An aerial photograph of a natural gas well site at night. The site is illuminated by several bright lights, highlighting a tall derrick, various buildings, and a parking lot filled with vehicles. The site is situated in a wooded area with rolling hills in the background. A road leads to the site from the bottom of the frame.

Natural Gas Fundamentals

NOVEMBER 2020

This presentation includes “forward-looking statements.” Such forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond AR’s control. All statements, except for statements of historical fact, made in this presentation regarding activities, events or developments are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All forward-looking statements speak only as of the date of this presentation. Although AR believes that the plans, intentions and expectations reflected in or suggested by the forward-looking statements are reasonable, there is no assurance that these plans, intentions or expectations will be achieved. Therefore, actual outcomes and results could materially differ from what is expressed, implied or forecast in such statements. To the extent a forward-looking statement contained in this presentation speaks as of a period covered by prior guidance, the information in this presentation is intended to supersede, and investors should not rely on, such prior guidance.

AR cautions you that these forward-looking statements are subject to all of the risks and uncertainties, most of which are difficult to predict and many of which are beyond the AR’s control, incident to the exploration for and development, production, gathering and sale of natural gas, NGLs and oil. These risks include, but are not limited to, commodity price volatility, inflation, lack of availability of drilling and production equipment and services, environmental risks, drilling and other operating risks, regulatory changes, the uncertainty inherent in estimating natural gas and oil reserves and in projecting future rates of production, cash flow and access to capital, the timing of development expenditures, and the other risks described under the heading "Item 1A. Risk Factors" in AR’s Annual Report on Form 10-K for the year ended December 31, 2019.

1 2020 Year-to-Date Recap

- **COVID-19 Related Oil Demand Destruction Results in Sharply Lower Associated Gas Supply**
 - Oil focused rig count declined 68% since March 2020⁽¹⁾
 - Natural gas supply declined 7%, or 6 Bcf/d from year end 2019, primarily due to lower associated gas volumes⁽²⁾
- **LNG Export Cargo Cancellations**
 - Pandemic related international demand destruction led to over 40 LNG cargo cancellations each month, June through August, reducing U.S. exports by over 5 Bcf/d⁽³⁾
- **U.S. Demand Remained Resilient, but Lower Export Volumes Drove Storage to 5-Year High**
 - U.S. demand remained stable through the pandemic at 75 Bcf/d during the summer; however sharply lower LNG exports drove storage to 5-year high

2 Winter 2020/21 Outlook

- **Producer Discipline Expected to Result in Flat Supply**
 - Associated gas volumes from oil basins to remain depressed with the oil strip below \$45/Bbl
 - Gas producers are expected to stick with maintenance level capital programs in 2021, focus on maximizing free cash flow
- **LNG Feedgas Demand to Exceed Pre-Pandemic Levels**
 - U.S. LNG export volumes are now over 10 Bcf/d, above pre-COVID-19 levels⁽²⁾
 - Zero LNG cargo cancellations are forecast for December
 - Rising international natural gas prices are incentivizing increased exports⁽³⁾
- **Falling Supply and Rebounding Demand Will Push Storage to 5-Year Lows**
 - Forecasts for storage to decline towards 1 Tcf in March 2021, as a 6 Bcf/d supply decline and recovery in U.S. LNG exports could lead to the largest winter draw in the past decade

1) Backer Hughes rig count

2) S&P Global Platts

3) Bloomberg

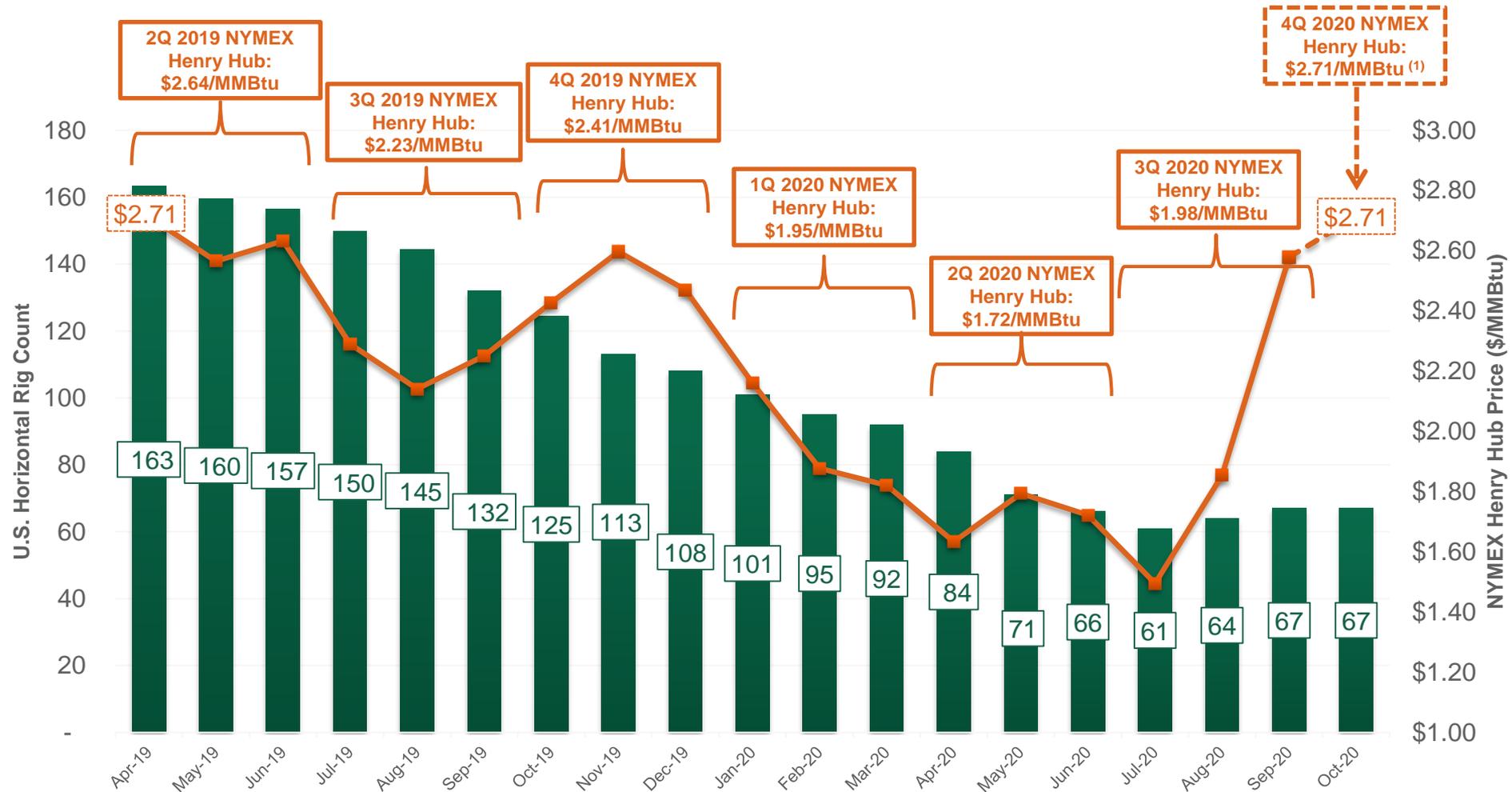
Natural Gas Rig Count Highlights Producer Discipline



