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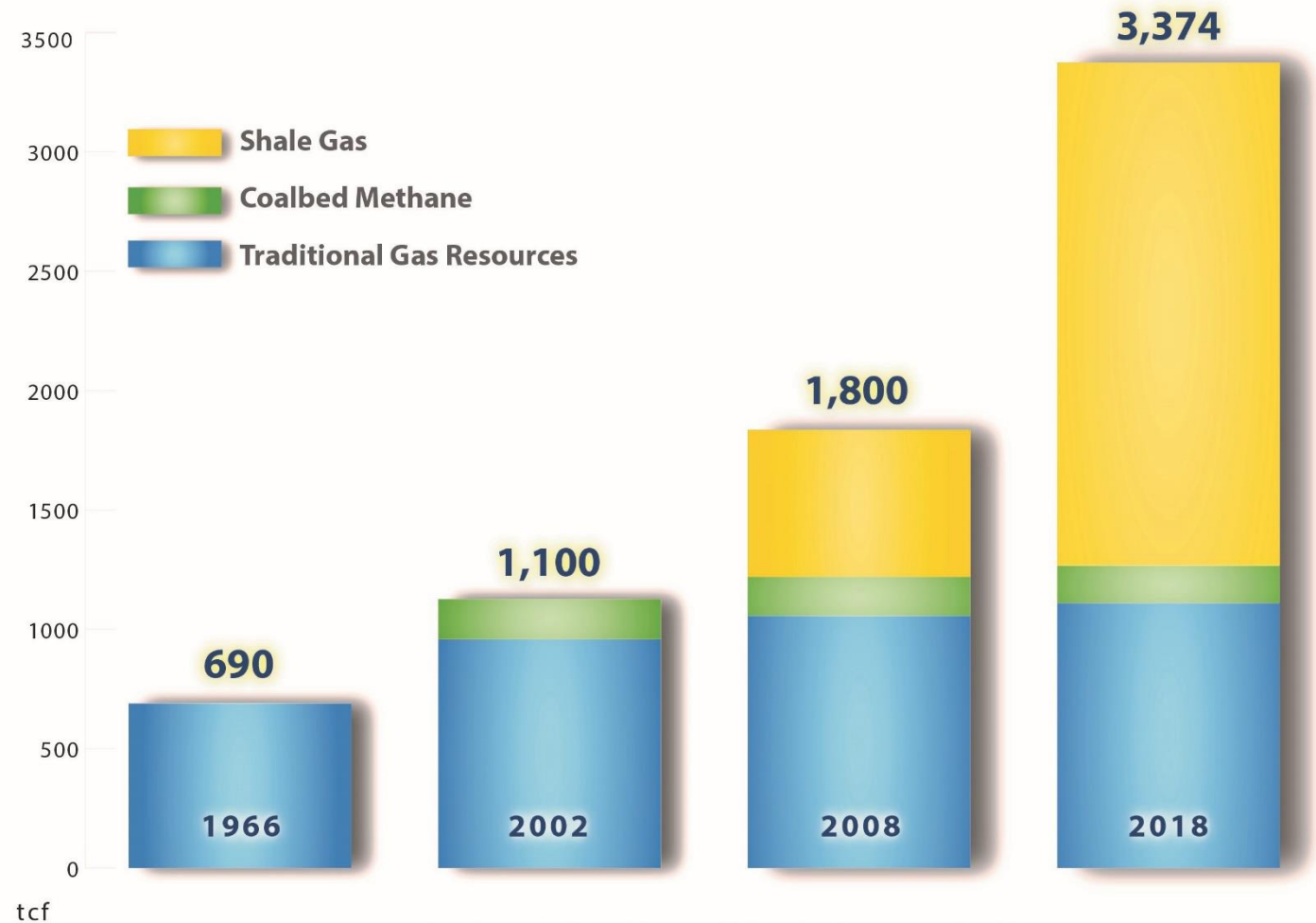
Dena Wiggins  
President and CEO, Natural Gas Supply Association

Charlie Riedl  
Executive Director, Center for LNG

January 23, 2020

If the 1966 estimate of 600 Tcf had remained static, the U.S. would have run out of natural gas in the 1990s. Technology has improved our ability to detect and extract natural gas.

