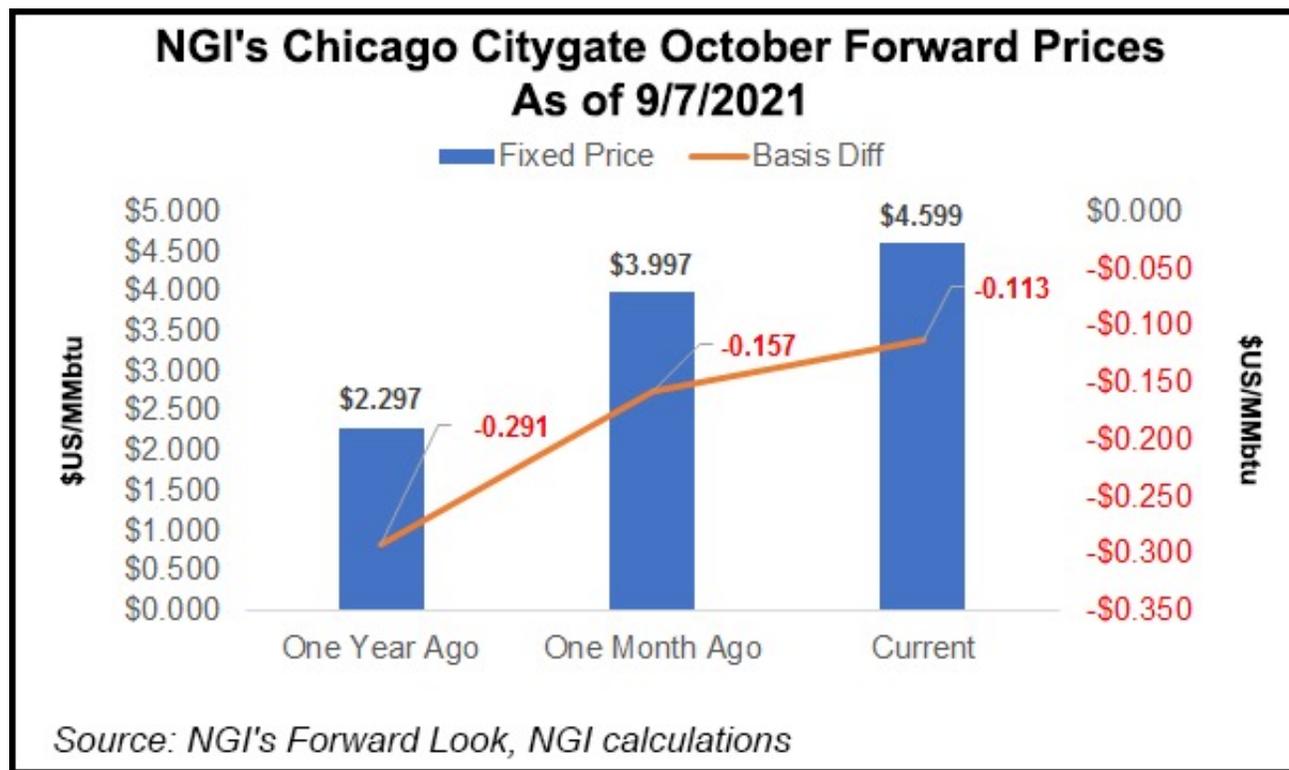
Exports

Industrial

All Eyes on Henry Hub



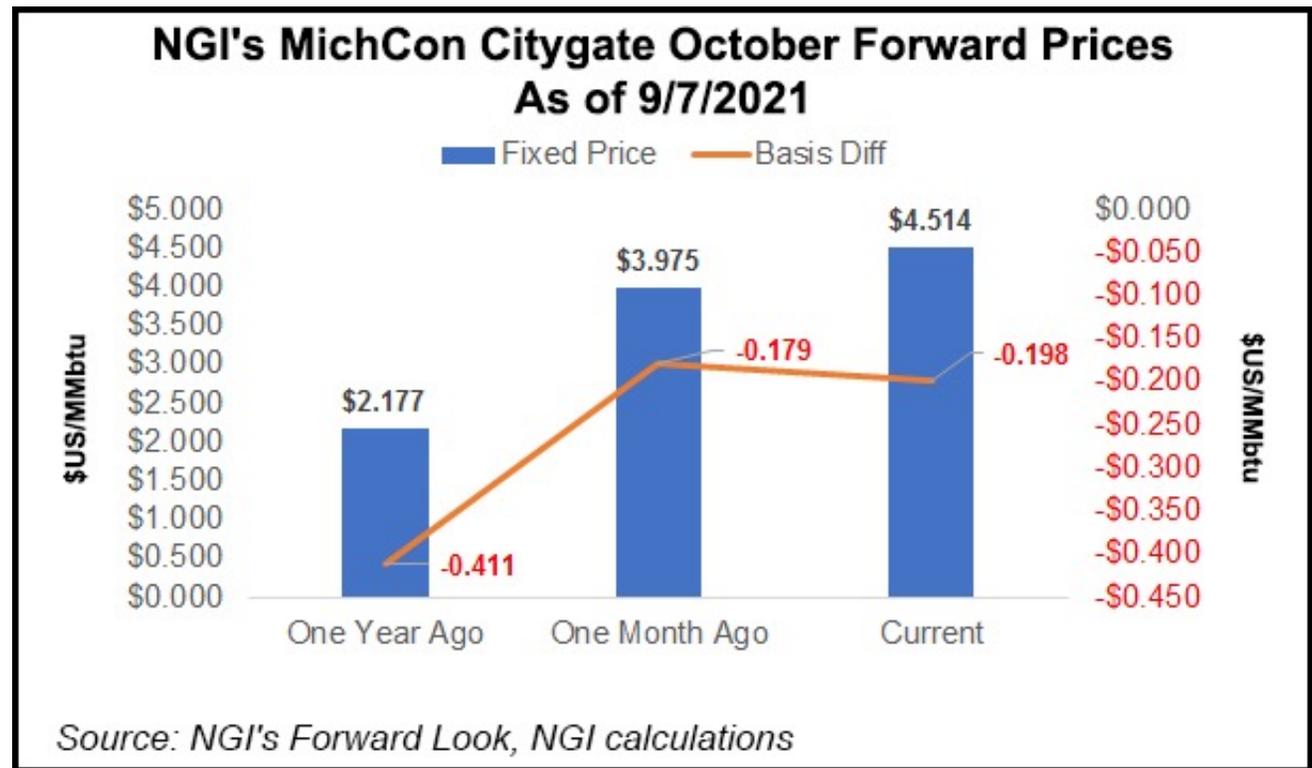
Chicago Citygate October Pricing – Foreshadowing of Winter Volatility?



