



# U.S. NATURAL GAS FUNDAMENTALS

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# BIO



## **MICHAEL (MIKE) GEHRING, CFA**

### **Director, Portfolio Management & Analytics**

In his role as Director, Portfolio Management & Analytics, Mike leads the team focused on developing customized forward hedging solutions for TEA's Members and Partners in the East. Mike is also behind the growth and potential of TEA MarketInsights, our in-house fundamentals-based energy market analysis, which is exclusively for TEA Members and Partners.

Prior to joining TEA in March 2022, Mike spent ~15 years at ExxonMobil, serving a variety of commercial and leadership roles in both the upstream and downstream businesses including gas and LNG, power, international tankers, and capital markets. Immediately prior to leaving ExxonMobil, Mike ran their U.S. natural gas and power derivatives trading team.

Mike holds a bachelor's degree in chemical engineering from the University of Florida and is a Chartered Financial Analyst.

Mike enjoys outdoor activities, spending time with his wife, and teaching his three children to sell high and buy low.



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MARKET INSIGHTS

**EXPECT VOLATILITY & PREPARE**

- BULLISH VOLATILITY THESIS
- A TRIP WAY DOWN MEMORY LANE
- GAS PRICE FACTORS / WHAT HAPPENS NEXT?

# ENERGY MARKETS VOLATILITY SINCE COVID

PAST 36 MONTHS SHOULD CHANGE HOW WE THINK ABOUT PRICE RISK

# FROM FEAST TO FAMINE TO FEAST TO... ?

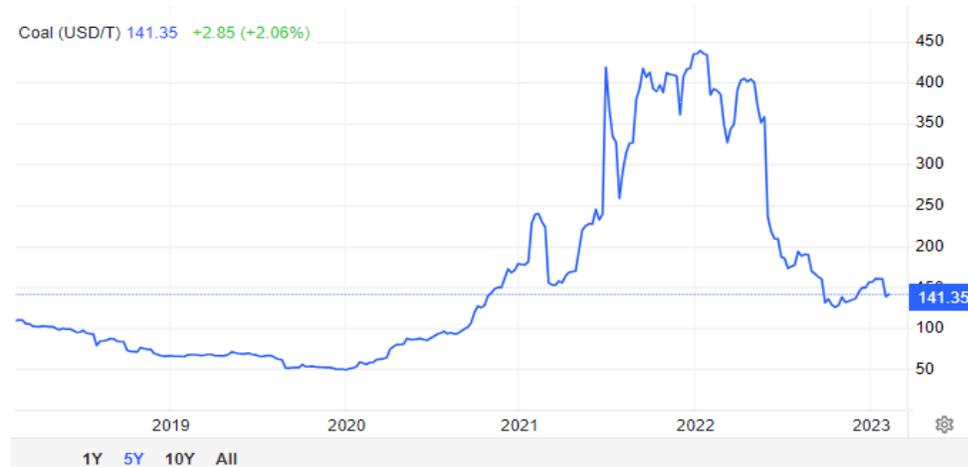
Henry Hub



LNG



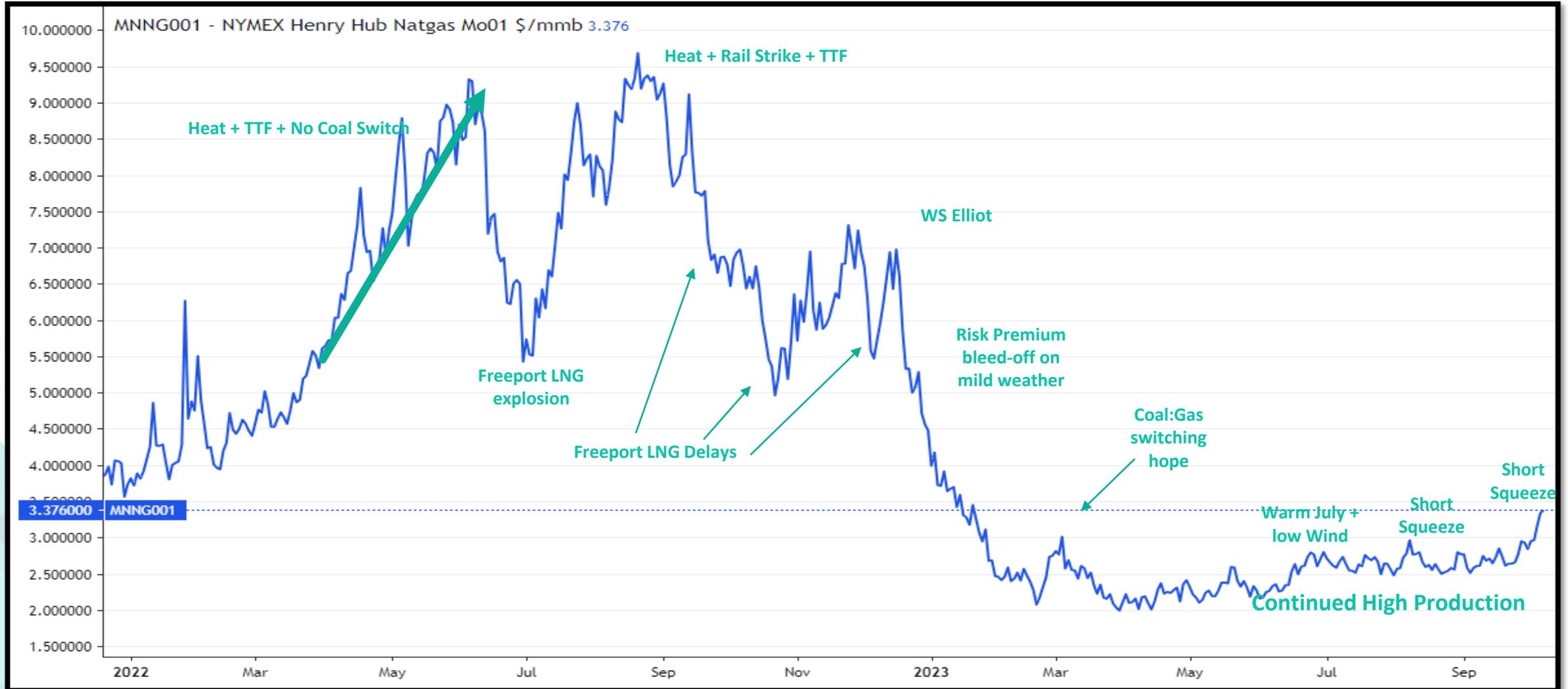
International Coal



EU Power

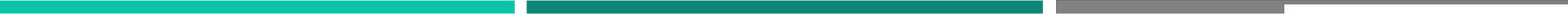


# WHAT HAPPENED LAST YEAR



# EXPECT VOLATILITY TO CONTINUE...

- Energy supply chains are tighter than ever as the world transitions from **fuel on the ground** (coal, oil) to **fuel in the pipe** (gas) and **fuel in the sky** (solar / wind)
- Small kinks to **just-in-time supply chains** have amplified price impacts
- The **more exposed you are to spot price**, the **larger a short squeeze** will be
- U.S. **physical energy storage lags** demand growth (e.g. gas storage vs LNG exports)
- **Government interventions** are becoming **more common** and have a “butterfly effect”
- Commodity suppliers have realized **scarcity pricing makes more money** than producing to marginal cost
- **OH.... NOT TO MENTION.... COAL RETIREMENTS AND MORE LNG EXPORT AMPLIFY VOLATILITY RISK**



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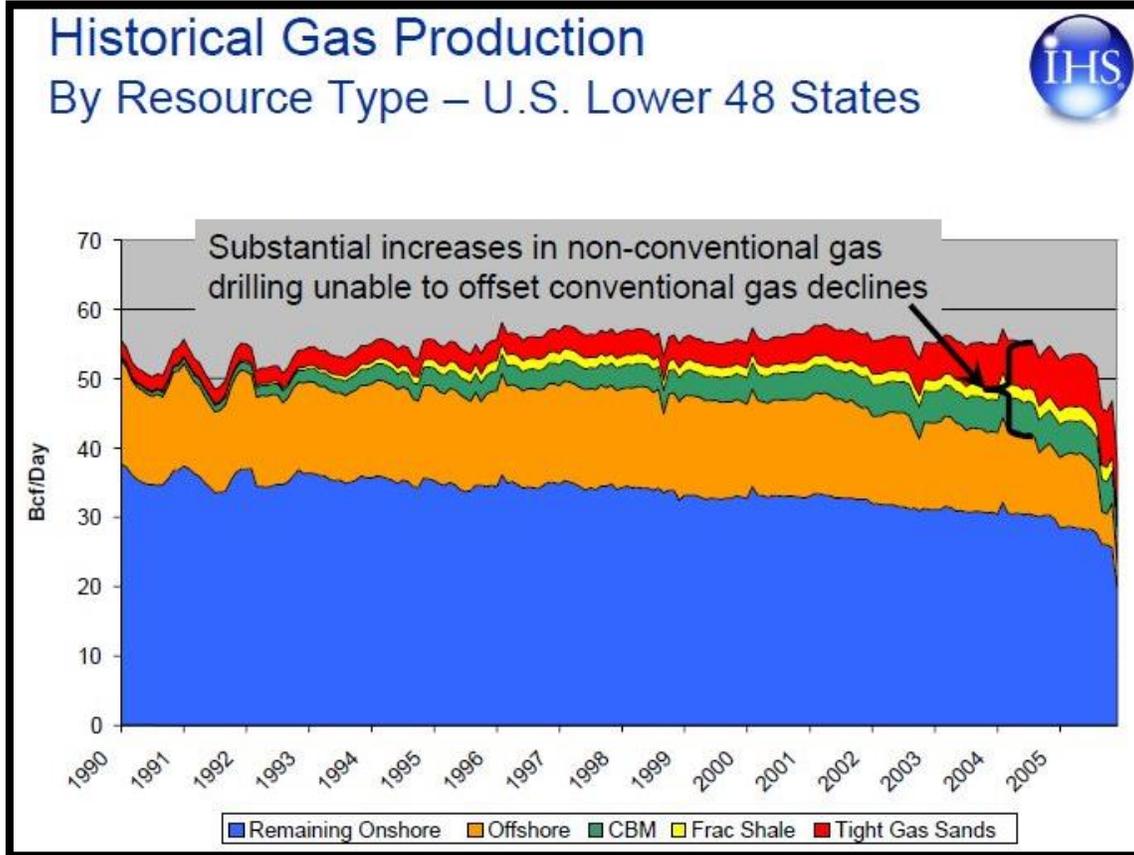
MARKET INSIGHTS