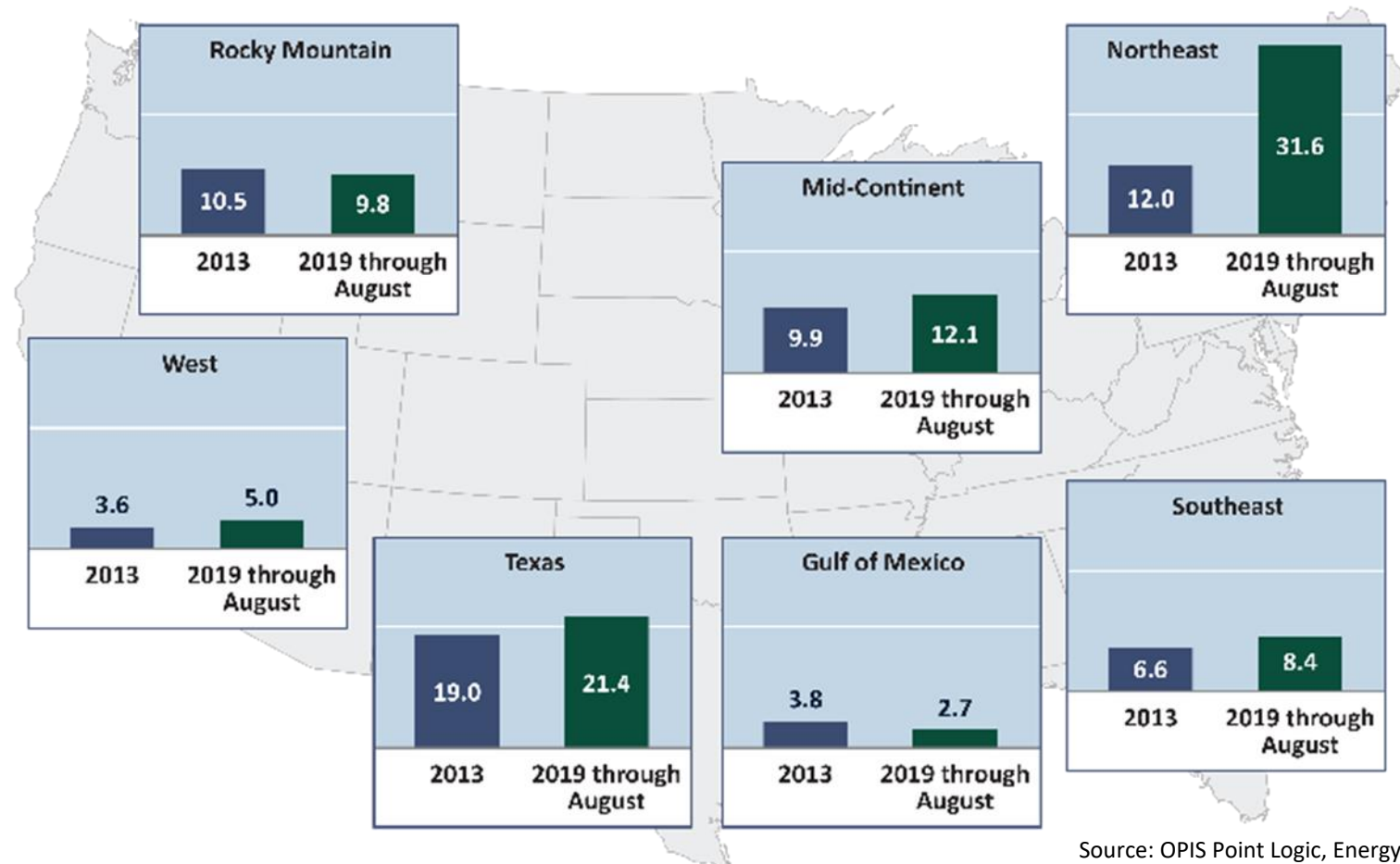
## U.S. Recoverable Natural Gas Resources Almost Doubled in Last Decade



Source: *Potential Supply of Natural Gas in the U.S. 2018*, Potential Gas Committee, 2019