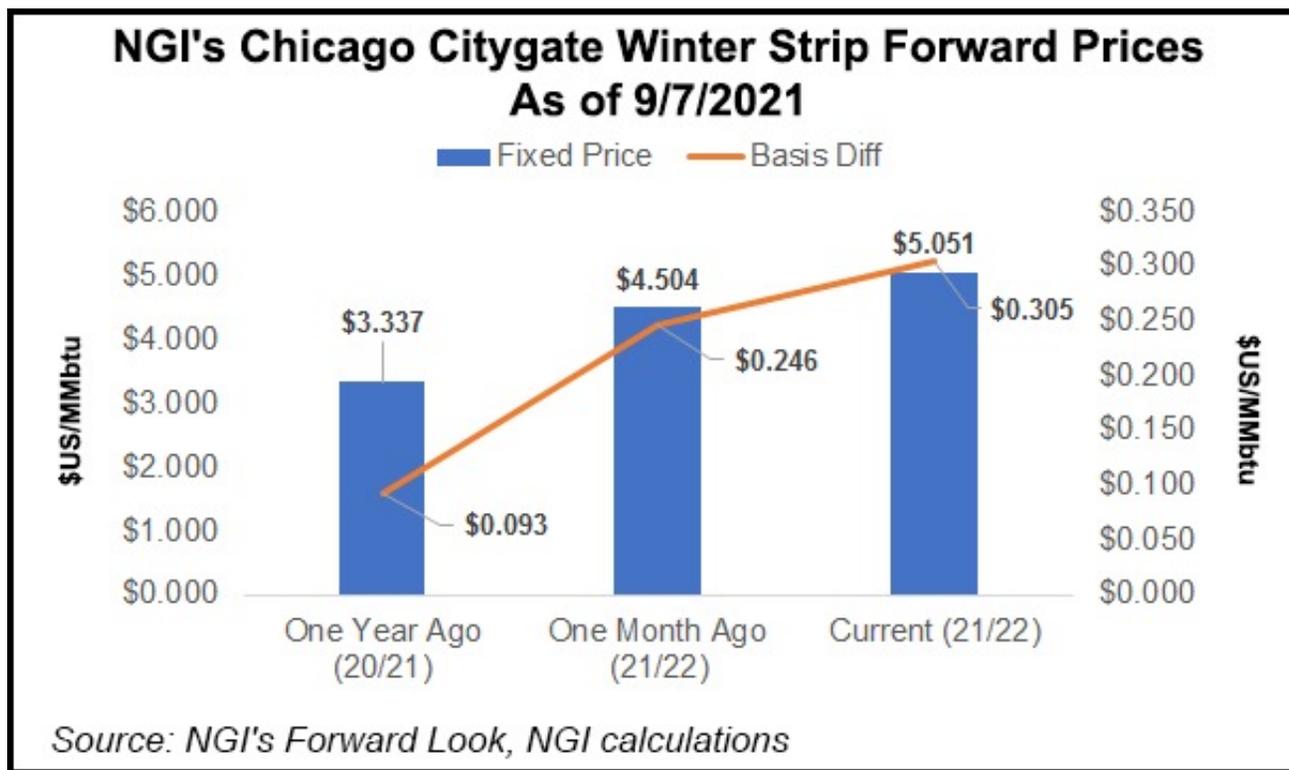
- Hot summer driving strong demand
- Midwest storage 3% below the five-year avg. and 11% below last year

MichCon Citygate – Second Verse Same as the First

- Power burns strong despite higher prices
- Gas-to-coal switching fall short of expectations