Gas rig count responded to lower natural gas prices with a 59% reduction in horizontal gas directed rigs since April 2019

– Minimal rig response as gas prices recovered in July 2020 suggest producers will remain disciplined

Horizontal Gas Rig Counts vs NYMEX Henry Hub



Source: U.S. rig counts from Baker Hughes as of 10/16/2020.

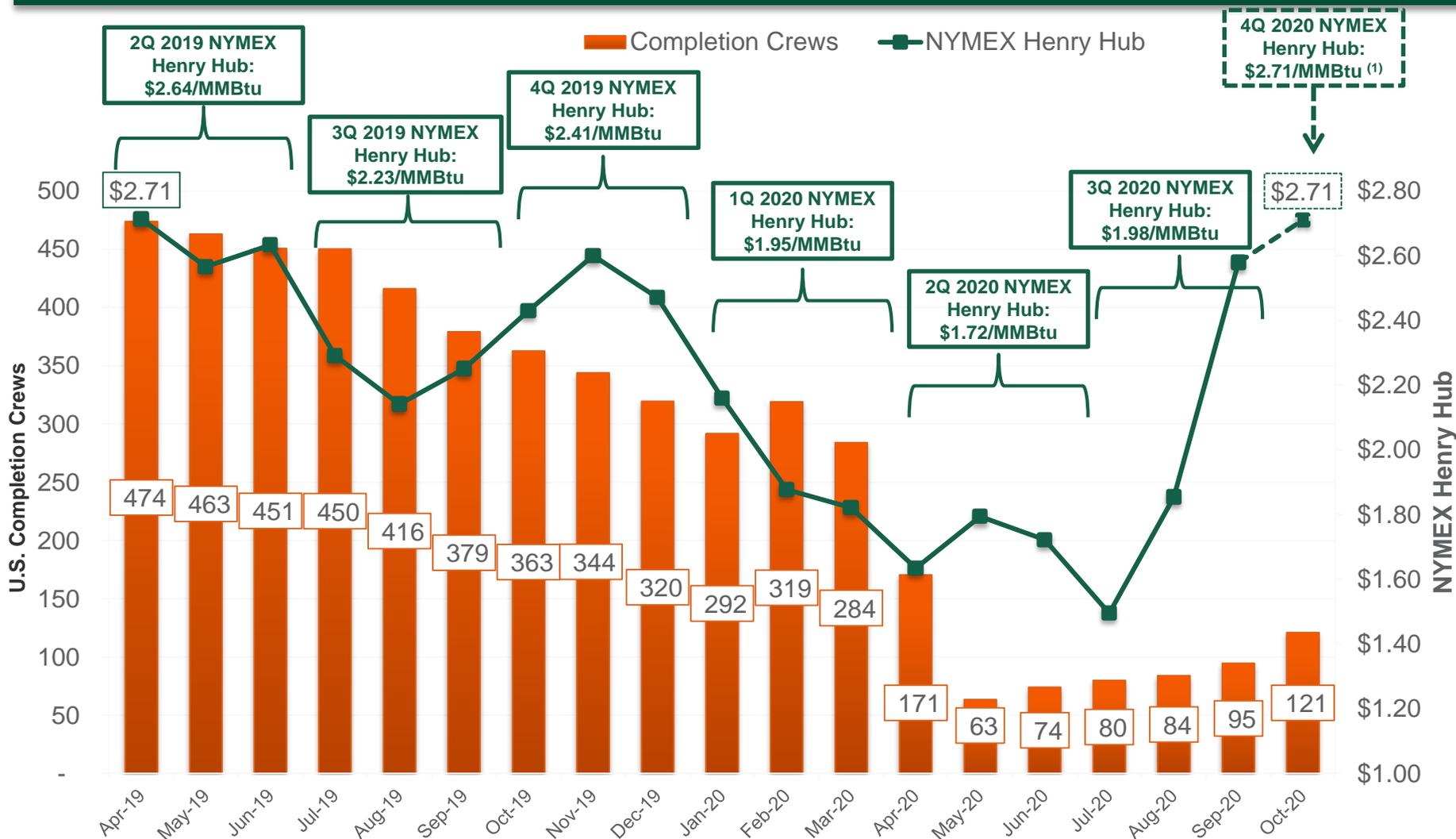
Note: NYMEX Henry Hub price represents natural gas front month futures settlement history.

