Electricity Transmission Competition, LNG and Interstate Natural Gas Pipeline Issues

---

Industrial Energy Consumers of America

May 2022

Industrial Energy Consumers of America (IECA)
The Energy Voice of Industrial Energy Consumers

We have transitioned from an era of low energy costs and relatively high reliability to an era of accelerating natural gas, feedstock and electricity costs and withering reliability.

Both problems and solutions reside in WDC.

Electricity Transmission Competition

($525 B by 2050)

Electricity Transmission Competition

- One of two mega energy cost issues that is politically timely.
- Until recently, electricity transmission costs has been manufacturing's highest increased energy costs.
- Nationwide, from 2014 to 2020, RTO/ISO transmission costs increased by $74.9 billion, or 79 percent, while electricity demand was flat.

Electricity Transmission Competition

- Princeton University decarbonization study says it will cost $2.1 trillion in new transmission by 2050. Plus, distribution, storage and carbon-free generation costs.
- Studies have shown that competition can reduce the cost of transmission projects by 20-30 percent.
- A 25 percent savings would save consumers an estimated $525 billion by 2050.

Transmission Competition Advocacy

- Creation of Electricity Transmission Competition Coalition (ETCC)
- 75 diverse consumer organizations from all 50 states. https://electricitytransmissioncompetitioncoalition.org/
- **Advocacy objective:** All transmission projects that are 100 kV or larger should be competitively bid.
- Despite FERC Order 1000, only 3% of transmission projects are competitively bid.

Advocacy Status

- In 2021, FERC ANOPR comments.
- On April 21, 2022, FERC's NOPR steps away from competition.
- Comments are due on July 18. Reply comments on August 17.
- ETCC: Public Relations Campaign
- ACTION: Sign-on to the coalition.

Advocacy Status

- EEI and electric utilities support for Glick NOPR
- FERC Chairman Glick: up for renomination
- Chairman Manchin: potential hearing.
- Transmission competition is “anti-inflation policy”

LNG Exports

Annualized Natural Gas Cost Increase of $122 billion YTD

- Increased natural gas prices cost consumers $305 million for every one cent increase.
- 2021 average Henry Hub price: $3.89 per MM Btu.
- Friday, May 6: $7.89 per MM Btu
- A $122 billion increase in US costs.

IECA LNG Export Policy

- Not against LNG exports. Against excessive exports that impact reliability and price.
- Prevent connecting domestic price to global price. (Australia)
- Support NATO allies: (Since September, China has locked up 10 contracts for 2.1 BCF/d for 20 years.) In 2021, China tied with S Korea as number one destination.
- Advocate for "LNG Consumer Protection Policy"

DOE Approved LNG Exports

2021 Net NG U.S. supply = 86 Bcf/d (FTA = 77 % of net supply)

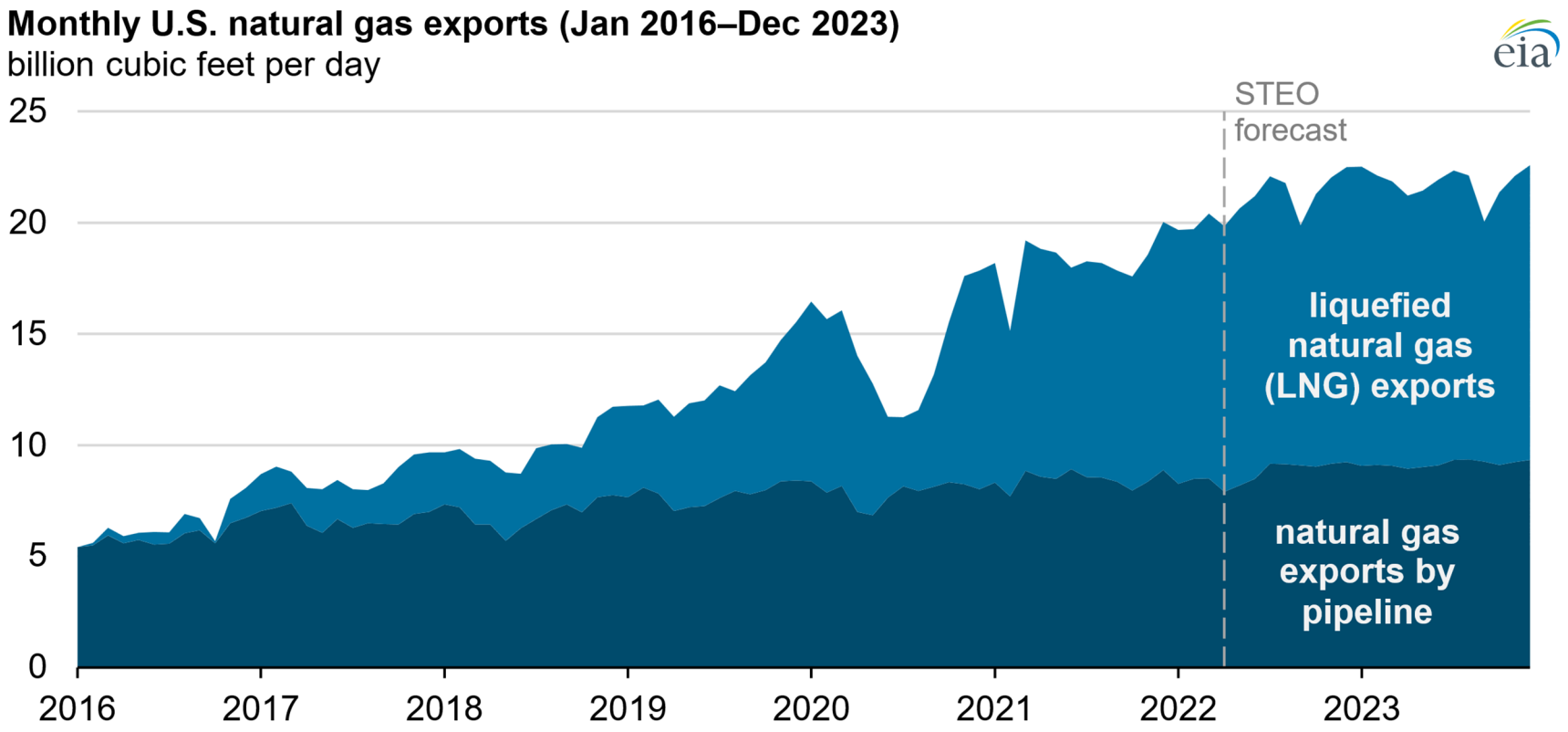
Organization	Free Trade Agreement Countries	Non-Free Trade Agreement Countries
DOE	66.5 Bcf/d	63.02 Bcf/d