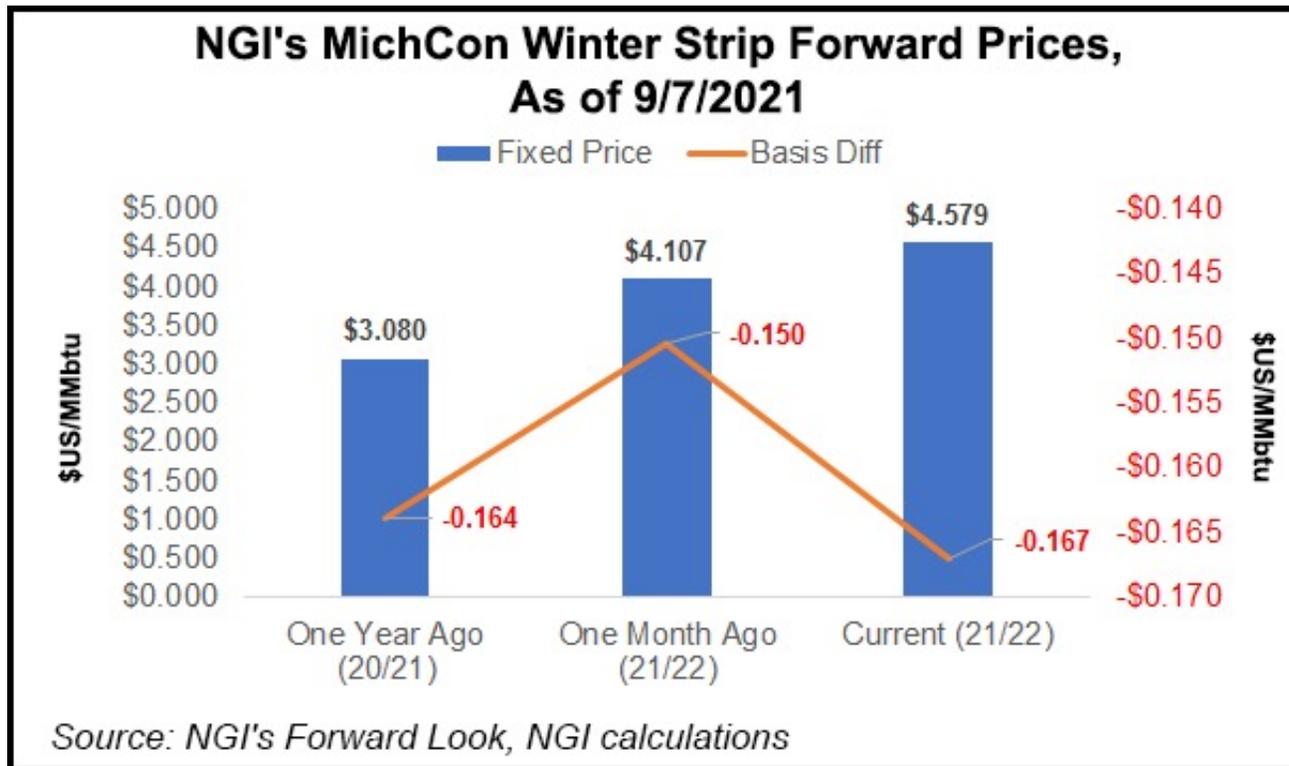


Fast & Furious Winter Pricing a Sign of Extreme Swings Still to Come

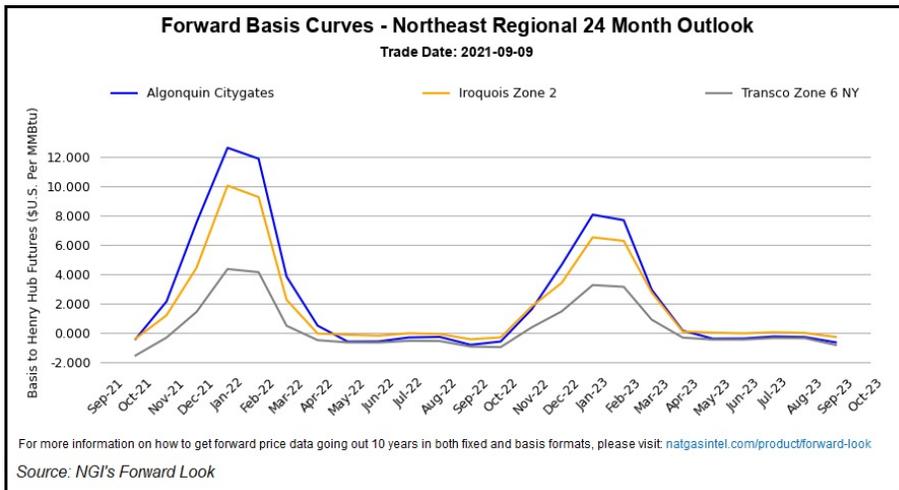
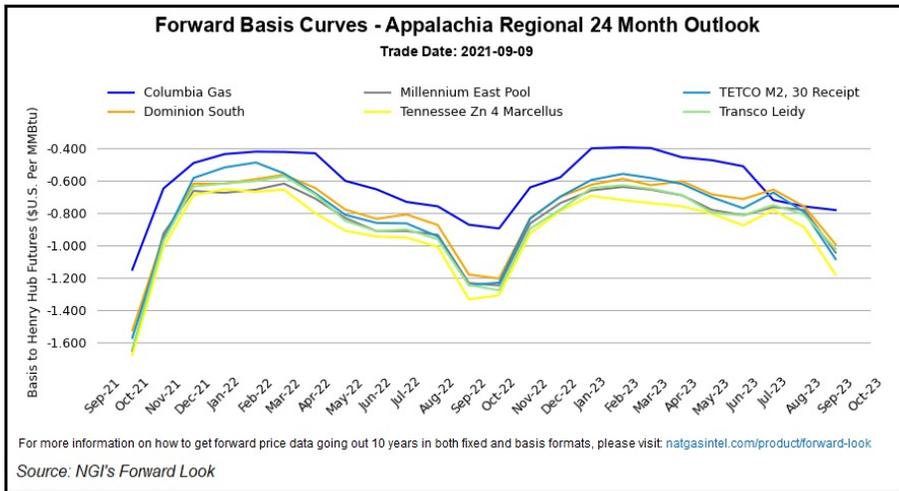


