



Natural Gas Supply Association

# 2020-2021 Winter Outlook

## Markets Matter

[www.ngsa.org](http://www.ngsa.org)

# Understanding the Symbols

---



Upward market pressure

---



Flat market pressure

---



Downward market pressure



# 2020-2021 Winter Outlook: **Outline**

---

- Looking ahead to Winter 2020-2021
  - Market pressure points:
    - Economy
    - Weather
    - Demand
    - Production/Supply
    - Storage
  - Wild card factors
  - Winter expectations
- Summary



# Demand: Economy

Winter Season Period-to-period change	Last Winter 2019-2020 ACTUAL	This Winter 2020-2021 FORECAST
Economy	Slow growth	Recovering from recession
GDP Growth	1.3%	-2.6%
Unemployment Rate	3.7%	7.3%
Manufacturing	-1.7%	-4.6%
CPI	2.1%	1.2%
World GDP Growth	-6.1%	4.5%
Consumer Sentiment Index	96.9	78.8

**Winter-to-winter pressure  
on natural gas prices**



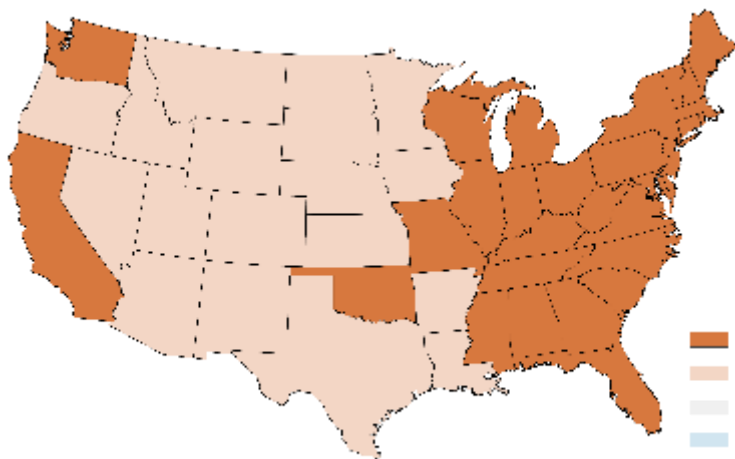
# Demand: Winter Weather

Last Winter (Nov. – March)  
2019-2020 ACTUAL

This Winter (Nov.-March)  
2020-2021 FORECAST

Actual winter heating season:

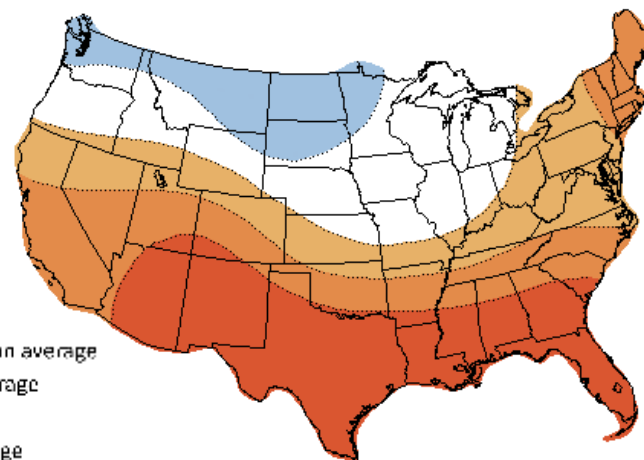
9% *warmer* than previous winter  
*6<sup>th</sup> warmest on record*



3,294 Heating degree days (NOAA)

Forecast:

4% *colder* than last year



3,433 Heating degree days

Winter-to-winter pressure  
on natural gas prices



# Demand: Customer Demand

Winter Season Period-to-period change	Last Winter 2019-2020 ACTUAL	This Winter 2020-2021 FORECAST
<b>Domestic Demand</b>		
■ Residential/Commercial	36.2 Bcf/d	36.9 Bcf/d
■ Power burn	28.9 Bcf/d	26.6 Bcf/d
■ Industrial	24.6 Bcf/d	24.7 Bcf/d
<i>Subtotal</i>	<i>89.7 Bcf/d</i>	<i>88.2 Bcf/d</i>
<b>Exports</b>		
■ Pipeline exports - Mexico	5.1 Bcf/d	5.5 Bcf/d
■ LNG exports	8.5 Bcf/d	9.3 Bcf/d
<i>Subtotal</i>	<i>13.6 Bcf/d</i>	<i>14.8 Bcf/d</i>
<b>Total Natural Gas Demand*</b>	<b>110.6 Bcf/d</b>	<b>109.7 Bcf/d</b>
<b>Growth sector</b>	Exports (LNG +89%; Mexican +19%) Electric + 11%	Exports (LNG +9%; Mexican + 8%)