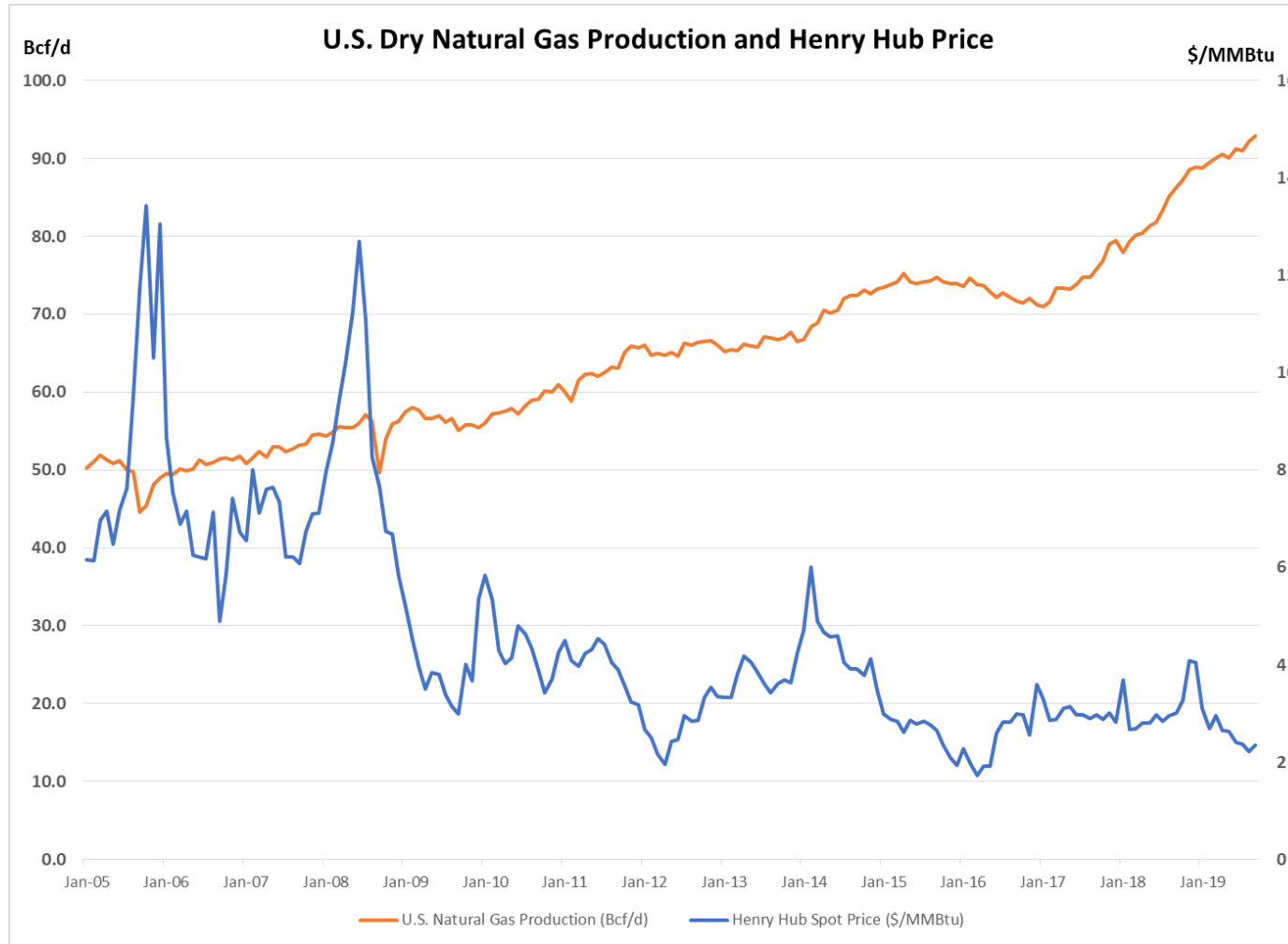
# Record Growth in Production Continues

26 BCFD GROWTH IN U.S. GAS PRODUCTION FROM 