- Early cold snaps always spook the market – even if just briefly
- Production stuck in low 90s Bcf/d, but rig count rising

Big Price Gains ... and Risks for More to Come



- Production freeze-offs
- Another extreme weather event



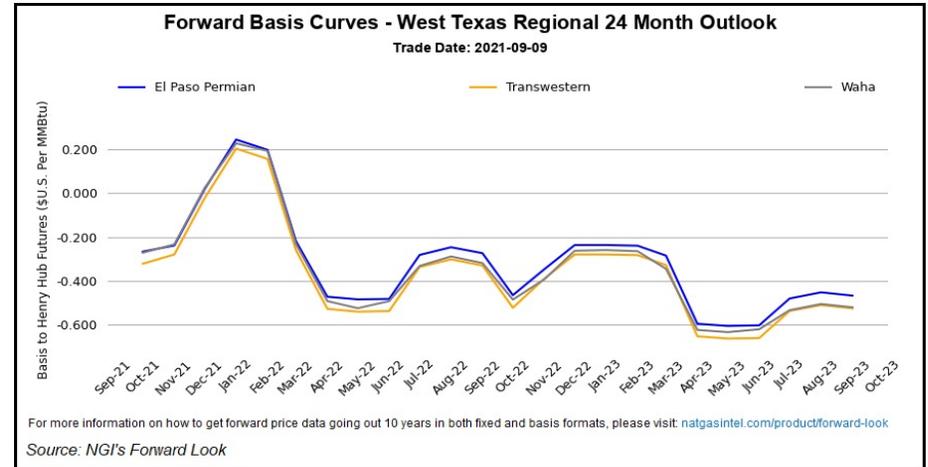
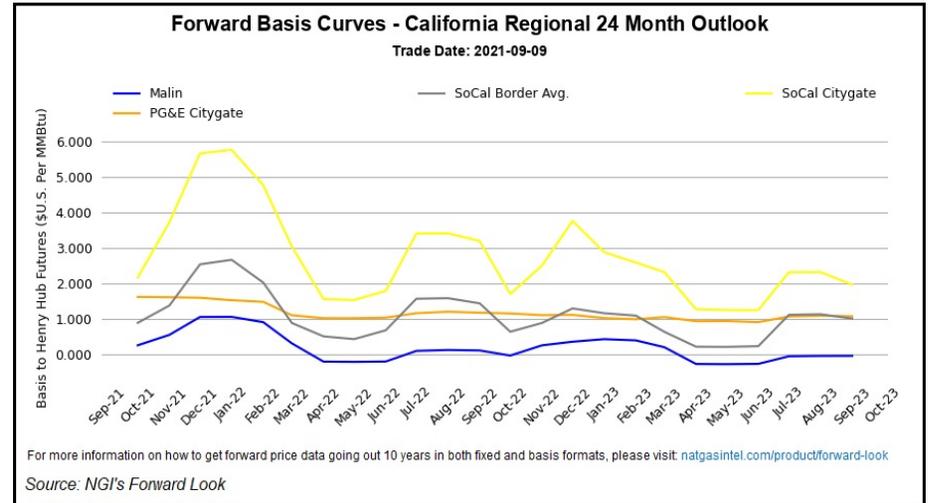
Northeast winter premiums could be steeper than usual this year

- Storage sitting far below normal
- Lingering heat preventing bigger refills
- Producers sticking to their words about staying within cash flow and returning money to shareholders – no more growth for growth's sake

For more information on our forward price curves, please refer to <https://natgasintel.com/product/forward-look>

California markets seeing massive price swings this summer

- Extreme heat setting records across the state
- Leading to record low water levels at key reservoirs
- Hydro curtailments resulting in increased power imports – boosting gas demand
- Pipeline restrictions = more volatility