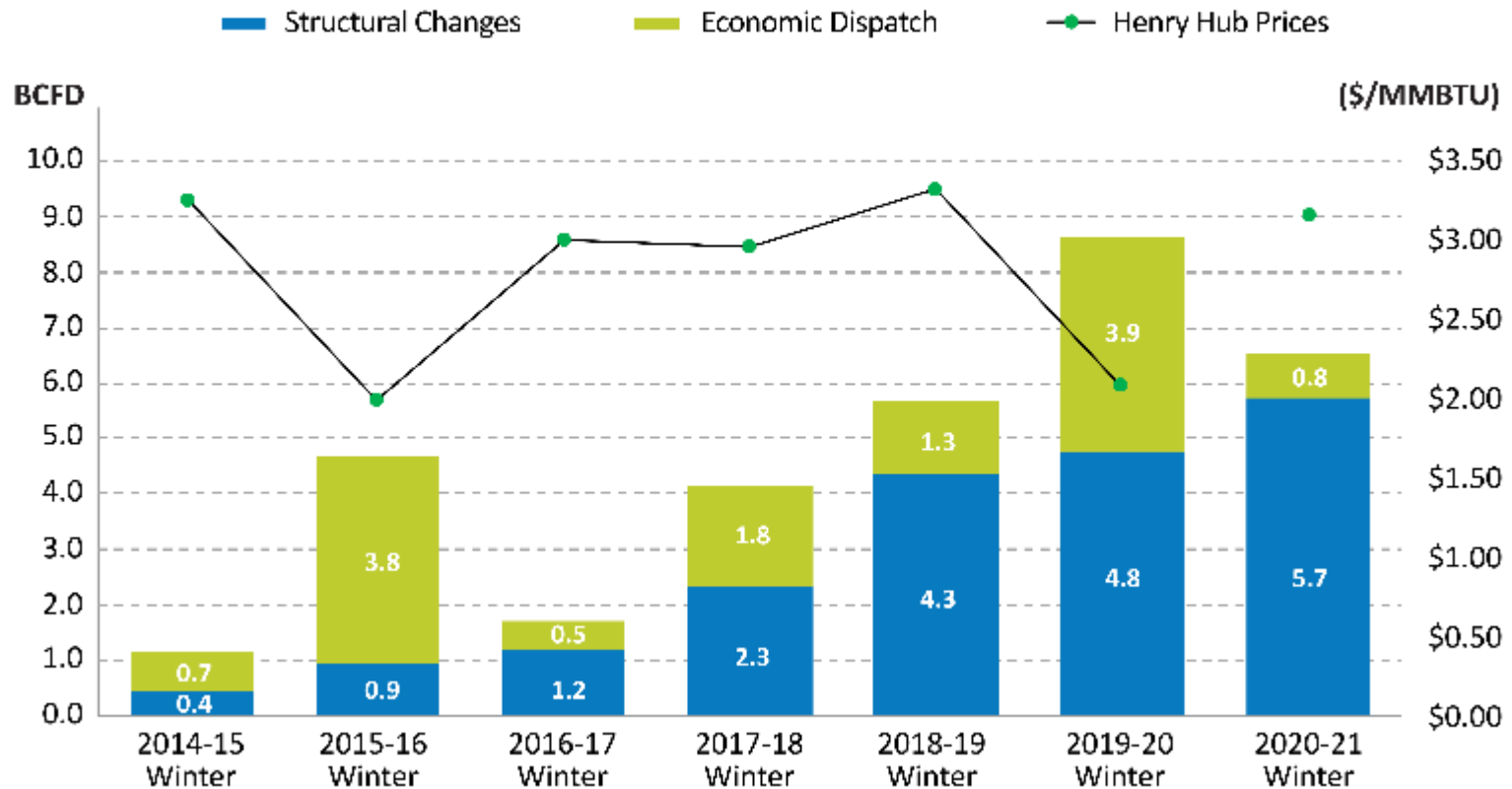
## Winter-to-winter pressure on natural gas prices



\*Includes "Lease, Plant and Pipeline Fuel"