2013 TO 2019 YTD, OR ~40%



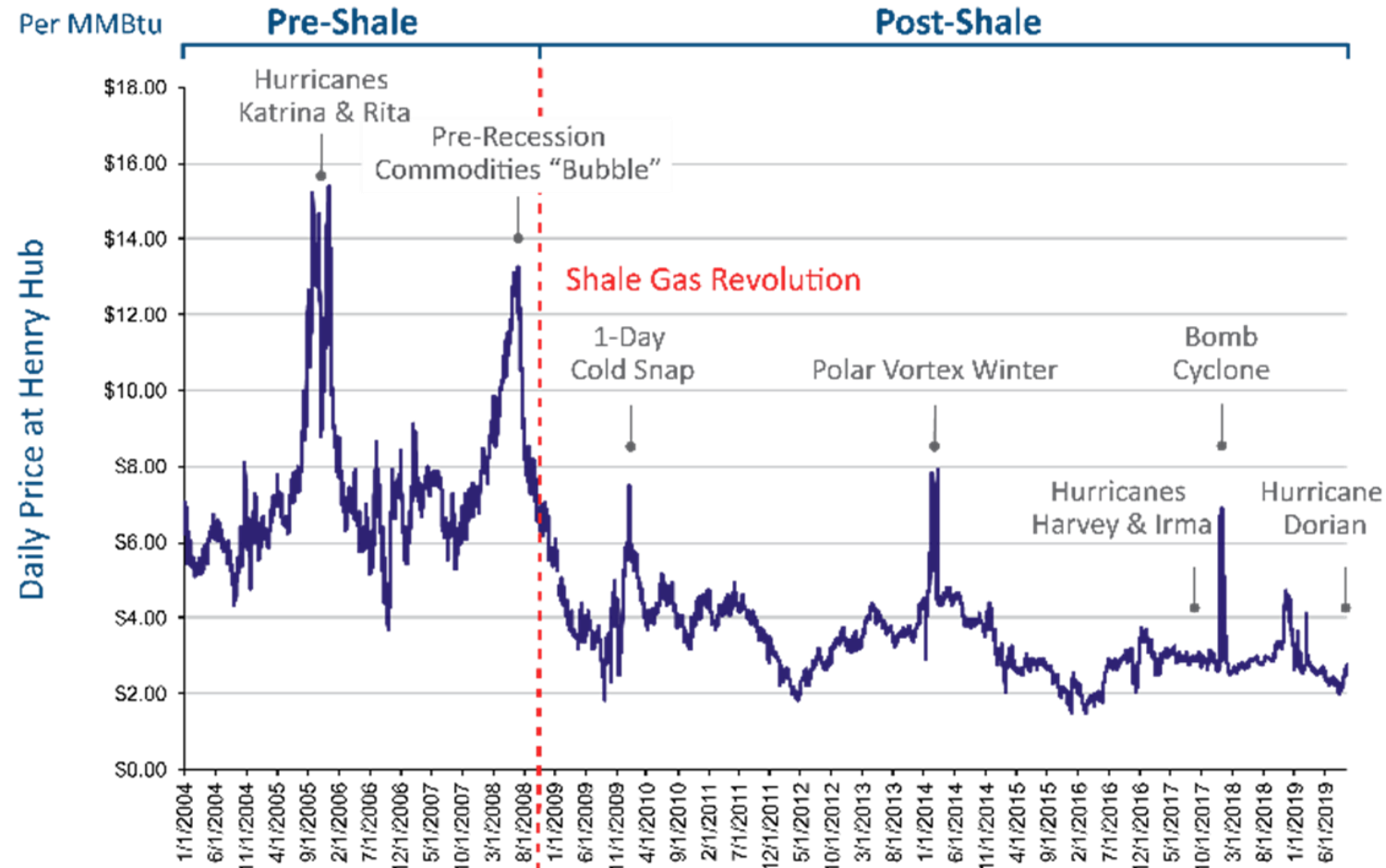
Source: OPIS Point Logic, Energy Ventures Analysis