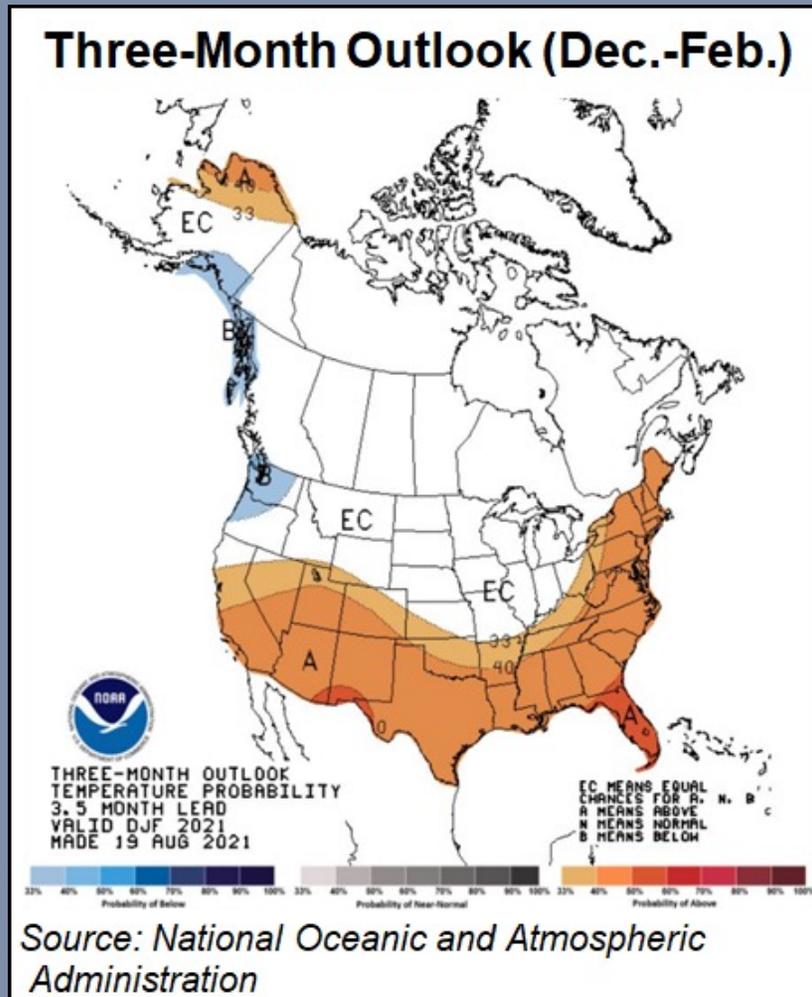


For more information on our forward price curves, please refer to <https://naturalgasintel.com/product/forward-look>

Peak Winter Weather Forecast

As of late August, NOAA was predicting a relatively mild winter for the upcoming season.

But as we saw this past winter, it just takes one anomaly to throw a major curveball to the U.S. gas markets.

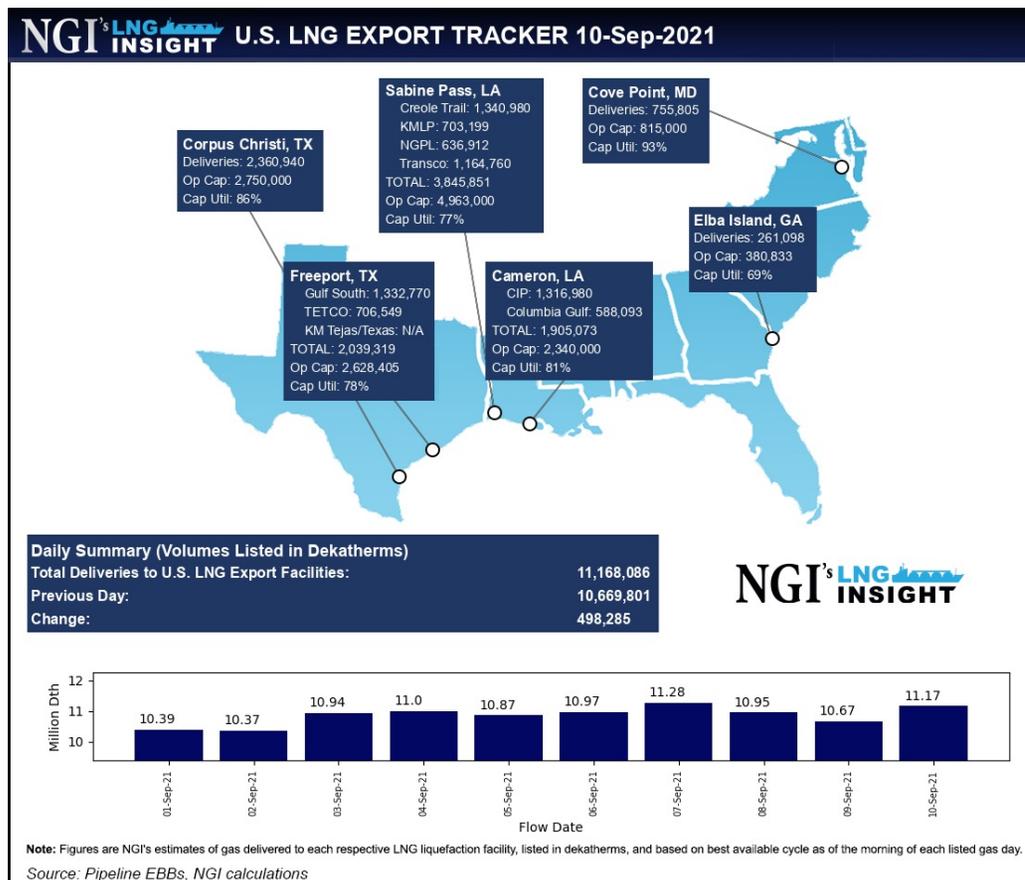


U.S. LNG Exports Make Full Recovery

U.S. LNG export facilities are back near all-time highs thanks to:

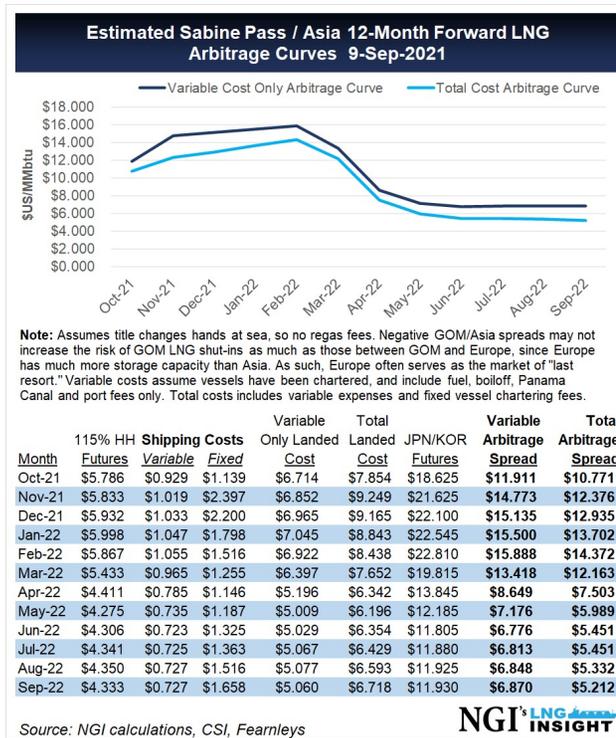
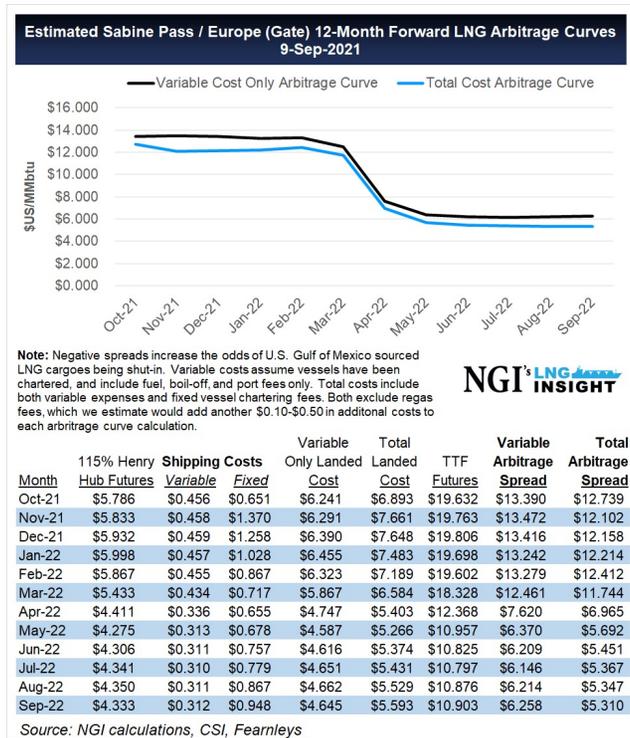
- Low global inventories after a cold winter
- Hot summer driving strong demand
- Supply constraints

Demand to grow even more in the coming months as Sabine Pass Train 6 & Calcasieu Pass come online



For more information on our LNG data suite, please refer to
<https://www.naturalgasintel.com/product/lng-datafeed/>

U.S. LNG – Show Me the Money!