*Note: FTA and NTFA approvals not additive.

Source: U.S. Department of Energy (DOE), as of March 28, 2022
https://www.energy.gov/fe/articles/summary-lng-export-applications-lower-48-states

LNG and Pipeline Exports

27% of net US supply

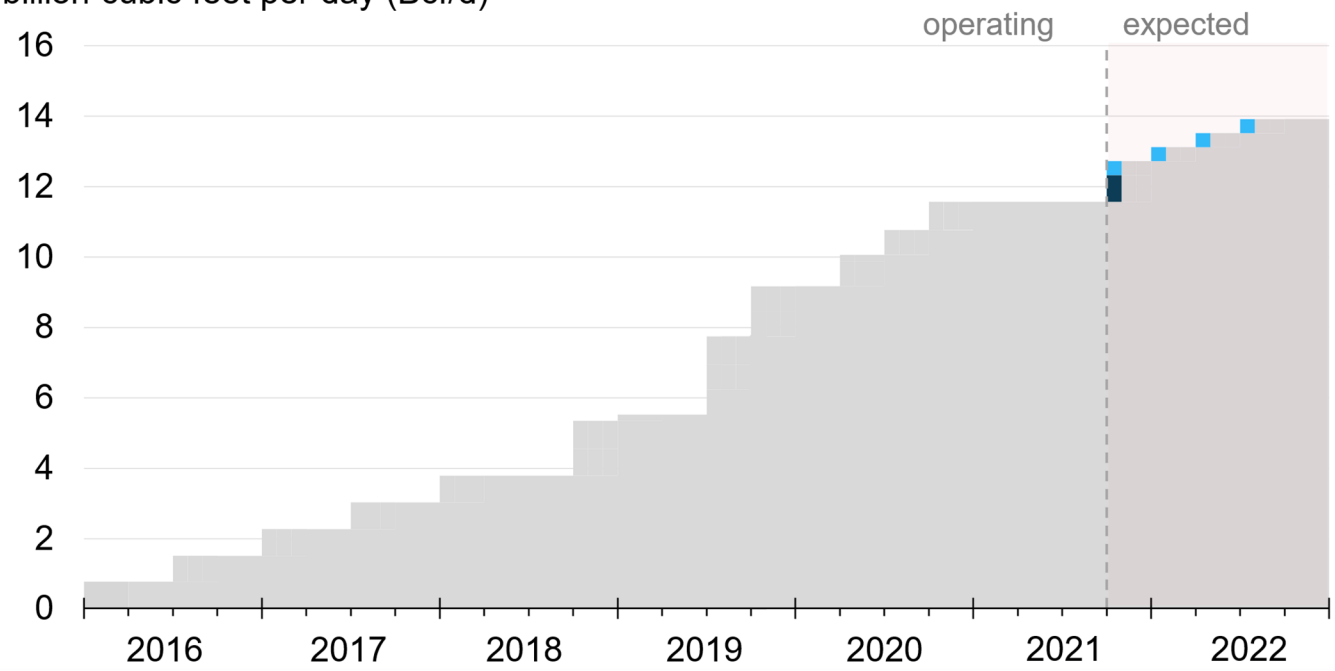


Source: EIA

Industrial Energy Consumers of America (IECA)
The Energy Voice of Industrial Energy Consumers