# Electric Demand: Structural Growth vs. Temporary Economic Switching

## POWER BURN INCREASE FROM 2013-2014 WINTER: STRUCTURAL GROWTH VS. ECONOMIC SWITCHING





# Focus: Industrial Demand Peak Growth Phase

## Natural Gas Spurring 37 Major Industrial Projects 2020-2023

\$62 Billion  
Investment to Build

Increase of  
1.6 Bcf/d by 2023

**29** New Projects

21 Petrochemical  
5 Steel  
3 Fertilizer

**6** Expansions

5 Petrochemical  
1 Steel

**2** Re-starts

2 Steel

*In addition to*

**48** COMPLETED

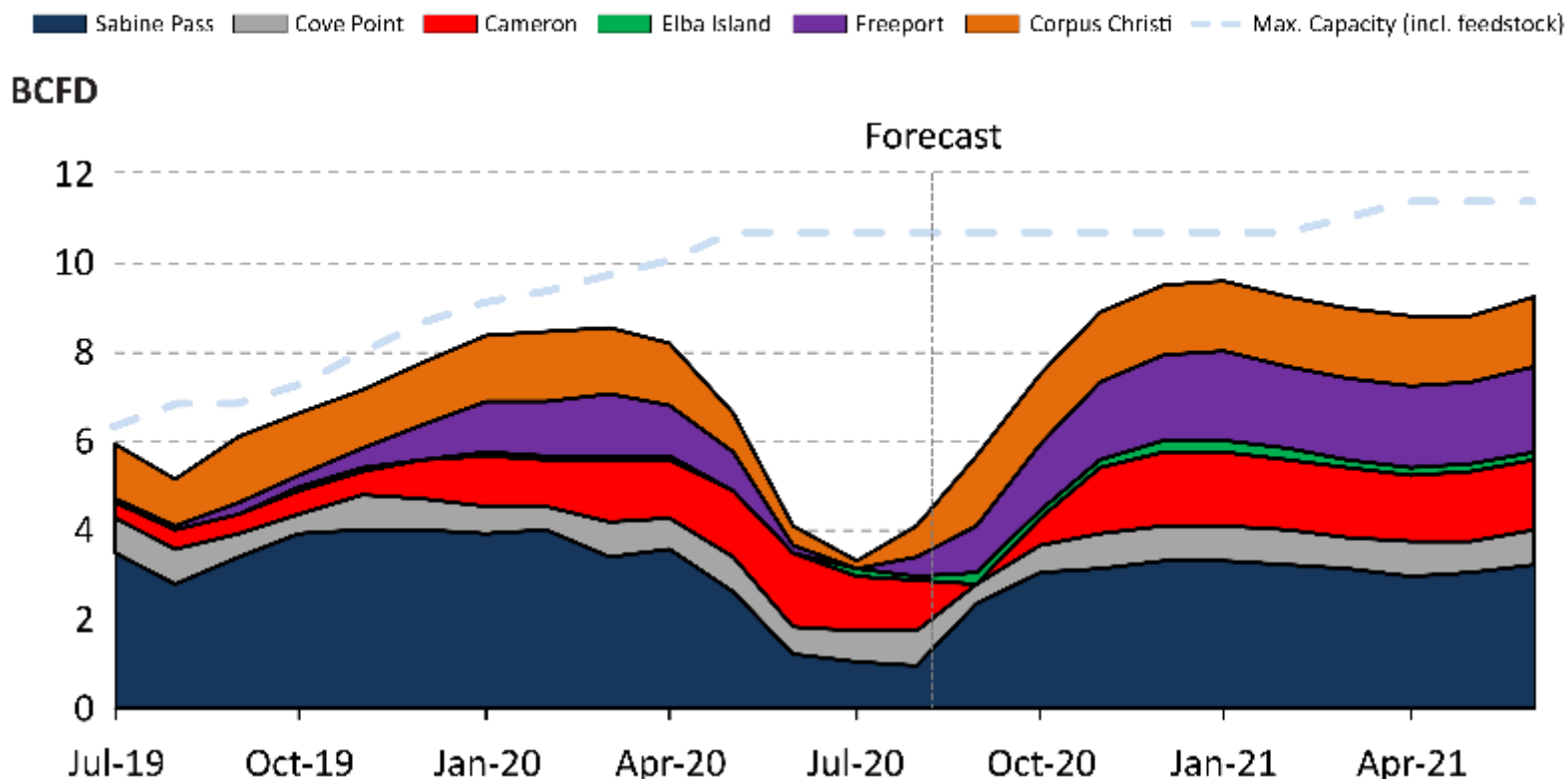
Projects for  
additional \$67 Billion  
and 1.9 Bcf/d from  
2015-2019