**#1 – PRICE VOLATILITY WILL CONTINUE**

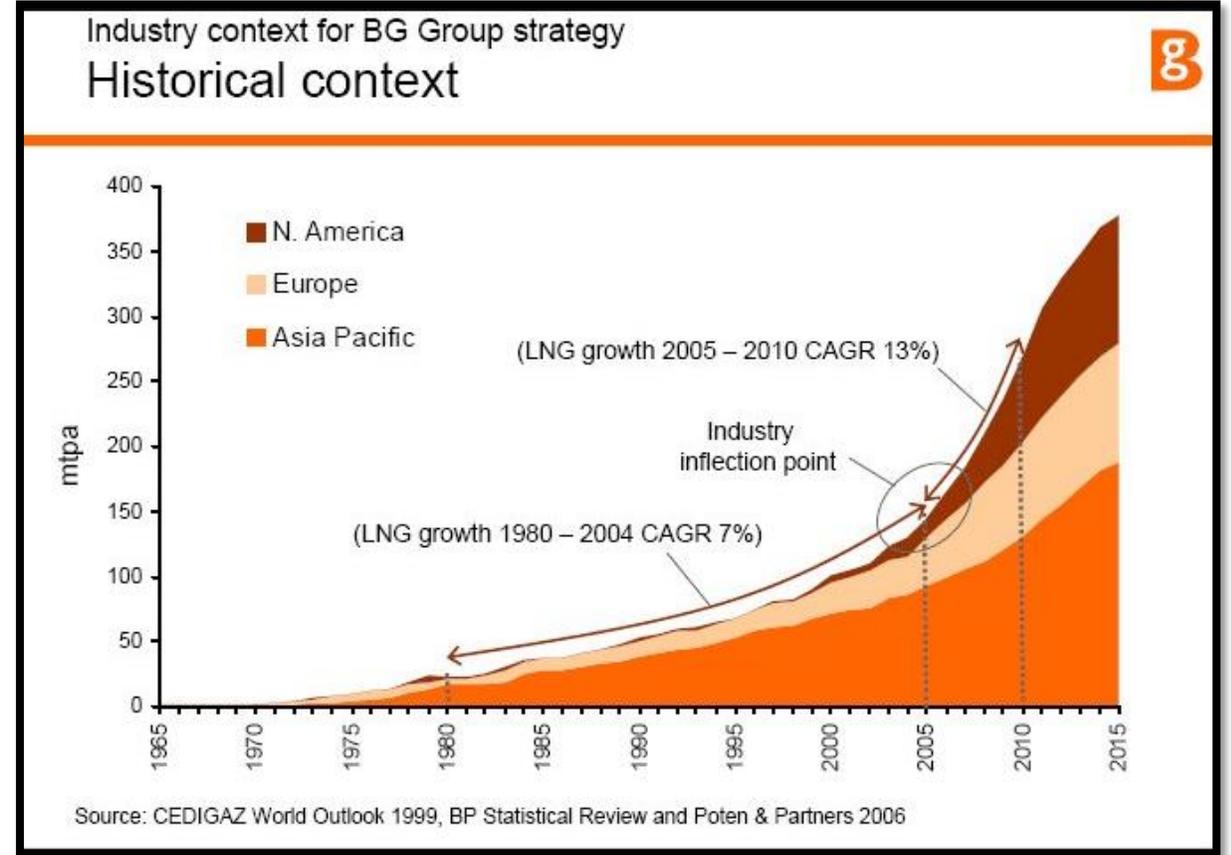
# A TRIP WAY DOWN MEMORY LANE

HISTORY REPEATS

# 20 YEARS AGO... WE WERE QUICKLY RUNNING OUT OF GAS...

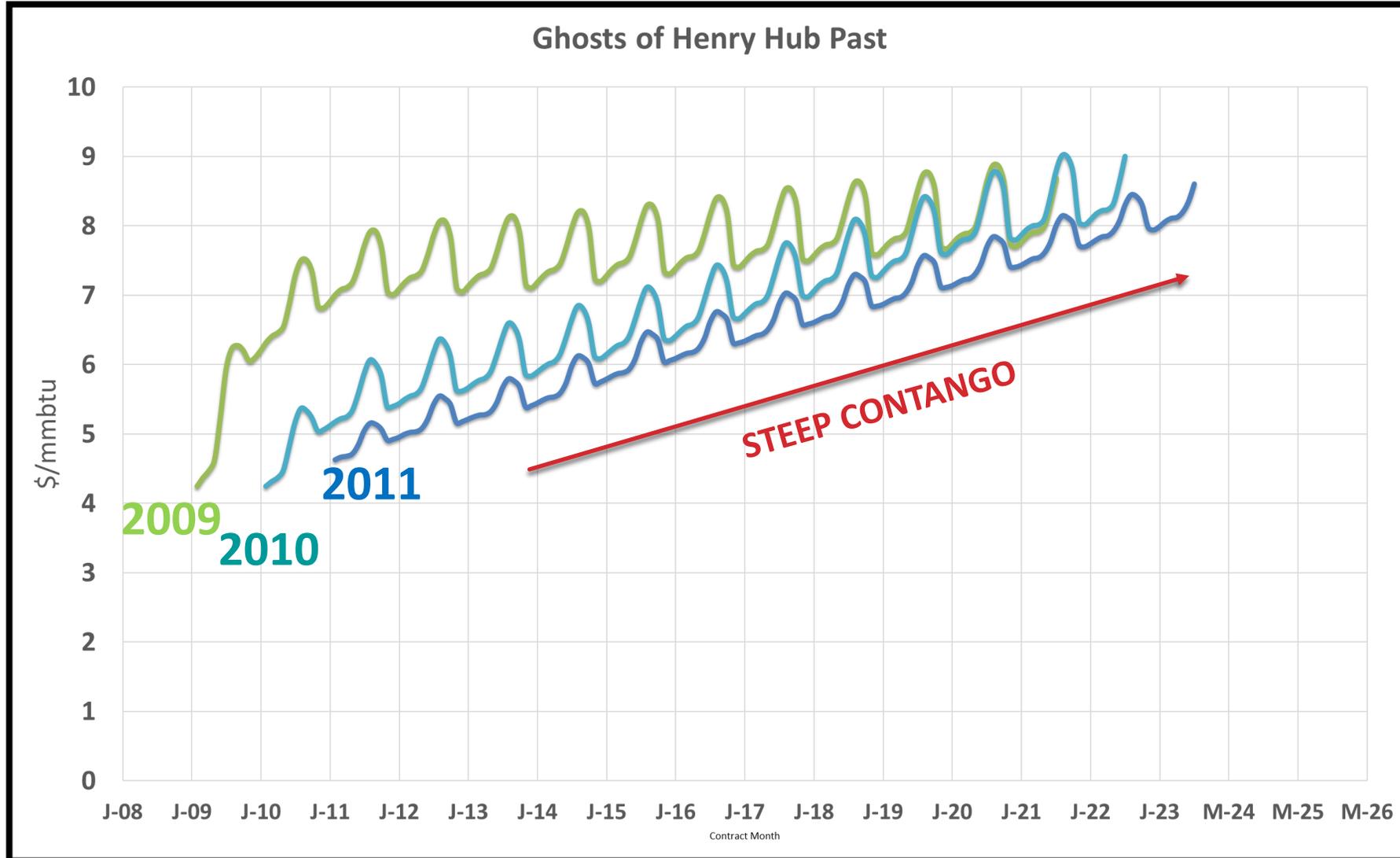


**GAS SUPPLY**

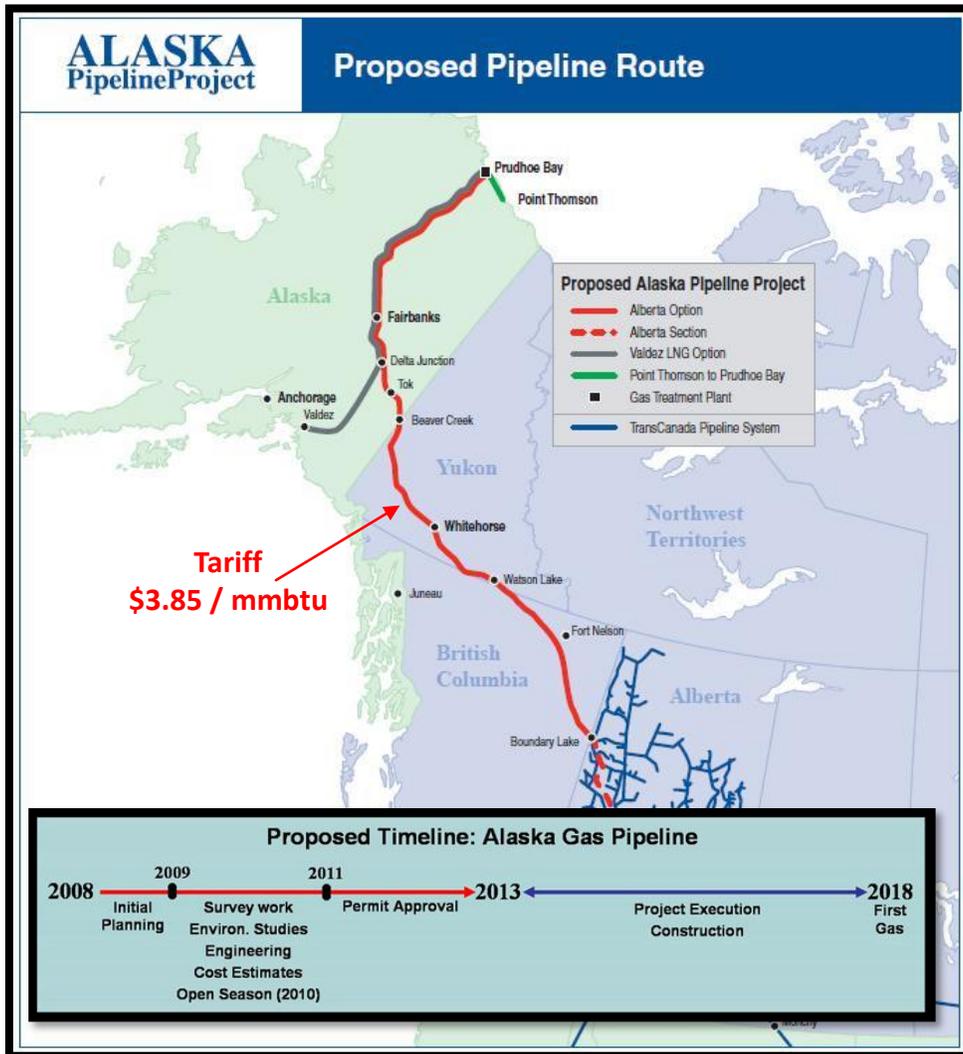


**LNG DEMAND**

# ...WHICH LED TO THIS...



# ... AND THUS THESE



December 11, 2007

**ExxonMobil**

**ExxonMobil Energy, a Pro Gas Supplies via a Floating**

**CHENIERE**

WHO WE ARE ▾ OUR RESPONSIBILITY ▾ INVESTORS ▾

2008

**2005**

Construction begins on the LNG import project.  
 Freeport LNG applies with FERC for an expansion of the regas terminal.  
 A third TUA is executed with Mitsubishi for expansion volumes.

**2006**

FERC approves the regasification terminal expansion.  
 Freeport LNG begins construction of an underground natural gas storage cavern.

**2008**

Testing and commissioning cargoes for the regasification facility are delivered in April and May.  
 Regasification facilities enters commercial operations in June.