U.S. LNG Peak Export Capacity

U.S. quarterly liquefied natural gas peak export capacity (2016–2022)
billion cubic feet per day (Bcf/d)



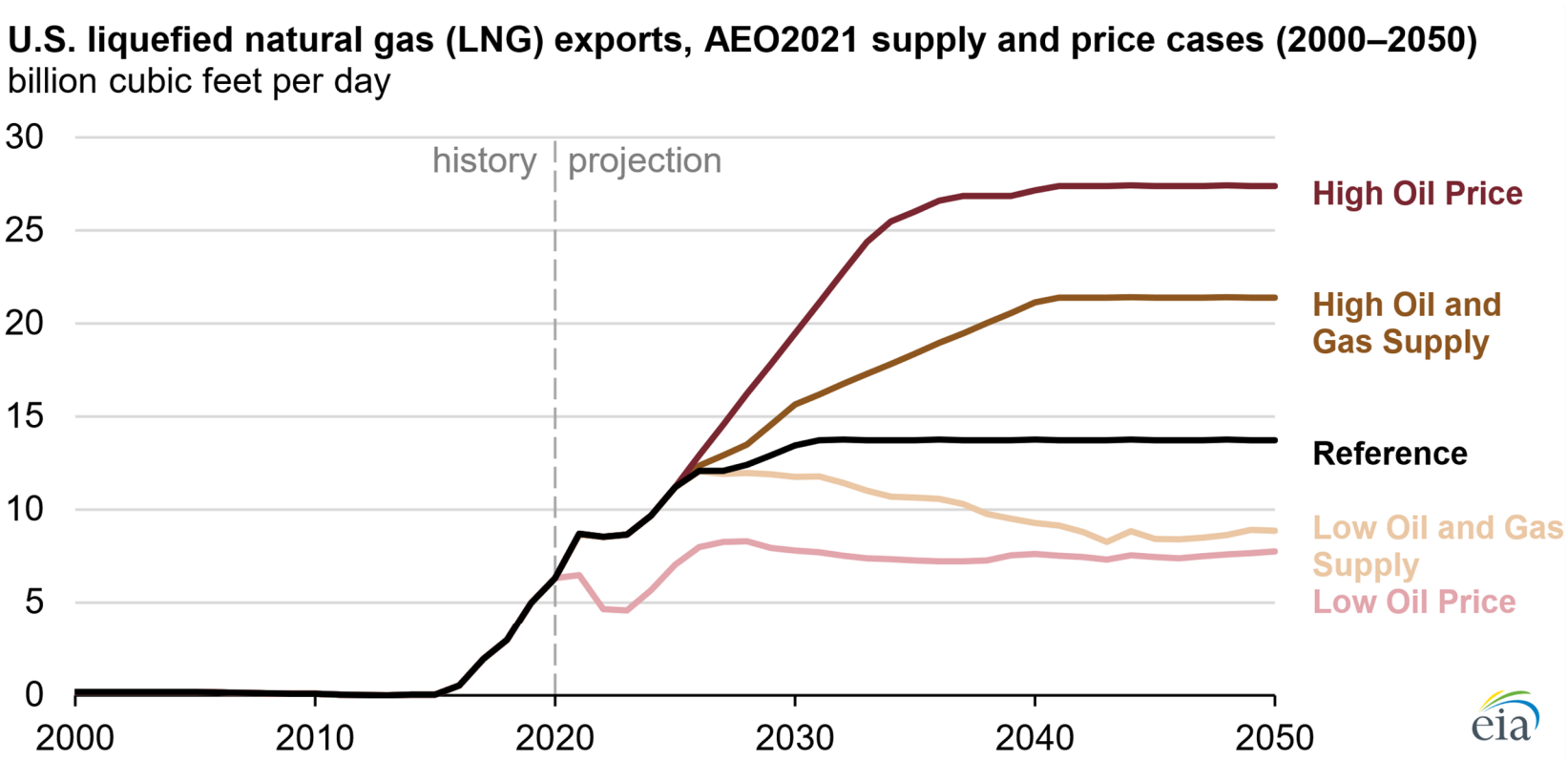
Calcasieu Pass 1-18
new export faciliity, includes 18 liquefaction units with a combined capacity of 1.6 Bcf/d