1) Represents 4Q20 NYMEX Henry Hub average including October and November front month actuals and December futures as of 11/5/2020.

Completion Crew Count Also Remains Low

Completion crew count has responded to lower natural gas and oil prices with a 74% reduction in active completion crews since April 2019

Monthly Average U.S. Completion Crews



Source: Completion crews from Primary Vision.

Note: NYMEX Henry Hub price represents natural gas futures settlement history.

1) Represents 4Q20 NYMEX Henry Hub average including October and November front month actuals and December futures as of 11/5/2020.

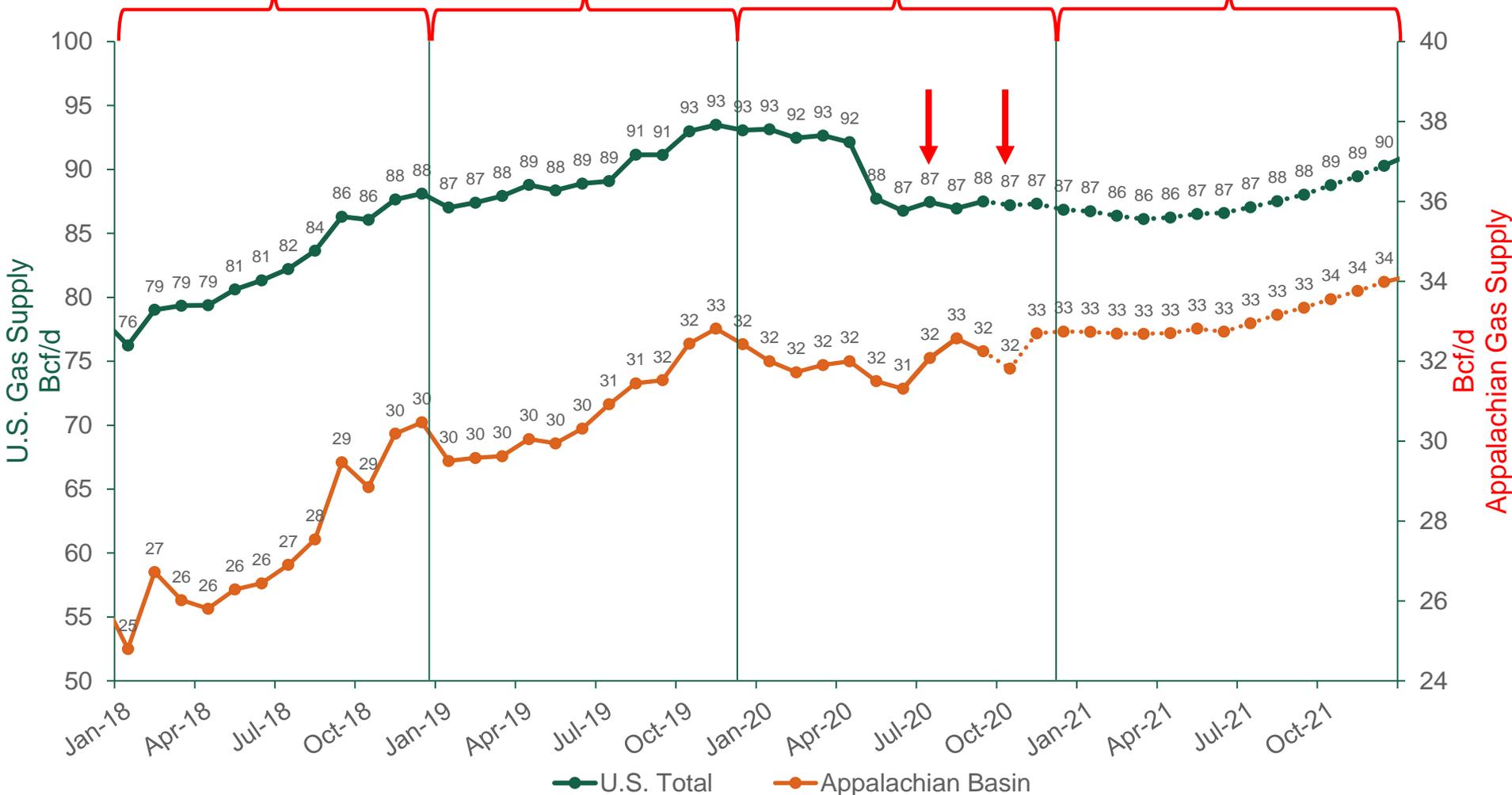
Accordingly, exit-to-exit U.S. supply declined dramatically in 2020