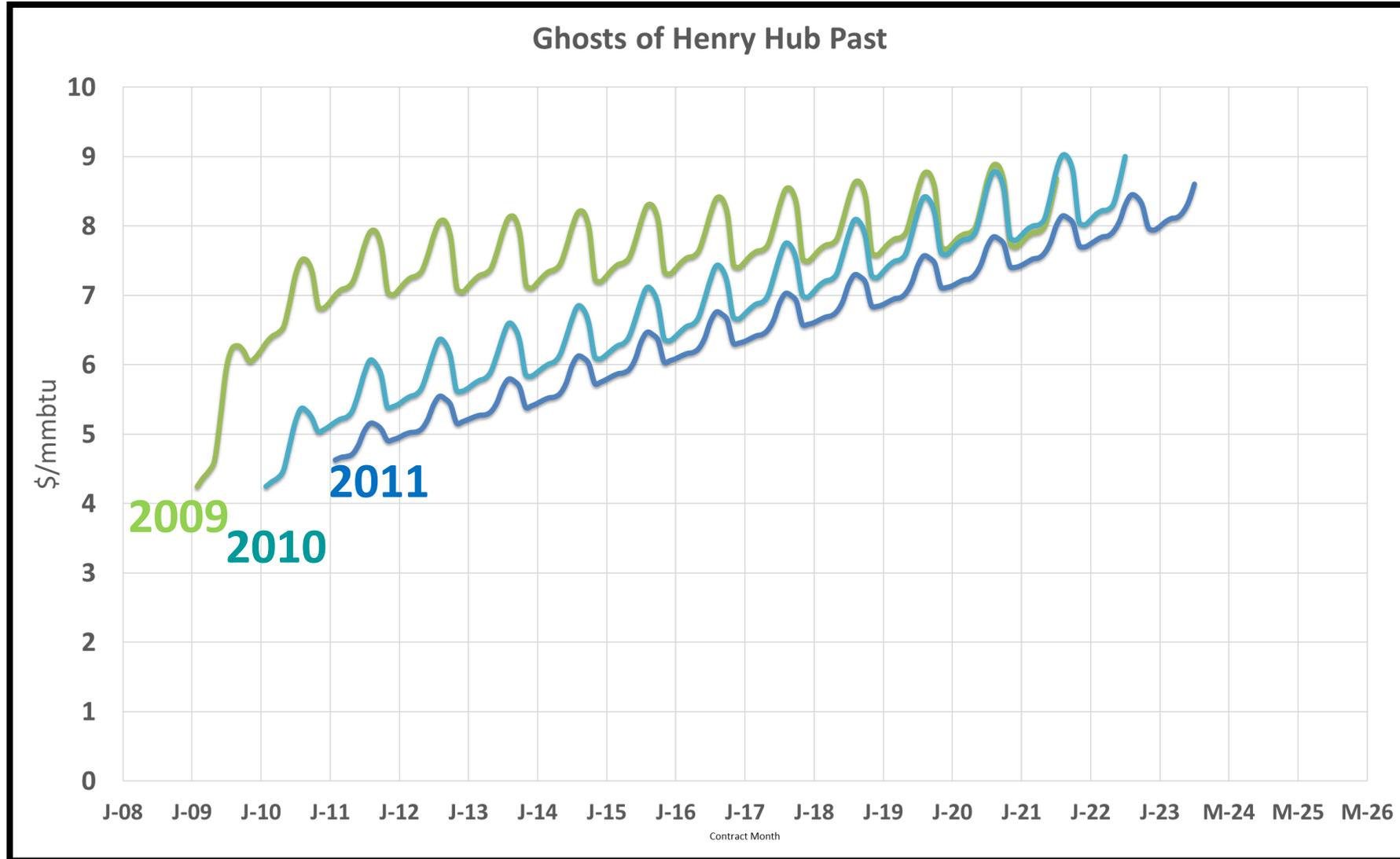
**2009**

Freeport LNG is the first company to file with DOE to allow LNG to be imported, stored and then reexported.