Sabine Pass 6
sixth liquefaction unit being added, with 0.8 Bcf/d capacity

eia

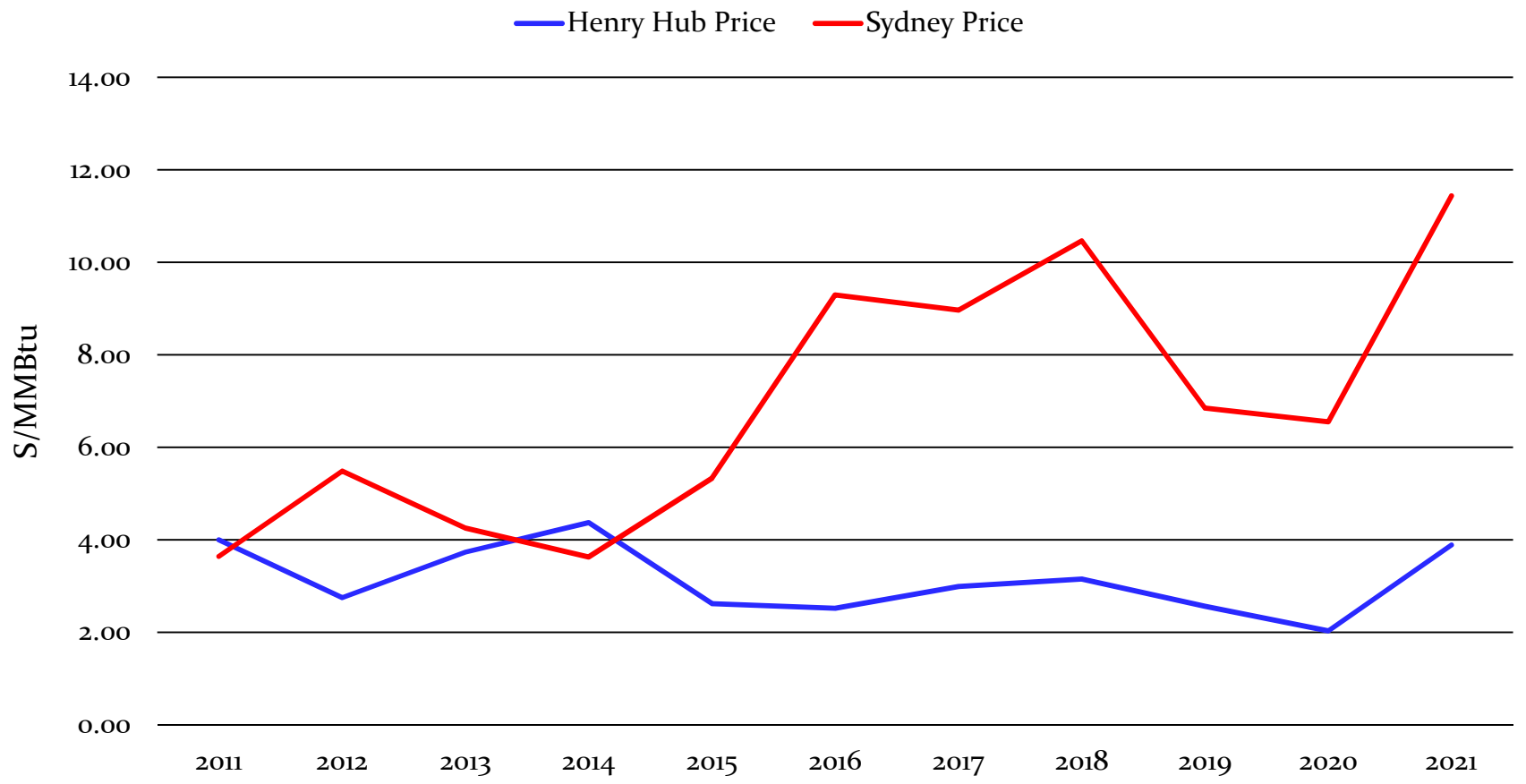
Source: U.S. liquefied natural gas export capacity will be world's largest by end of 2022, U.S. Energy Information Administration (EIA), https://www.eia.gov/todayinenergy/detail.php?id=50598&src=email