10.8 Bcf/d, or 14.1%,
U.S. supply growth
Jan 2018 to Jan 2019

6.1 Bcf/d, or 7.0%,
U.S. supply growth
Jan 2019 to Jan 2020

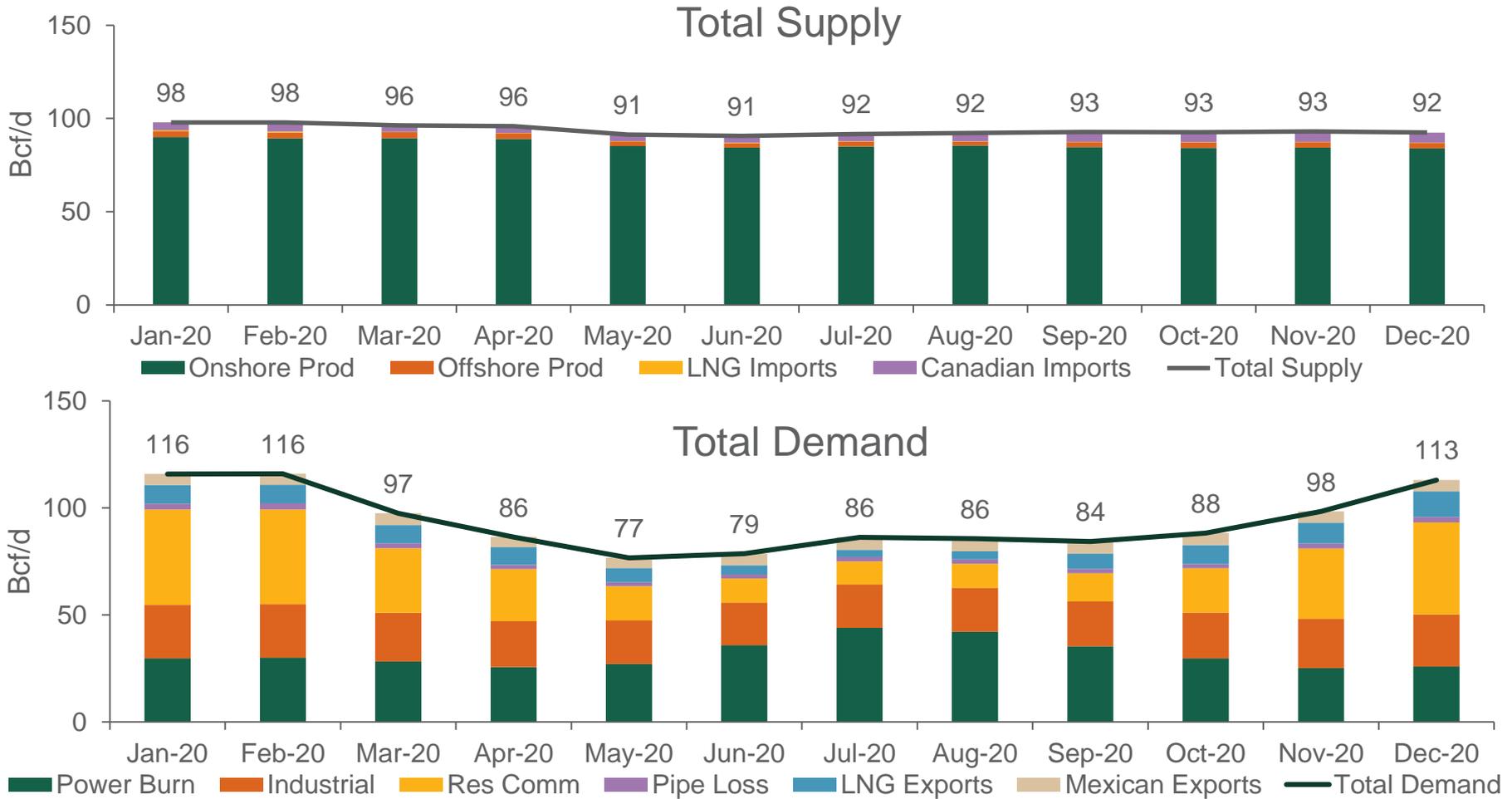
(6.4) Bcf/d, or (6.9%),
U.S. supply decline
Jan 2020 to Jan 2021

3.0 Bcf/d, or 3.4%,
U.S. supply growth forecast
Jan 2021 to Jan 2022



2020 Supply/Demand Balance Detail

2020 is projected to be slightly undersupplied with demand out weighing supply...

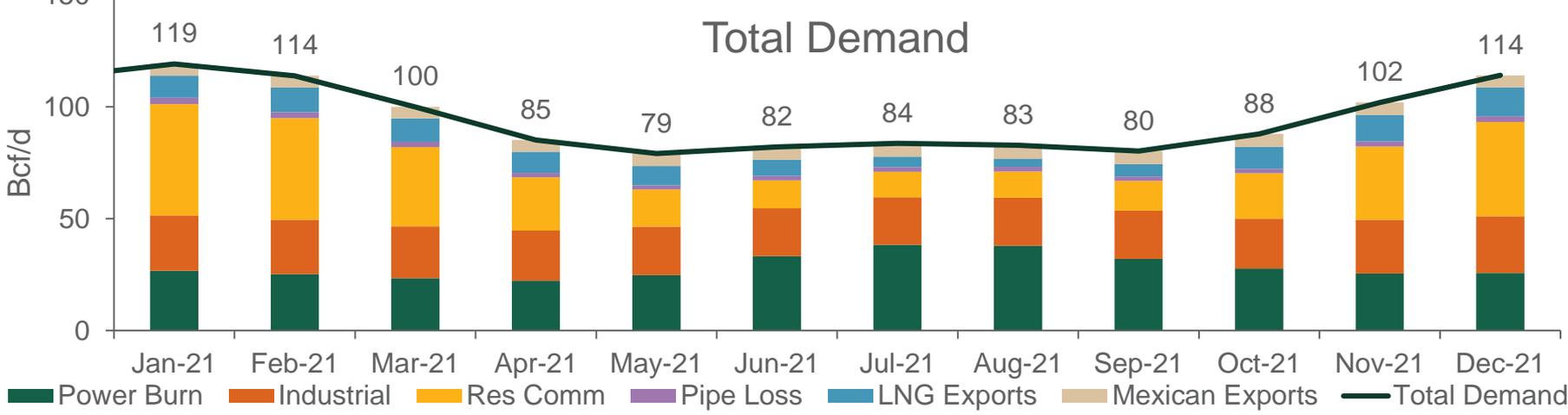
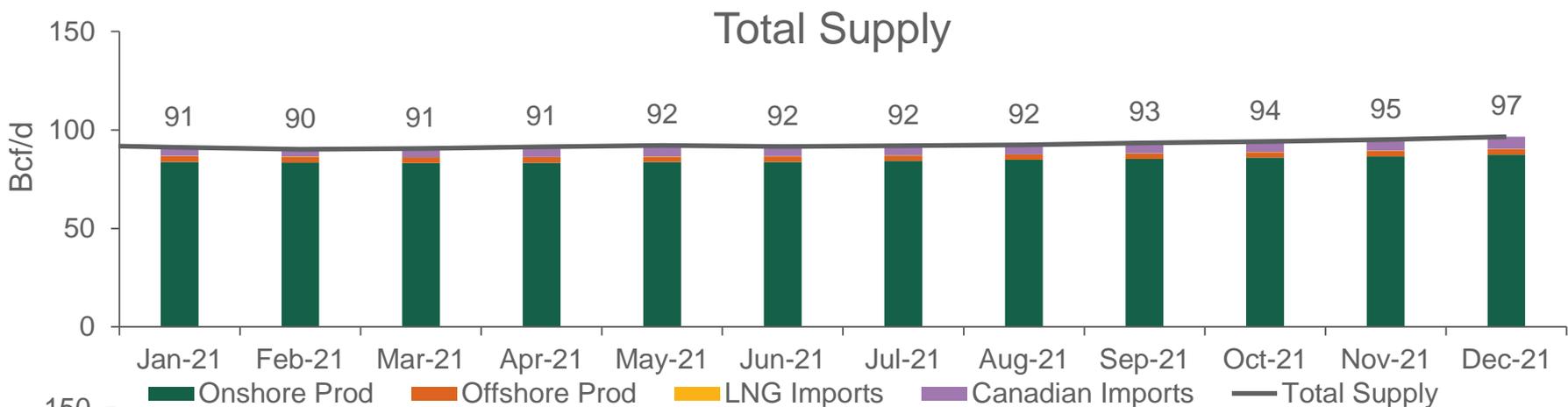