# Natural Gas Production Grew 86% Since 2005 While Prices Declined 244%



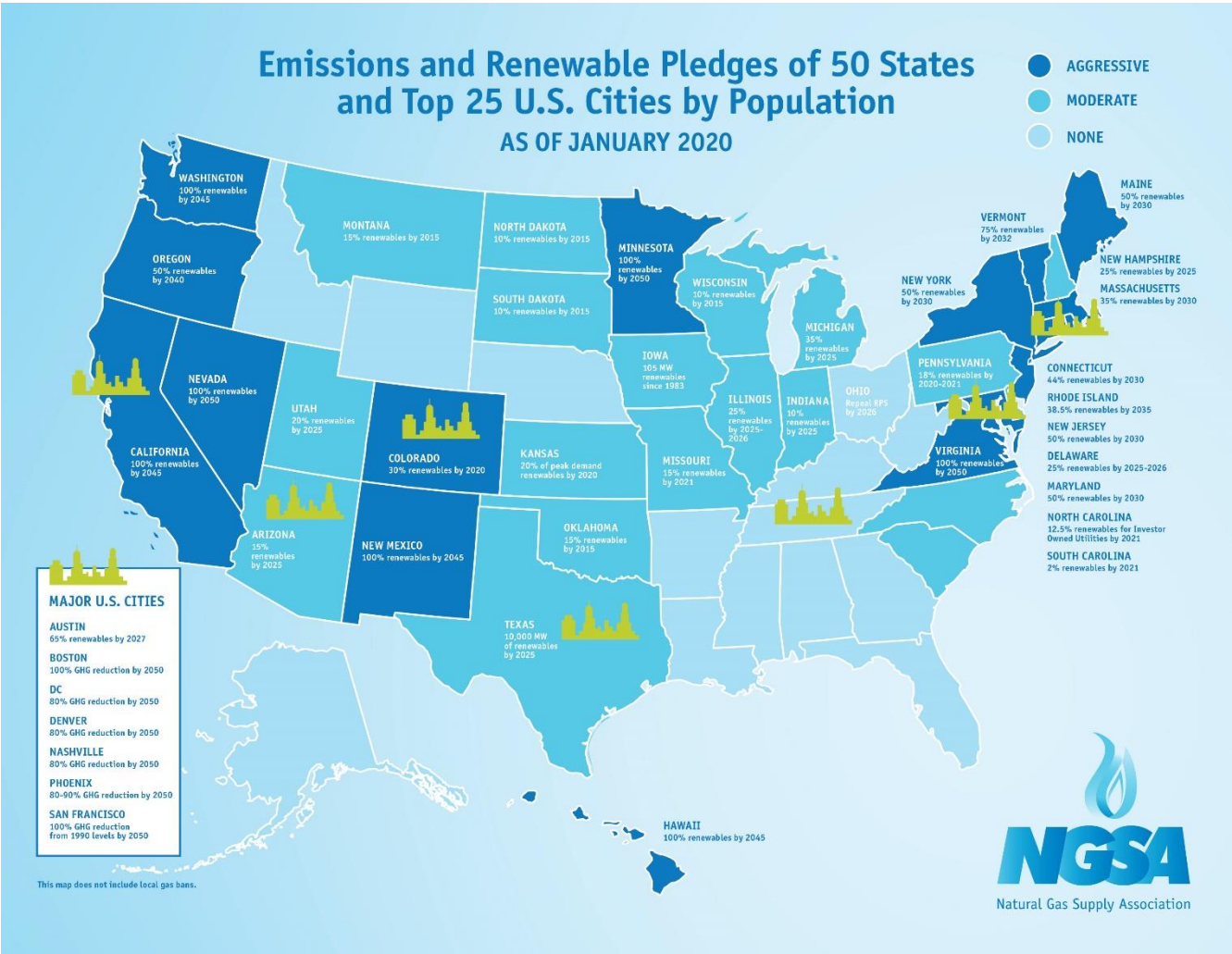
Source: EIA

# Comparison of Impact of Severe Weather on Daily Prices: What a Difference a Decade Makes



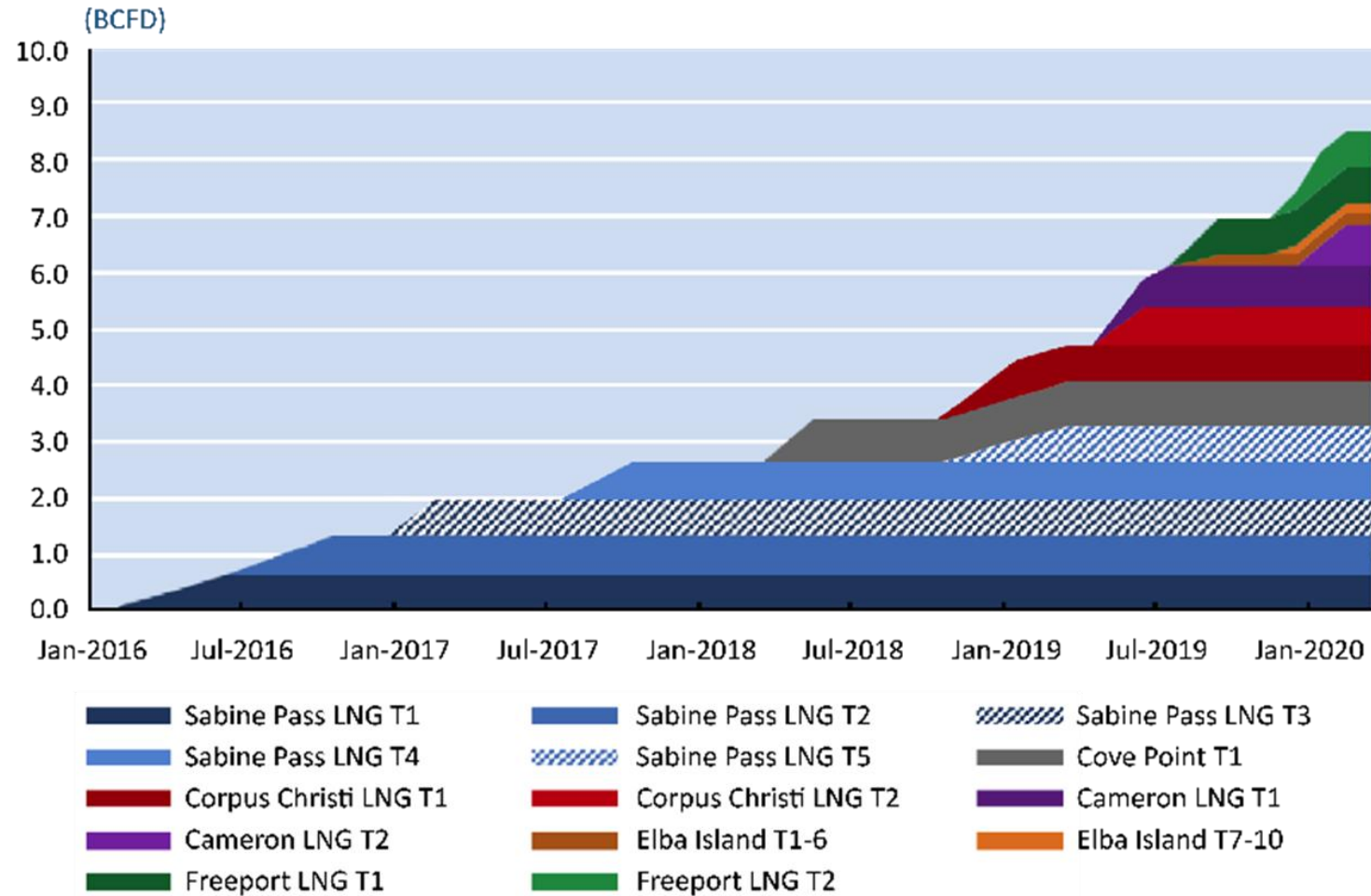
Data Source: Gas Daily

# Rapidly changing energy marketplaces





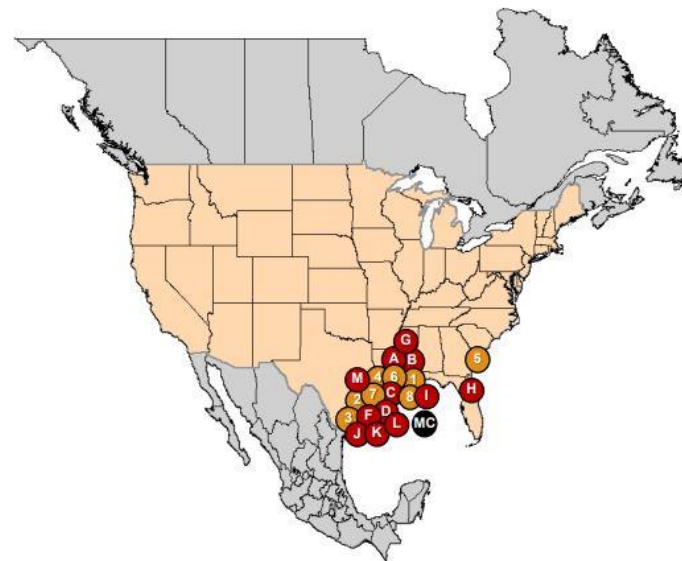
# U.S. LNG: How We Got Here



Source: Energy Ventures Analysis

# U.S. LNG: Looking Forward

## North American LNG Export Terminals *Approved, Not Yet Built*



### Export Terminals

#### UNITED STATES

##### APPROVED - UNDER CONSTRUCTION - FERC

1. Hackberry, LA: 1.43 Bcfd (Semptra-Cameron LNG, Trains 2 & 3) (CP13-25)
2. Freeport, TX: 1.43 Bcfd (Freeport LNG Dev/Freeport LNG Expansion/FLNG Liquefaction Trains 2&3) (CP12-509) (CP15-518)
3. Corpus Christi, TX: 0.72 Bcfd (Cheniere-Corpus Christi LNG Train 2) (CP12-507)
4. Sabine Pass, LA: 0.7 Bcfd Train 6 (Sabine Pass Liquefaction) (CP13-552)
5. Elba Island, GA: 0.245 Bcfd (Southern LNG Company Units 2, 5-10) (CP14-103)
6. Cameron Parish, LA: 1.41 Bcfd (Venture Global Calcasieu Pass) (CP15-550)