U.S. LNG Exports, AEO 2021 Supply and Price Cases



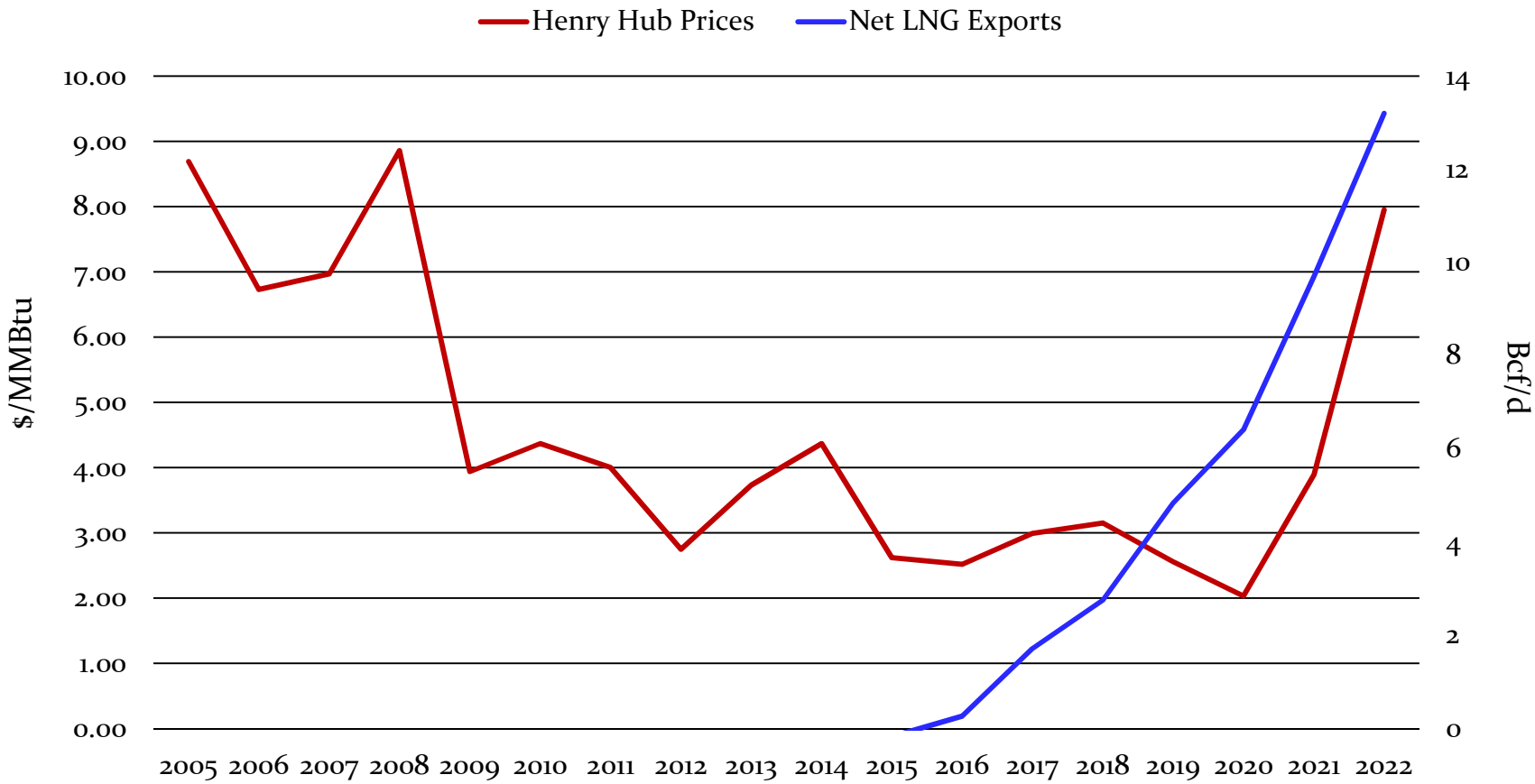
Source: U.S. Energy Information Administration (EIA), https://www.eia.gov/

Comparison of U.S. & Australian Natural Gas Prices



Source: Natural Gas Prices, U.S. Energy Information Administration (EIA); Gas Market Prices, Australian Government, https://www.aer.gov.au/wholesale-markets/wholesale-statistics/gas-market-prices