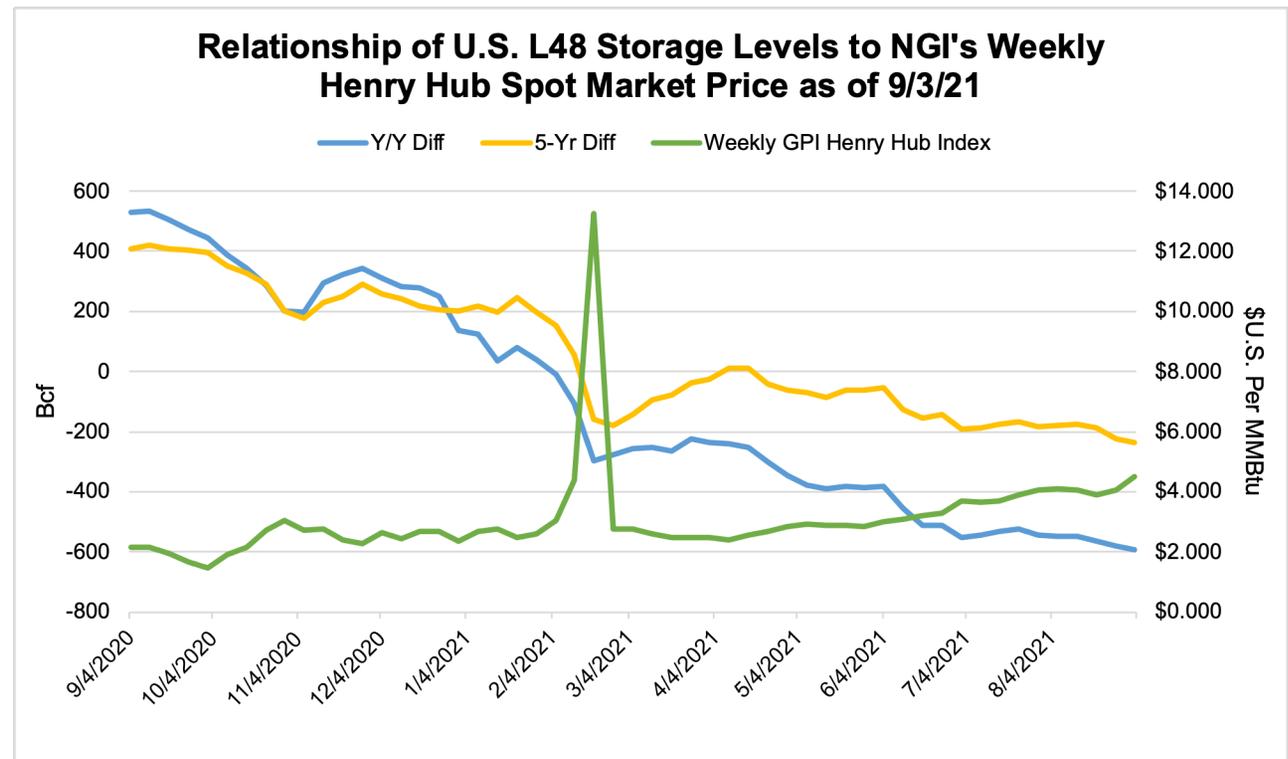


- This is what happens when:
 - a cold winter drains global inventories
 - a hot summer prevents adequate refills
 - maintenance and other constraints limit supply

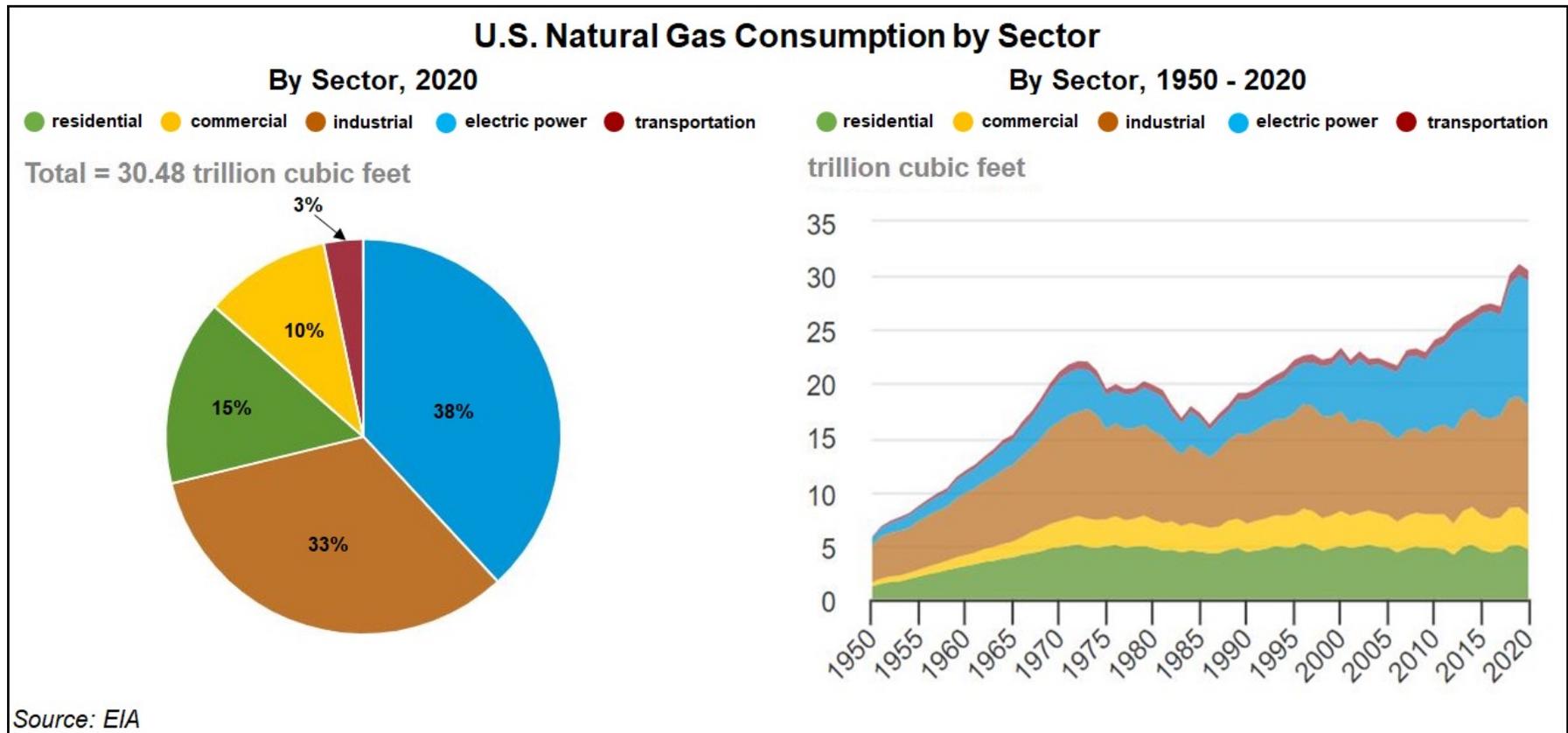
For more information on our LNG data suite, please refer to <https://www.naturalgasintel.com/product/lng-datafeed/>