7. Sabine Pass, TX: 2.1 Bcfd (ExxonMobil - Golden Pass) (CP14-517)
8. Calcasieu Parish, LA: 4.0 Bcfd (Driftwood LNG) (CP17-117)

##### APPROVED - NOT UNDER CONSTRUCTION - FERC

- A. Lake Charles, LA: 2.2 Bcfd (Southern Union - Lake Charles LNG) (CP14-120)
- B. Lake Charles, LA: 1.08 Bcfd (Magnolia LNG) (CP14-347)
- C. Hackberry, LA: 1.41 Bcfd (Semptra - Cameron LNG) (CP15-560)
- D. Port Arthur, TX: 1.86 Bcfd (Port Arthur LNG Trains 1 & 2) (CP17-20)
- F. Freeport, TX: 0.72 Bcfd (Freeport LNG Dev Train 4) (CP17-470)
- G. Pascagoula, MS: 1.5 Bcfd (Gulf LNG Liquefaction) (CP15-521)
- H. Jacksonville, FL: 0.132 Bcfd (Eagle LNG Partners) (CP17-41)
- I. Plaquemines Parish, LA: 3.40 Bcfd (Venture Global LNG) (CP17-66)
- J. Brownsville, TX: 0.55 Bcfd (Texas LNG Brownsville) (CP16-116)
- K. Brownsville, TX: 3.6 Bcfd (Rio Grande LNG - NextDecade) (CP16-454)
- L. Brownsville, TX: 0.9 Bcfd (Annova LNG Brownsville) (CP16-480)
- M. Corpus Christi, TX: 1.86 Bcfd (Cheniere Corpus Christi LNG) (CP18-512)

##### APPROVED - NOT UNDER CONSTRUCTION - MARAD/Coast Guard

- MC. Gulf of Mexico: 1.8 Bcfd (Delfin LNG)