# U.S. LNG Exports: Recovery Underway

## U.S. LNG FEEDGAS DEMAND BY TERMINAL



# Supply: Winter Production and Imports

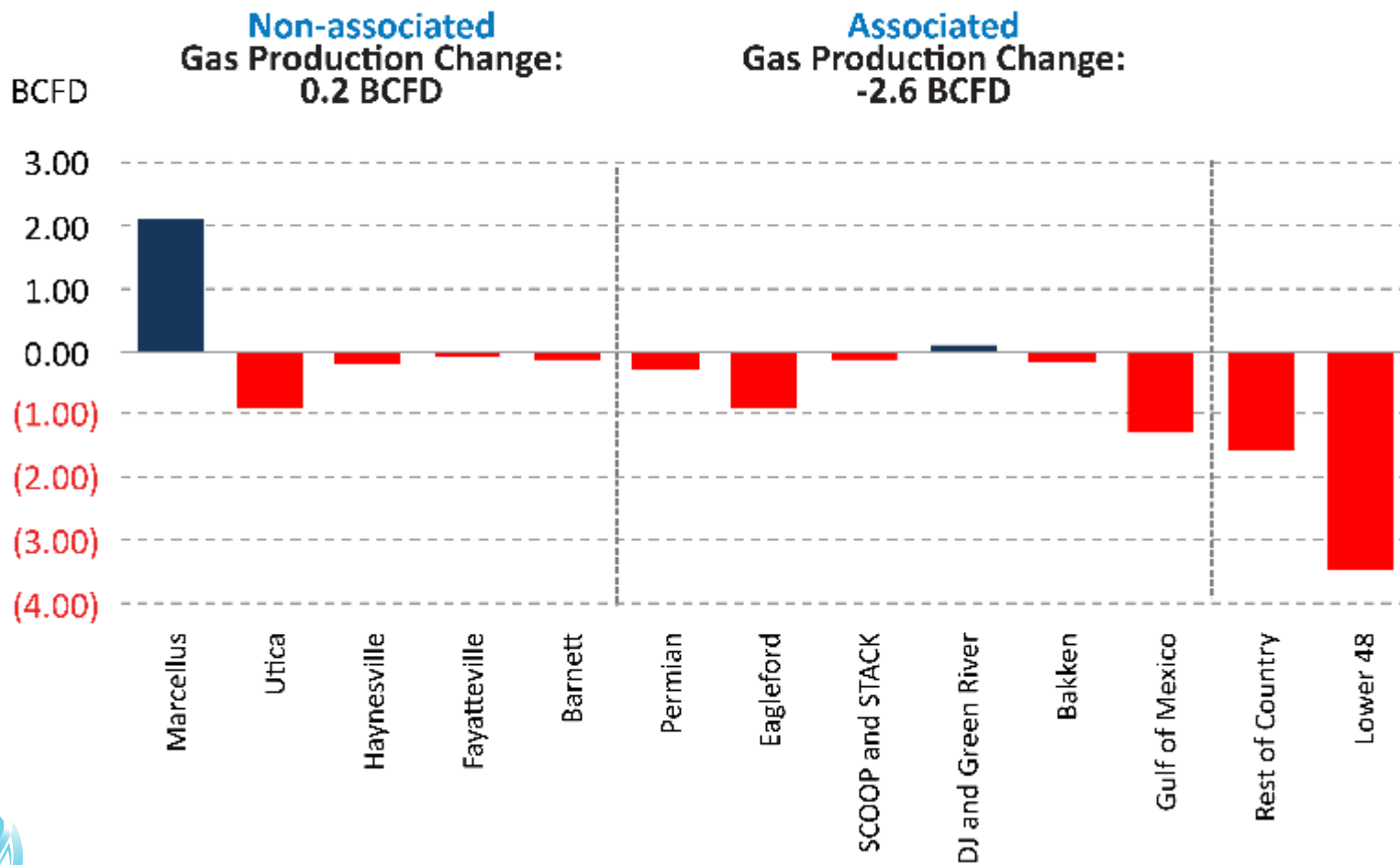
Winter Season Period-to-period change	Last Winter 2019-2020 ACTUAL	This Winter 2020-2021 FORECAST
Winter average production (Lower 48)	94.2 Bcf/d	86.0 Bcf/d
Canadian imports (net)	4.6 Bcf/d	5.0 Bcf/d
LNG imports	0.2 Bcf/d	0.3 Bcf/d