	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Avg.
Net (Supply - Demand)	(18.0)	(18.2)	(1.1)	9.4	14.7	12.0	5.4	6.5	8.5	4.3	(-5.3)	(20.6)	(0.2)

2021 Supply/Demand Balance Detail

...the undersupply is forecast to worsen in 2021 with demand out weighing supply by 1.6 Bcf/d overall

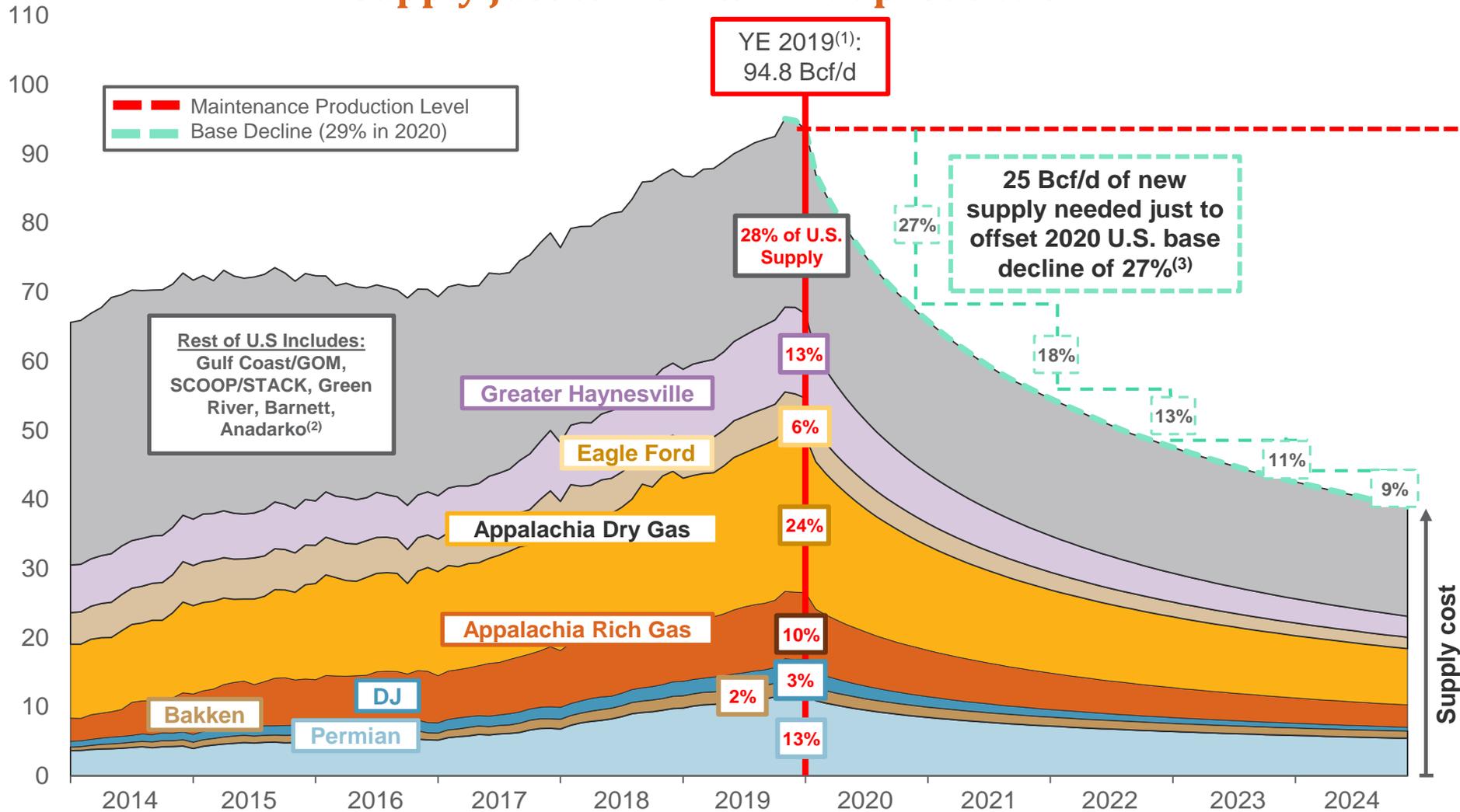
- Should result in sustained \$3.00+ NYEX prices
- Weather will be the key variable to watch



	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Avg.
Net (Supply - Demand)	(28.1)	(23.7)	(9.3)	6.2	13.1	9.5	8.4	9.7	13.2	6.2	(-6.9)	(17.5)	(1.6)

Source: S&P Global Platts.