The Clock is Ticking for Storage Refills

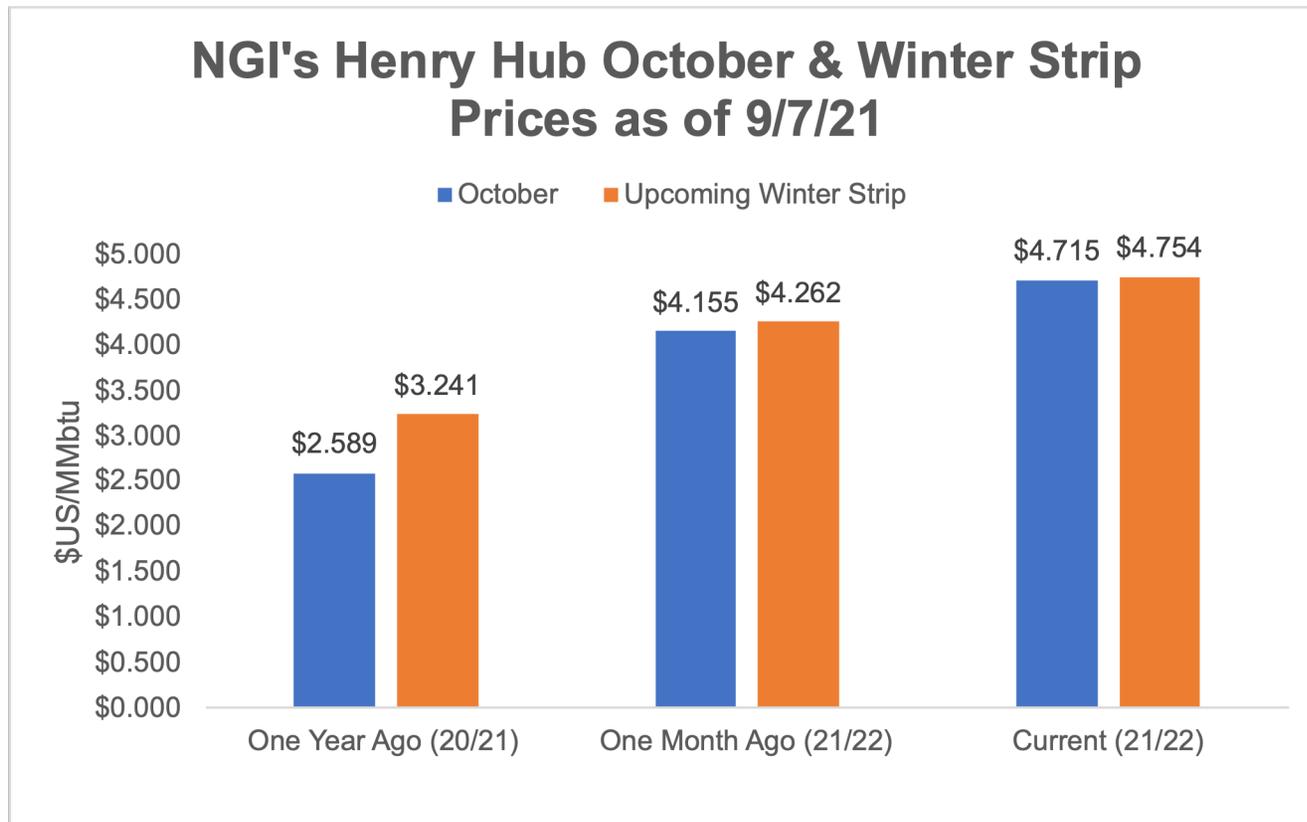
- We're nearly three-quarters of the way through the traditional injection season, and yet we've only been able to refill a little more than 50% of how much gas we pulled out last winter.
- At this rate, the U.S. gas market is looking at end-of-October inventories near 3.4 Tcf, far below "comfortable" levels ahead of winter.



Industrial Demand Recovering from 2020 Slump



All Eyes on Henry Hub



NGI Price Indexes Help You Do Business Better



NGI is Using Technology to Plan for the Future

The screenshot shows the NGI Trade Capture portal. At the top, there is a dark blue header with the text "NGI Trade Capture" on the left and "nate" and "Logout" on the right. Below the header is a sidebar with navigation links: "Dashboard", "Profile", "My Reports", and "API Docs". The main content area is titled "My Dashboard" and contains a welcome message: "Welcome to NGI's Price Reporting Portal. Using this portal and accompanying API, you can view the reports you have submitted and find the documentation for the API. If you have any questions or issues, please reach out to prices@naturalgasintel.com". Below the message are three featured items, each with a thumbnail image and a "View" button: "View Price Methodology" (with a thumbnail of a document titled "NGI's Price Index Methodology, Point-By-Point Descriptions & Code of Conduct Statement"), "View Publishing Calendar" (with a thumbnail of a "2021 PUBLISHING CALENDAR" table), and "View Notices" (with a thumbnail of an "NGI NATURAL GAS INTELLIGENCE" notice card).

Conclusions

- Explosive natural gas price action over the past month may be just the tip of the iceberg as to what's in store this winter
- Even though storage was in line with the five-year average at the start of the injection season, a hot summer has prevented big refills
- Producers have not responded to higher prices, but the rig count is rising
- LNG exports are tracking near record levels, with more capacity coming soon
- The current mild winter outlook may be the gas market's saving grace – but if it's wrong, \$5 gas could be a bargain

Questions

- For questions on North American natural gas pricing and markets coverage, please email Leticia Gonzales at Leticia.Gonzales@naturalgasintel.com or call 713.502.7085.
- For questions on contributing to NGI's price indexes, please contact Nathan Harrison at Nathan.Harrison@naturalgasintel.com