U.S. 13 Year High HH Natural Gas Price and LNG Exports

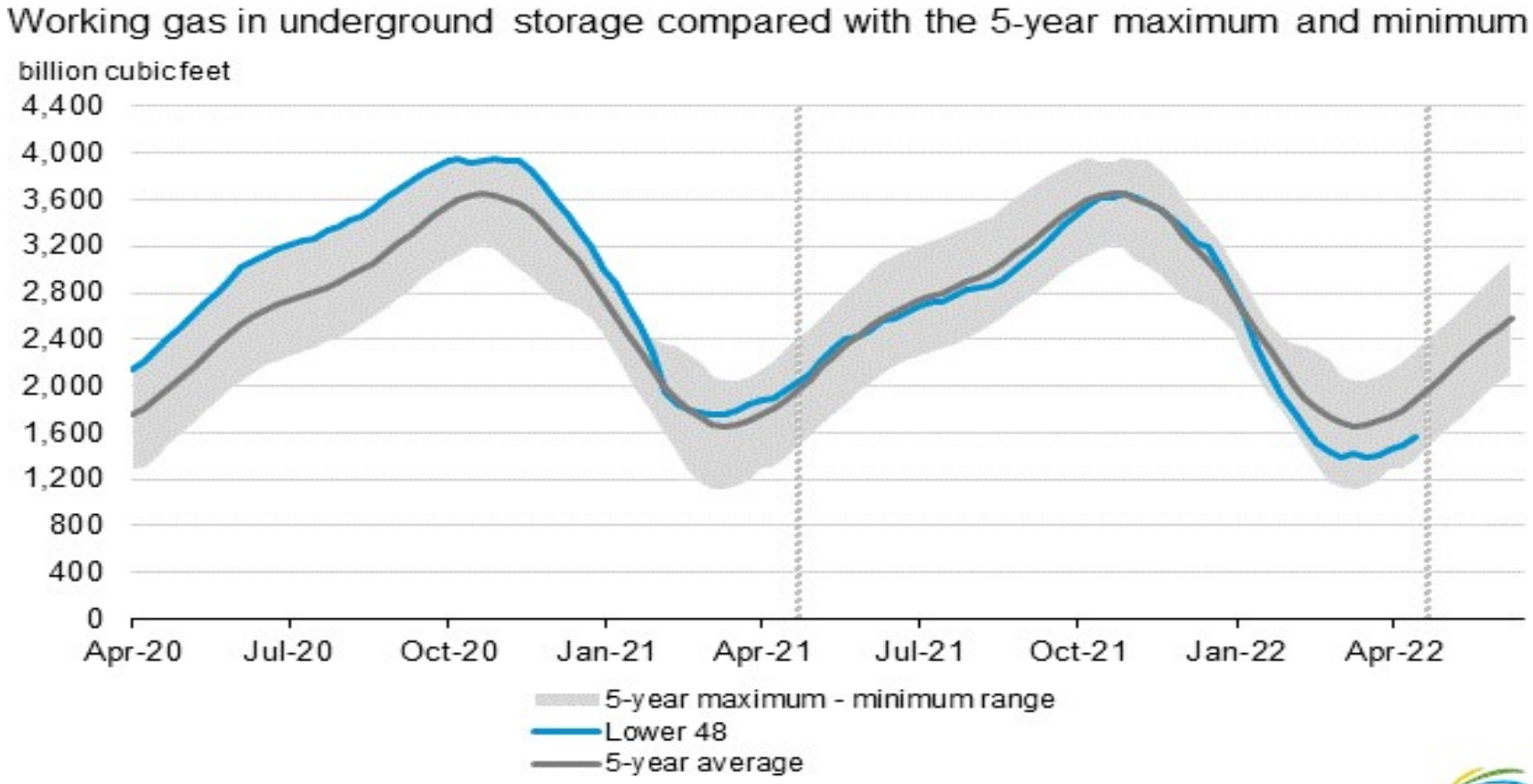


Source: Natural Gas, Annual Energy Outlook 2022, U.S. Energy Information Administration

Natural Gas - NYMEX Forwards

Month/Year	2022	2023	2024	2025
Jan	$ 4.02	$ 8.79	$ 5.39	$ 4.85
Feb	$ 6.27	$ 8.49	$ 5.21	$ 4.71
Mar	$ 4.57	$ 7.08	$ 4.85	$ 4.38
Apr	$ 5.34	$ 5.03	$ 4.08	$ 3.79
May	$ 7.27	$ 4.82	$ 4.04	$ 3.74
Jun	$ 8.53	$ 4.86	$ 4.06	$ 3.79
Jul	$ 8.58	$ 4.90	$ 4.13	$ 3.85
Aug	$ 8.57	$ 4.90	$ 4.12	$ 3.88
Sep	$ 8.52	$ 4.87	$ 4.09	$ 3.87
Oct	$ 8.51	$ 4.92	$ 4.14	$ 3.94
Nov	$ 8.57	$ 5.04	$ 4.33	$ 4.13
Dec	$ 8.71	$ 5.30	$ 4.70	$ 4.48