**Winter-to-Winter pressure  
on natural gas prices**



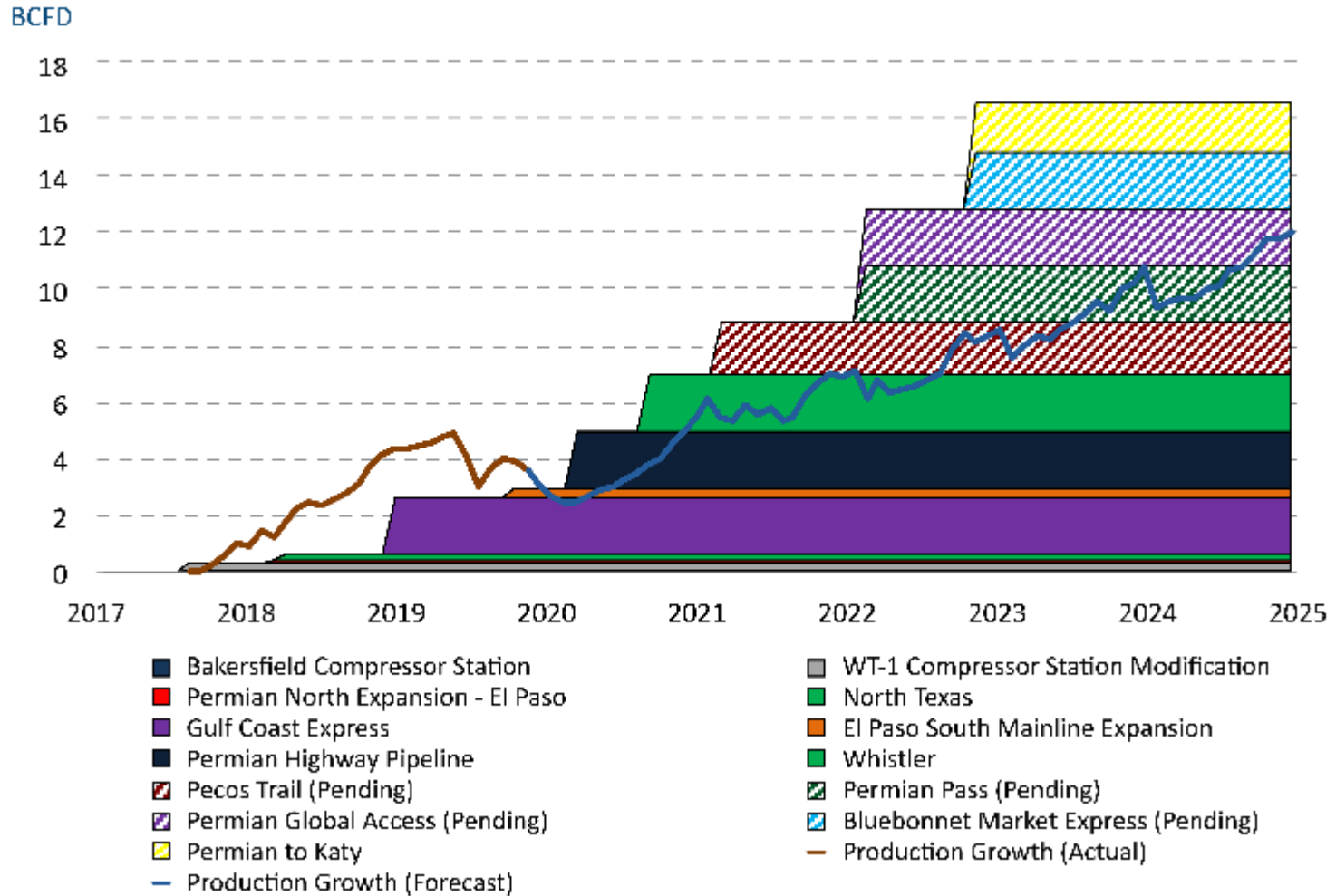
# Recession Impact: Growth of Associated Gas Production Slows