# BUT THEN THIS HAPPENED...



# AND CAUSED THIS...



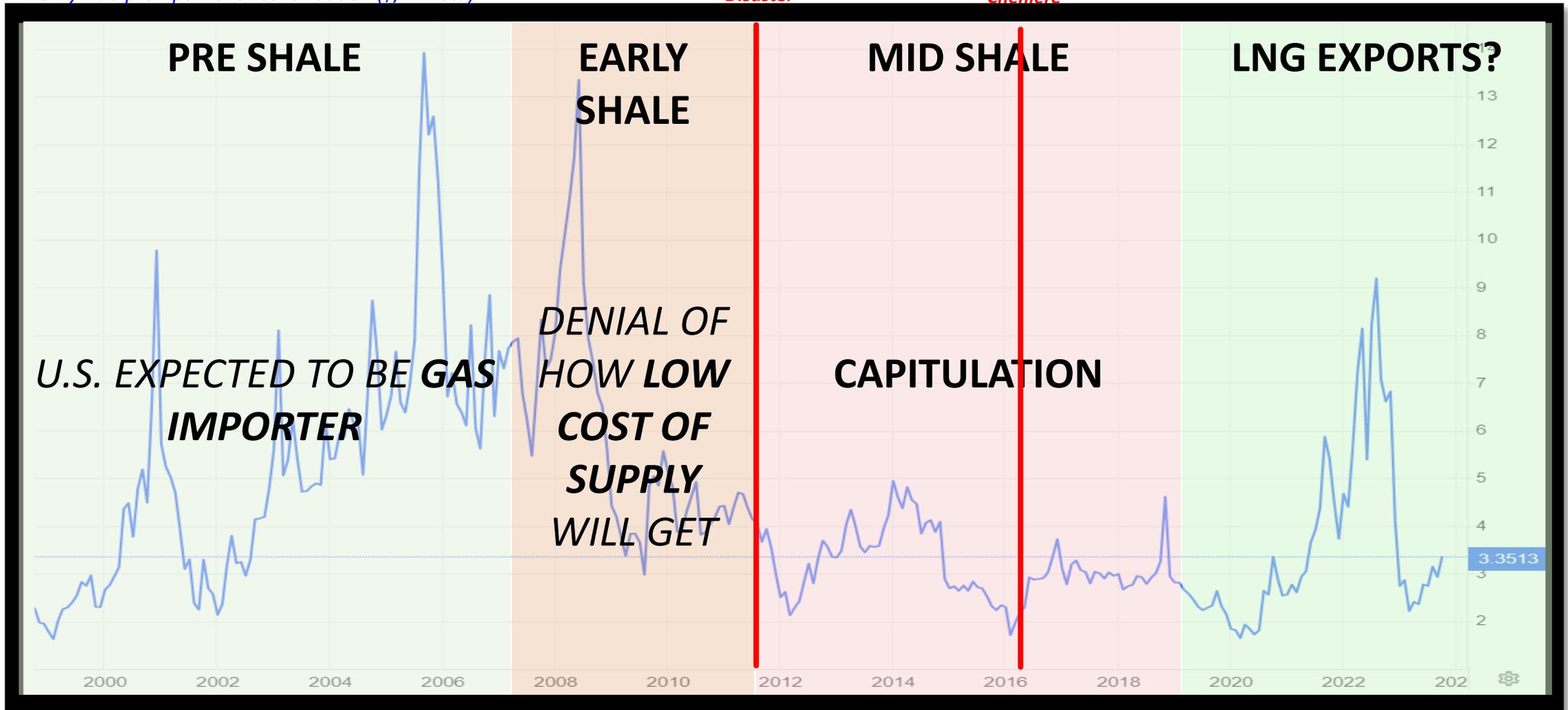
- Movement to flip LNG import plants to export (2009)
- Accelerated by Fukushima disaster (2011)