EIA Natural Gas Storage: 16.3 % Below 5 Year Average



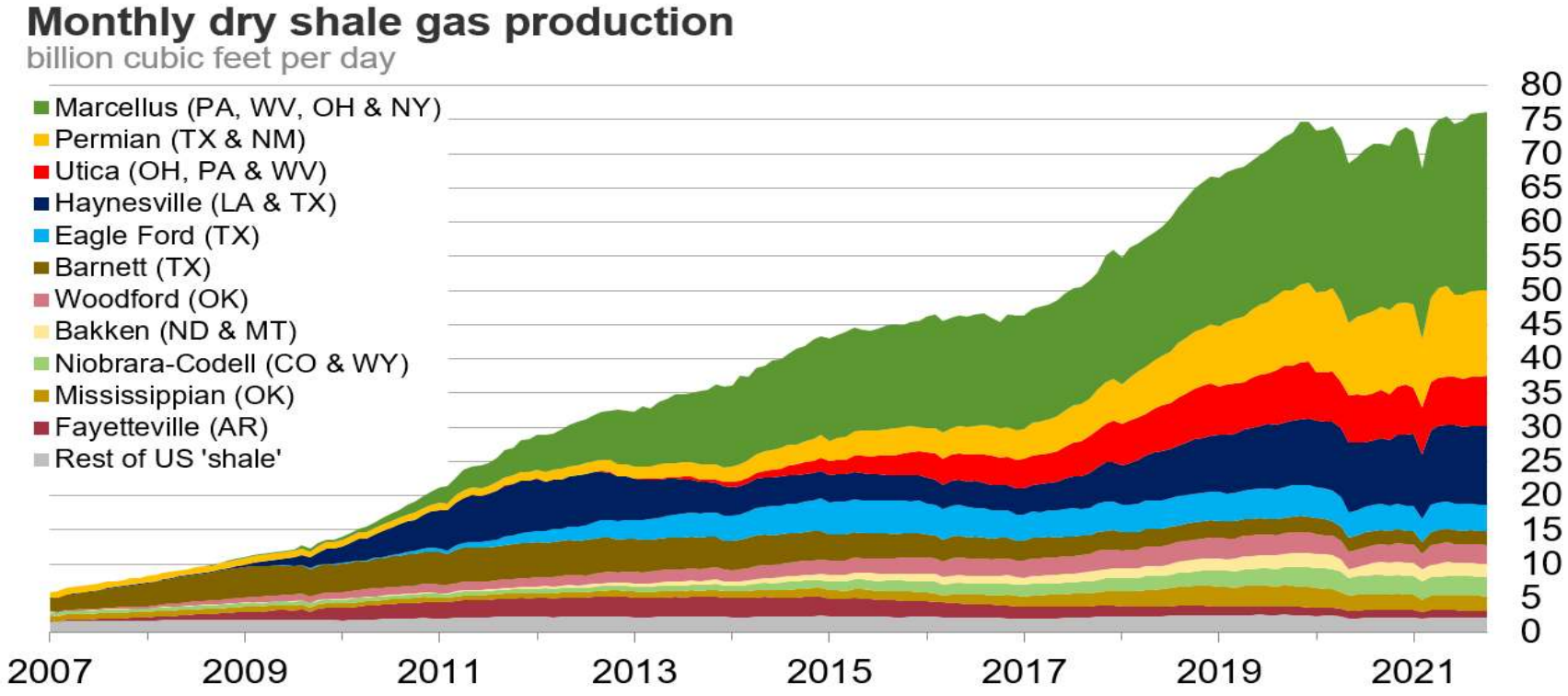
Source: U.S. Energy Information Administration

eia

Industrial Energy Consumers of America (IECA)
The Energy Voice of Industrial Energy Consumers