## PRODUCTION CHANGE BY BASIN, 2020 AUGUST VS. 2019 AUGUST



# New Pipeline Capacity Bringing Long-Awaited Relief to Permian

**PERMIAN PRODUCTION TAKEAWAY CAPACITY AND PRODUCTION GROWTH**



- Bakersfield Compressor Station
- Permian North Expansion - El Paso
- Gulf Coast Express
- Permian Highway Pipeline
- Pecos Trail (Pending)
- Permian Global Access (Pending)
- Permian to Katy
- Production Growth (Forecast)
- WT-1 Compressor Station Modification
- North Texas
- El Paso South Mainline Expansion
- Whistler
- Permian Pass (Pending)
- Bluebonnet Market Express (Pending)



# Supply: Winter Storage

Winter Season Period-to-period change	Last Winter 2019-2020 ACTUAL	This Winter 2020-2021 FORECAST
Start-of-winter inventory	3,724 Bcf	4,008 Bcf
Compared to 5-year average (Percent of total storage inventory)	1% higher	9% higher
Average daily withdrawal from storage	11.6 Bcf	18.3 Bcf
New storage capacity	-18 Bcf	8 Bcf

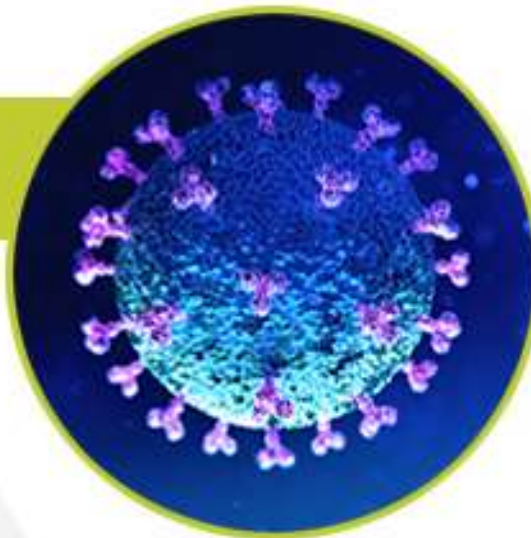
**Winter-to-winter pressure  
on natural gas prices**



# Winter Outlook: Wild Cards

---

COVID Wave 2



LNG Exports

Weather



# This Season's Winter Outlook

Winter Season Period-to-period change	This Winter 2020-2021 FORECAST
Economy	↓
Weather	↑
Overall demand	—
Winter supply	↑
Storage	↓
<b>Winter-to-winter pressure on natural gas prices</b>	<b>↑</b>





# Natural Gas Outlook: Flexible, Reliable Gas Market

---

- Domestic demand growth masked by economic uncertainty
  - Exports – LNG and pipeline – increase during ebbs and flows of market
  - Growth in residential-commercial and industrial sectors not enough to offset decrease in power burn
- Storage offsets a drop in production of associated gas
  - Efficiencies in drilling and production continue to make non-associated gas productive at lower cost
  - Decline in associated gas production due to lower oil prices
  - Diverse supply sources contribute to greater flexibility and resilience evidenced by limited supply impact of hurricanes



# About NGSA

---

- Represents major producers and suppliers of domestic natural gas
  - Integrated and independent companies: 14 members
  - Founded in 1965
- Only national natural gas association representing producers and suppliers with a dedicated focus on downstream issues
- Promotes benefits of competitive natural gas markets, resulting in reliable and efficient transportation and delivery, increased supply and demand
- Combined with the Center for LNG





**Contact:**

Daphne Magnuson  
dmagnuson@ngsa.org  
@natgas\_ngsa  
[www.ngsa.org](http://www.ngsa.org)

Natural Gas Supply Association

# 2020-2021 Winter Outlook

## Markets Matter

[www.ngsa.org](http://www.ngsa.org)

## BACKGROUND SLIDE: Last Year's Projection: How Did We Score?

Predicted Pressure on Prices	Actual Pressure on Prices	Score
▼	▼	☑

### Correctly predicted:

**We correctly projected record-breaking demand and supply. However, supply abundance outpaced demand due to very warm winter and new pipeline capacity. Result: Downward pressure on prices**

- Last winter 2019-2020 average Henry Hub price = \$2.08 MMBtu
- Previous winter 2018-2019 average Henry Hub price = \$3.33 MMBtu



# BACKGROUND SLIDE: U.S. LNG EXPORT BY DESTINATION 2018 to 2020 Q2