Significant U.S. base decline requires substantial new supply just to maintain flat production



Source: S&P Global Platts. Note: Platts supply forecast through 2024 is within 2% of EIA's supply forecast over the same period.

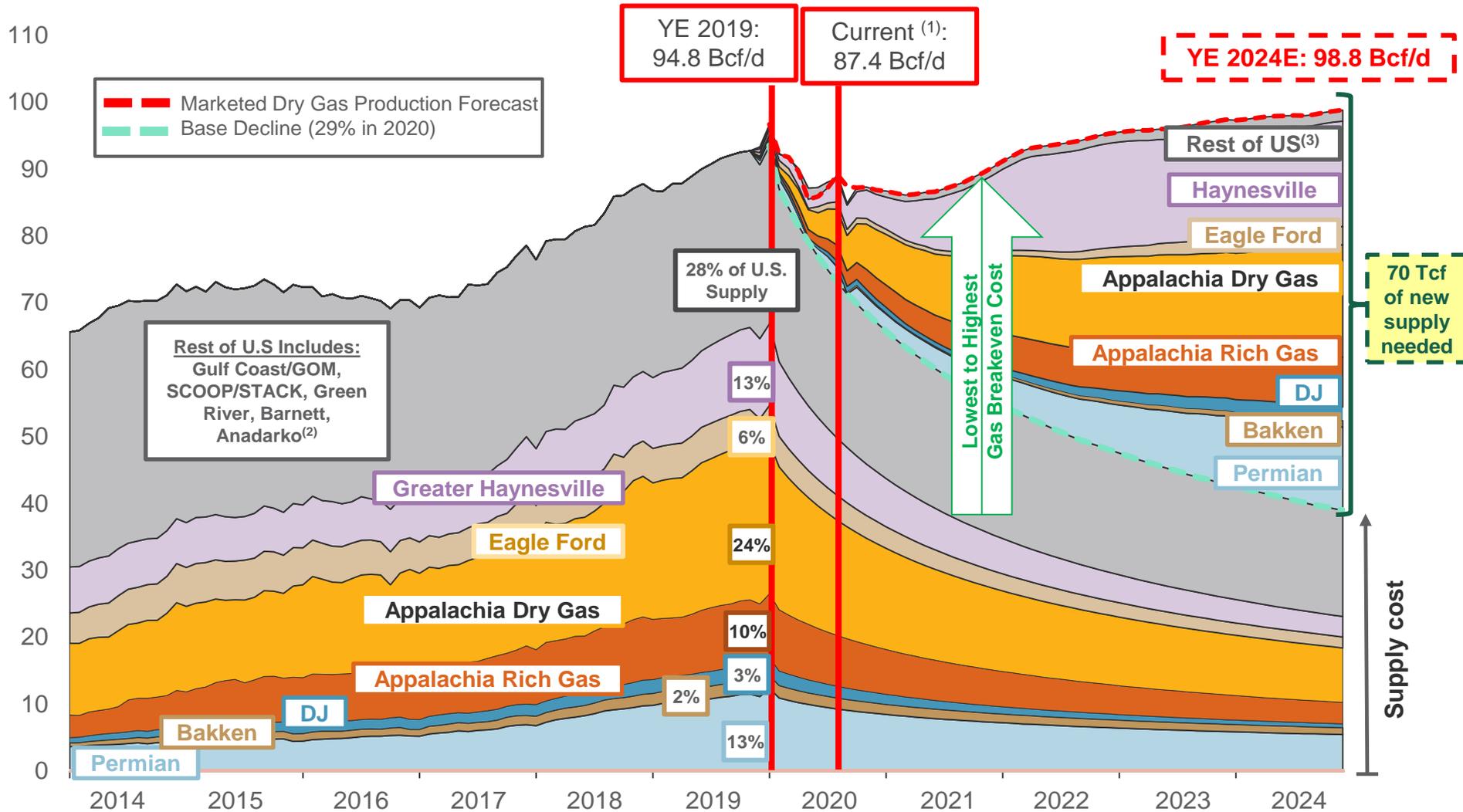
1) Historical and forecast volumes from Platts Analytics.

2) Top five basins/plays that are included in the Rest of U.S.

3) Base decline calculated using 4Q over 4Q forecast production rates for all wells producing as of year-end 2019 based on Platts bottoms up well by well analysis. See appendix for detailed calculations.

U.S. Gas Supply and Required New Supply Wedge

Modest demand growth through 2024 plus base decline requires 70 Tcf of new supply



Source: S&P Global Platts. Platts supply forecast through 2024 is within 2% of EIA's supply forecast over the same period.

1) Historical and forecast volumes from Platts Analytics. Decline as of December 2019. Forecast volumes as of September 2020.