U.S. Gas Production

Current 92 Bcf/d

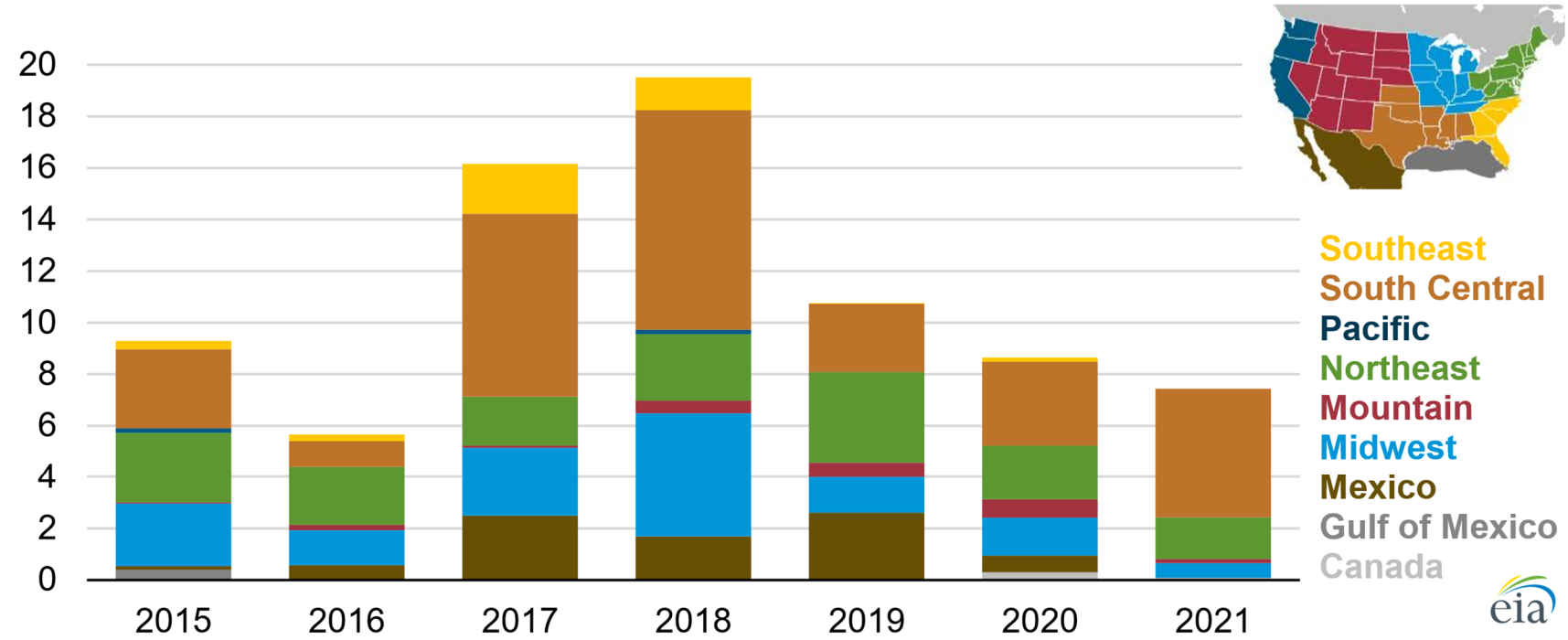


Source: Graph by the U.S. Energy Information Administration (EIA) based on state administrative data collected by Enverus. Data are through October 2021 and represent EIA's official tight gas estimates, but are not survey data. State abbreviations indicate primary state(s).

Note: Improvements to play identification methods have altered production volumes of between various plays.

Natural gas interstate pipeline capacity additions decrease in 2021

Interstate and international interconnection pipeline capacity additions by region (2015–2021)
billion cubic feet per day



Source: Today in Energy, U.S. Energy Information Administration (EIA), https://www.eia.gov/todayinenergy/detail.php?id=51398&src=email

Transco Interstate NG Pipeline

- **February 16, 2022**
  Manufacturers Request that FERC Hold Technical Conference on Federal-State Interstate Natural Gas Pipeline Coordination and Oversight to Increase Reliability (view press release)

Many Causes of Increased Natural Gas Prices

- Increased LNG exports.
- Financial markets: The prospects of continued increased exports.
- NG producers not reinvesting earnings in new production. (WSJ). Earnings emphasis vs output.
- Manpower and supply chain issues
- Resulting lower national inventory
- Capacity constraints in take-away capacity and interstate capacity regionally.

Advocacy

- Manchin hearing: Concerned that exports increase domestic prices.
- April 12, 2022
  IECA Urges Secretary Granholm to Implement IECA's "LNG Consumer Protection" Options
- April 6, 2022
  IECA Urges Chairman Manchin to Establish LNG Consumer Safety Valve (view press release)
- Senator King (I-ME): Draft LNG consumer protection legislation
- Ukraine/Russia conflict complicates DOE and or Senate action.
- Senate Dems support consumer protections. Pressure on DOE.

IECA LNG Consumer Protection Policy

- In the event that U.S. natural gas inventories, monitored by the EIA, fall five percent below the five-year average, the DOE shall require exports to ratably reduce export volumes until U.S. inventories increase to the five-year average.

- ***Justification:*** Domestic production and demand can change dramatically due to economic, weather, or policy-related events. In all cases, policy to maintain a five-year average inventory buffers unforeseeable events to reduce impacts to reliability and price.

Why LNG Consumer Protections are Needed

- Simply increasing domestic production of natural gas without changes to the nation's LNG export policy will not solve the problem of skyrocketing natural gas and electricity costs. Increases in LNG exports require consumer protections.

- A balanced LNG export policy recognizes that national and economic security starts with prioritizing the U.S. market by ensuring a reliable and affordable supply.

- The natural gas and electricity market reliability and costs are at stake thereby impacting the entire economy.

- The domestic natural gas consumer is captive and does not have an alternative.

Why LNG Consumer Protections are Needed

- LNG buyers have market power over domestic consumers. Unless there is a surplus inventory, the LNG market demand will set the marginal price for natural gas nationally, just like natural gas does for the domestic electricity market.

- Unlike crude oil and gasoline, natural gas does not have additional inventory. There is no Strategic Petroleum Reserve (SPR) and there is trivial private inventory. The number of days of supply is significantly less than crude and gasoline. Crude oil and gasoline can be imported. Importing increased supply of natural gas is not an option.

- There is zero economic value added for LNG exports. Consuming natural gas and electricity domestically creates enormous multiples of value-added GDP.

IECA Fall Meeting

- September 13-14, 2022
- Arlington, VA

Contact Info

Paul N. Cicio
President and CEO
Industrial Energy Consumers of America (IECA)
(703) 216-7402
pcicio@ieca-us.org
www.ieca-us.org