# COMMODITY PRICES ARE PATH DEPENDENT

Henry Hub prompt month continuation (\$/mmbtu)

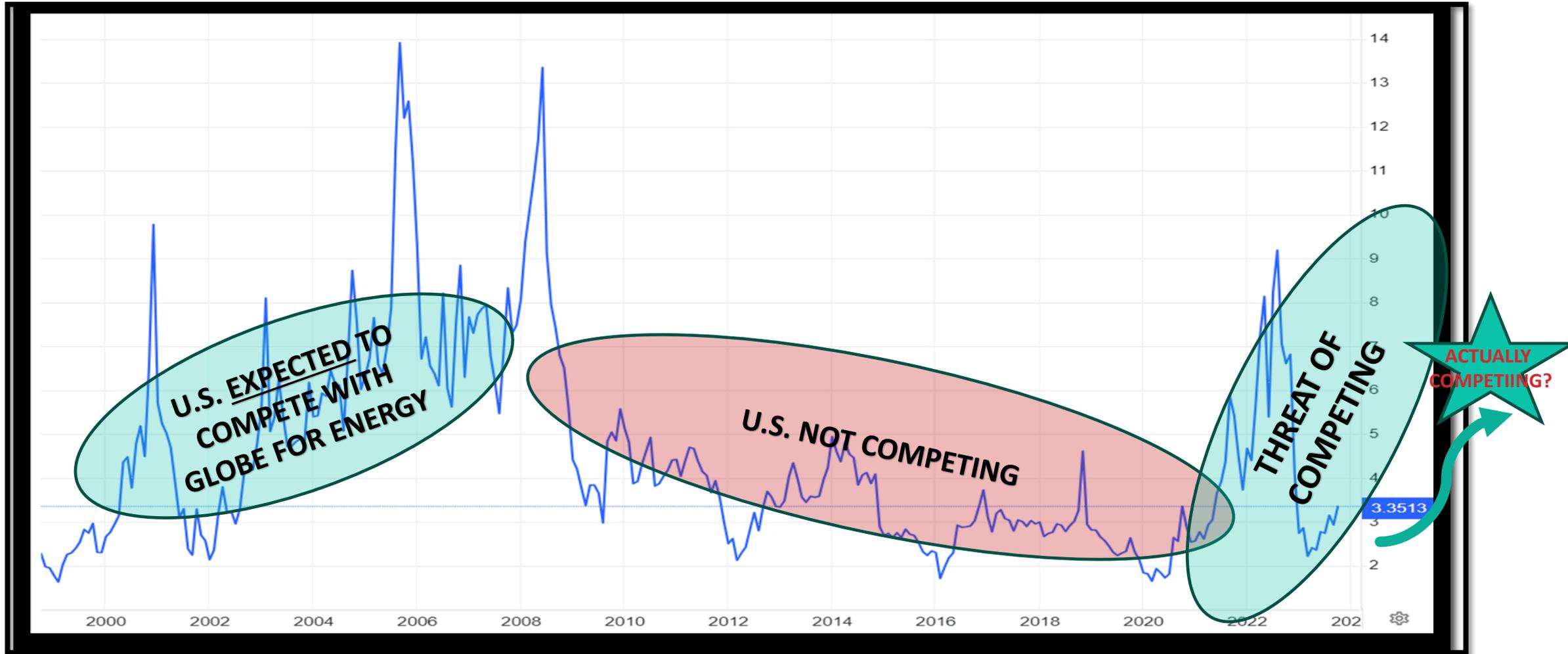
Fukushima Nuk  
Disaster

1<sup>st</sup> LNG export from  
Cheniere

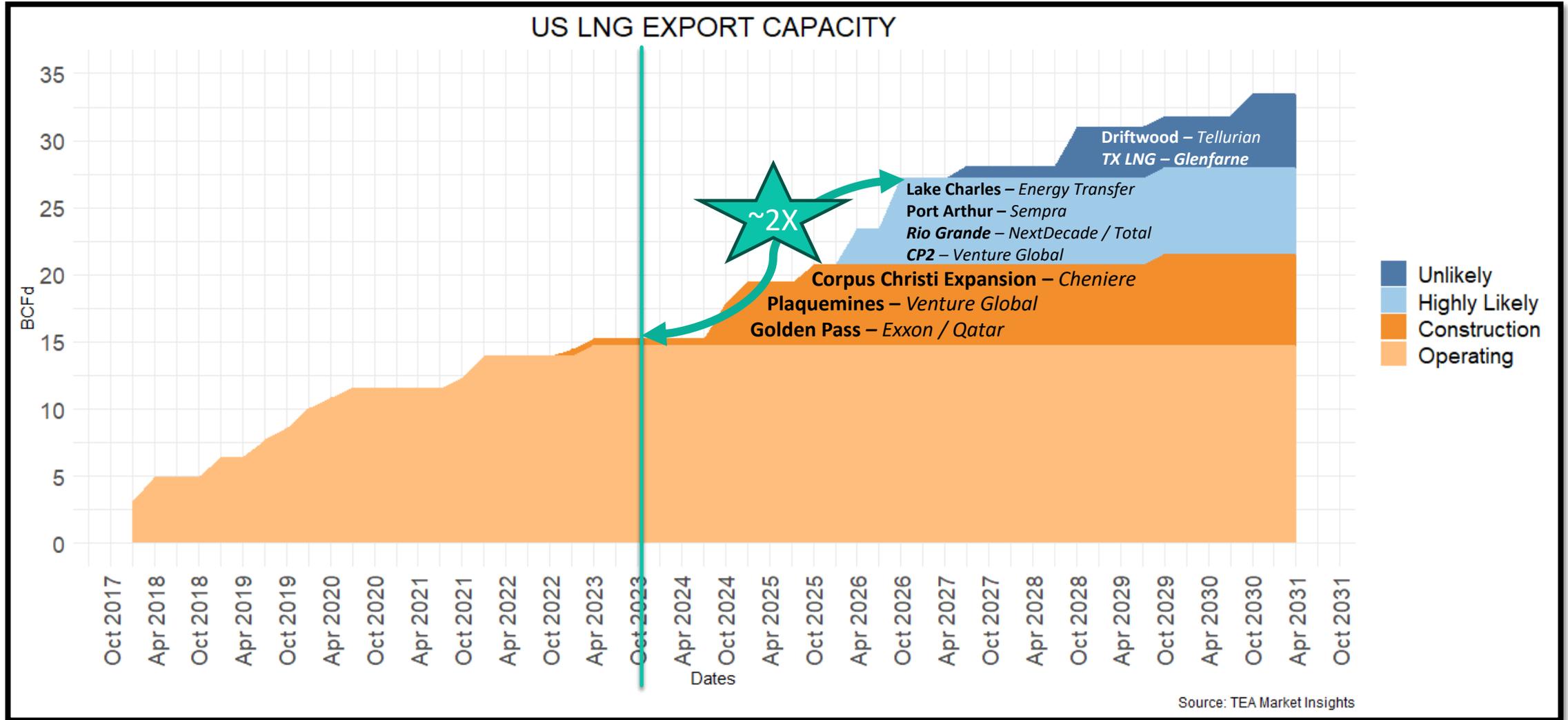


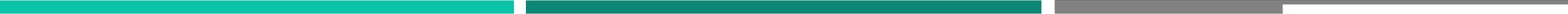
# LONG TERM PRICE TRENDS SIMPLIFY DOWN TO....

Henry Hub prompt month continuation (\$/mmbtu)



# THE THREAT IS REAL





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MARKET INSIGHTS

**#2 – GLOBAL LNG MARKETS MATTER TO YOU**

# COMMODITY PRICE FACTORS

## Bullish

- Winter – Peak day(s) capacity – pricing impact must be reflected in monthly index
- Summer '24 – Lack of coal participation; emissions adders on coal gen for Ozone season
- Summer '24 – Optimism on Golden Pass & Plaquemines LNG start-up timing

## Bearish

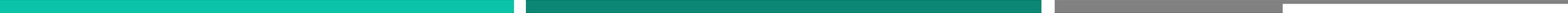
- Winter – Coal piles
- Winter – El Nino pattern
- Summer '24 – Gas producer efficiencies outweighing rig and frac crew declines

# WHAT HAPPENS NEXT?

## QUALITATIVE ASSESSMENT

# WHAT HAPPENS NEXT?

1. NATURAL GAS PRODUCTION INCENTIVIZED BY PRICE TO MEET FAST GROWING DEMAND
2. COAL CONTINUES TO AGGRESSIVELY RETIRE AFTER A BREIF PAUSE; PRICES WEAK FOREVER
3. LNG EXPORTS REPLACE COAL AS THE PRIMARY BALLAST FOR NATURAL GAS PRICE SPIKES
4. ENERGY STORAGE FOR LONGER THAN 4 HOURS BECOMES COVETED
5. CCGT INVESTMENTS OUTPACE PIPELINE EXPANSIONS RESULTING IN BASIS BLOWOUTS
6. NUCLEAR EVENTUALLY MUTES VOLATILITY?



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MARKET INSIGHTS

**EXPECT VOLATILITY & PREPARE**

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THANK YOU!

EXPECT VOLATILITY & PREPARE