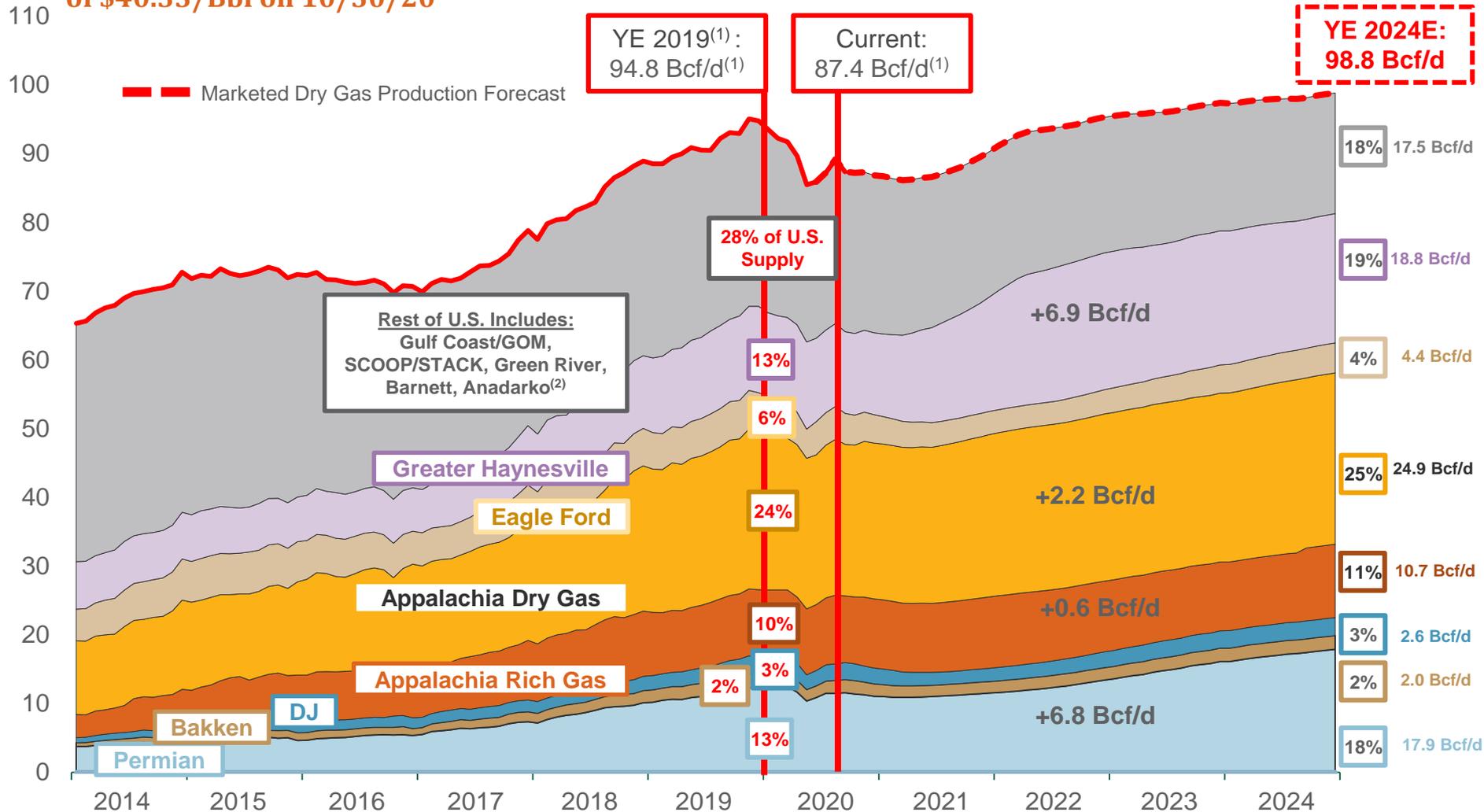
2) Top five basins/plays that are included in the Rest of U.S. are GOM, SCOOP/STACK, Green River, Barnett and Anadarko.

3) Base decline calculated using 4Q over 4Q forecast production rates for all wells producing as of year-end 2019 based on Platts bottoms up well by well analysis. See appendix for detailed calculations.

U.S. Gas Supply Growth Forecast

Almost all U.S. gas supply growth over the next 5 years is expected to come from the Appalachian, Permian and Haynesville Basins

– Platts forecast assumes crude oil price averages \$49.40/Bbl through 2024 as compared to strip price of \$40.33/Bbl on 10/30/20



Source: S&P Global Platts. Platts supply forecast through 2024 is within 2% of EIA's supply forecast over the same period. Platts forecast assumes crude oil price averages \$49.40/Bbl through 2024 as compared to strip price of \$40.33/Bbl on 10/30/20.

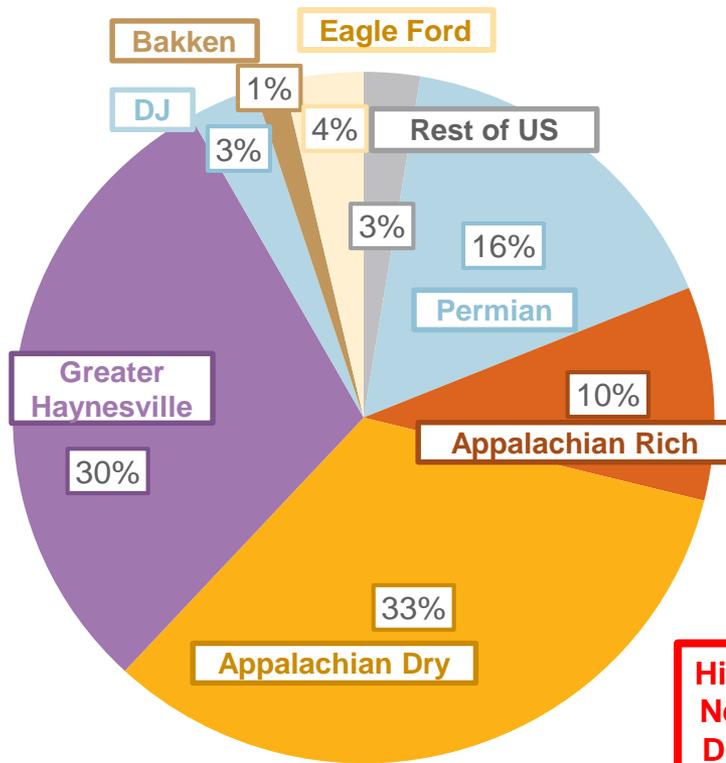
1) Historical and forecast volumes from Platts Analytics. Decline as of December 2019. Forecast volumes as of September 2020.