#### CANADA

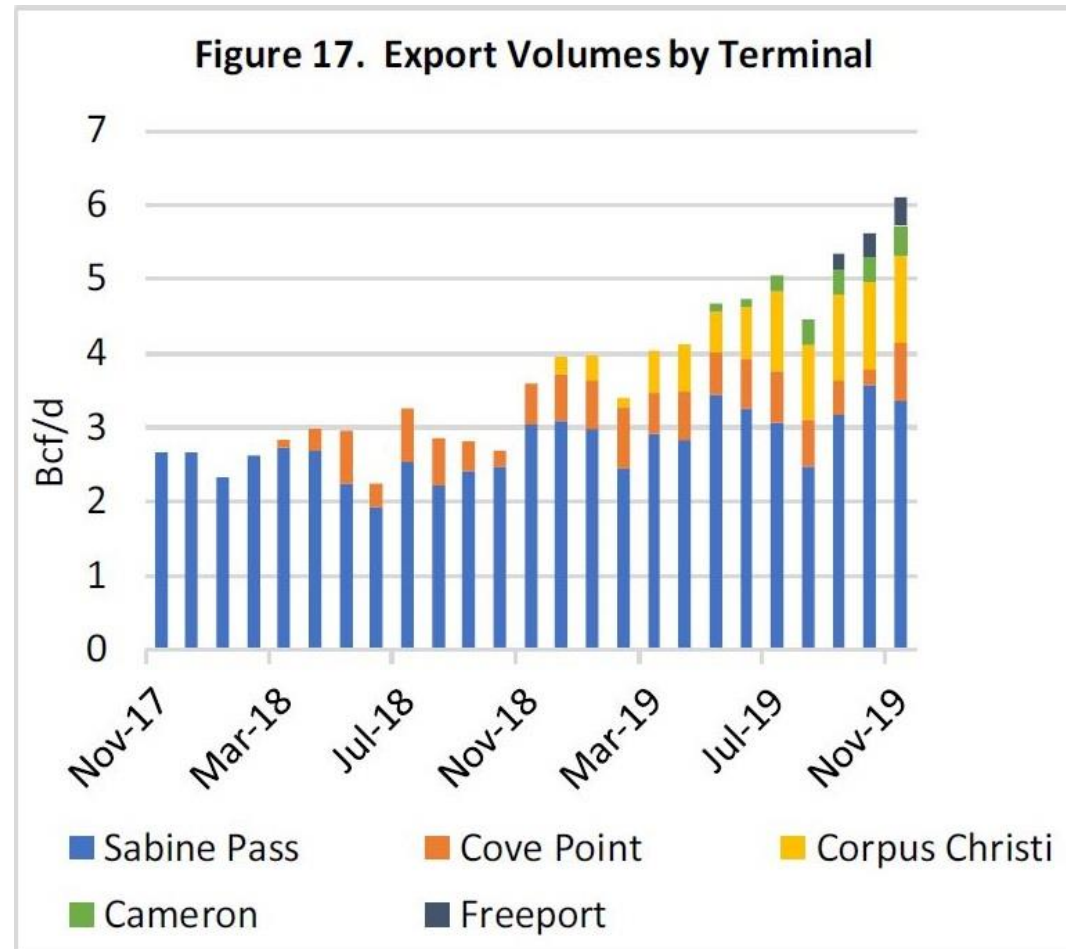
For Canadian LNG Import and Proposed Export Facilities go to:

<https://www.nrcan.gc.ca/energy/natural-gas/5683>

As December 31, 2019



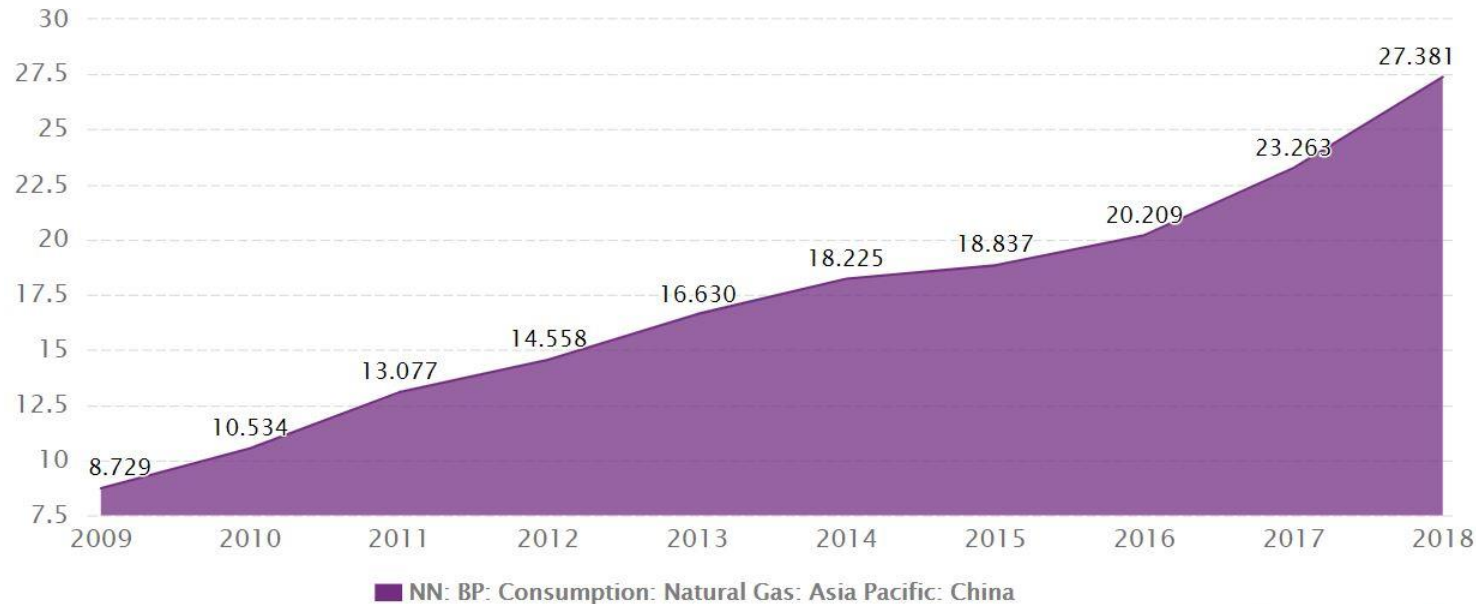
# U.S. LNG: How We Got Here



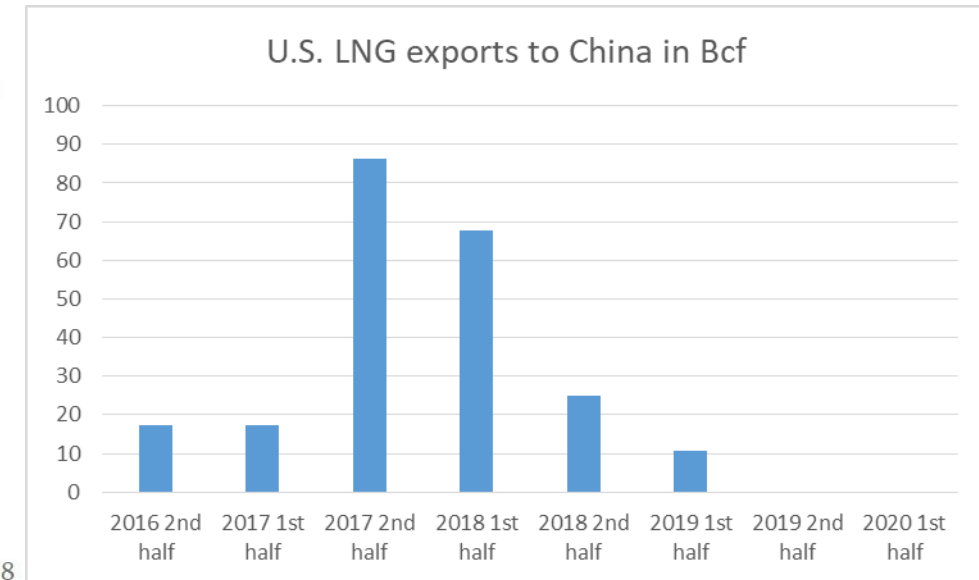
Source: RBN Energy "LNG Voyager"

# Chinese natural gas demand: Rapidly growing

Chinese natural gas demand is growing as they race to become the world largest LNG importer.



SOURCE: WWW.CEICDATA.COM | BP PLC



Meanwhile exports from the U.S. have fallen under the tariffs on U.S. LNG.

# About NGSA and CLNG

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## Natural Gas Supply Association

- Represents major producers and suppliers of domestic natural gas
  - Integrated and independent companies: 11 members
  - Founded in 1965
- Promote benefits of competitive natural gas markets, resulting in reliable and efficient transportation and delivery, increased supply and demand
- Dedicated to achieving a cleaner future through strong partnerships with renewables and supporting innovative technologies and market solutions that reduce emissions.



- Learn more at our website [ngsa.org](https://ngsa.org)

## Center for Liquefied Natural Gas

- The Center for Liquefied Natural Gas (CLNG) advocates for public policies that advance the use of liquefied natural gas (LNG) and its export. A committee of the Natural Gas Supply Association (NGSA), CLNG represents the full LNG value chain, including LNG producers, shippers, terminal operators and developers, providing it with unique insight into the ways in which the vast potential of this abundant, clean and versatile resource can be fully realized.
- Learn more at our website [lngfacts.org](https://lngfacts.org)