2) Top five basins/plays that are included in the Rest of U.S.

New Gas Supply Breakdown

46% of new gas supply needed in the 2020-2024 period is forecast to come from non-economic oil shale basins through breakeven prices there are higher than the long-term 2021-2024 strip of \$2.76/MMBtu for natural gas and \$40.33/Bbl for oil

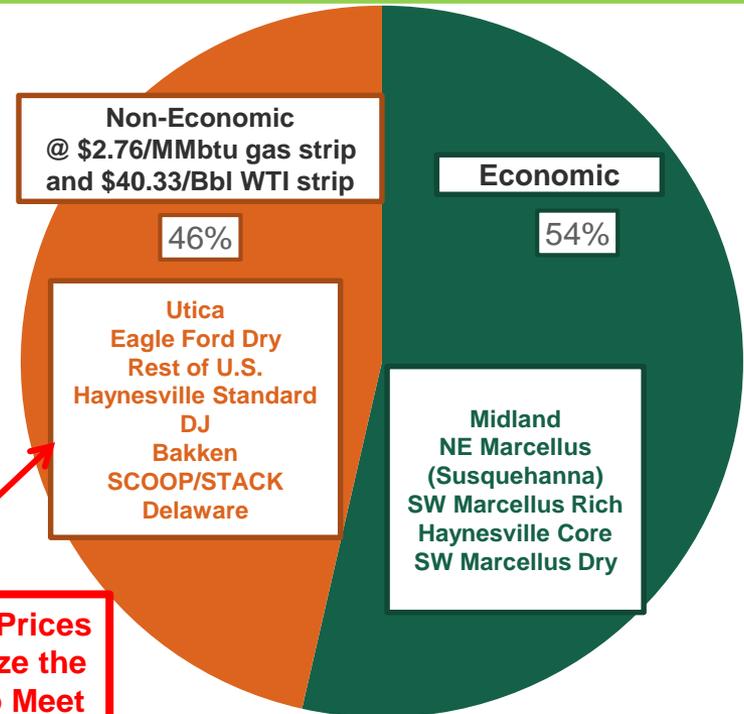
New Supply Contribution by Basin



70 Tcf New Supply Needed Through 2024 ⁽¹⁾

Economic vs Non-Economic New Supply

Breakeven Price Yields Pre-tax ROR of 15%⁽²⁾
 Non-Economic = Breakeven Price > \$2.76/MMBtu + \$40.33/Bbl Strip



70 Tcf New Supply Needed Through 2024 ⁽¹⁾

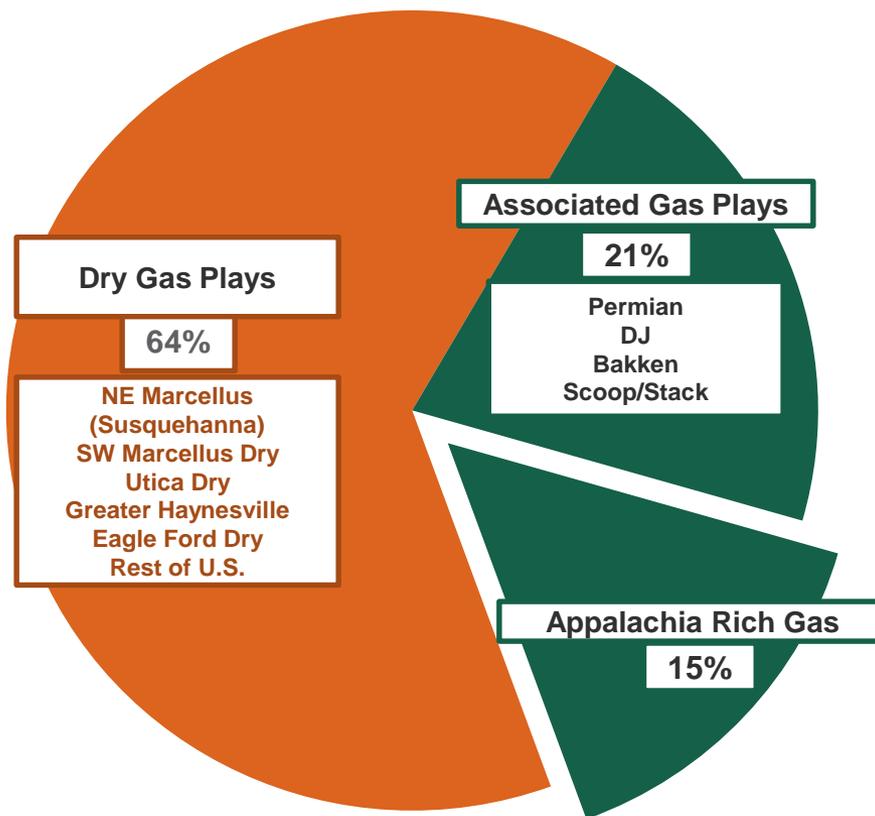
Higher Gas and Oil Prices Needed to Incentivize the Drilling Required to Meet New Supply Forecasts

1) Platts Analytics forecast supply growth.

2) Breakeven analysis source: J.P. Morgan Equity Research estimates. Defined as full cycle pre-tax ROR of 15%. Assumes \$40.33/Bbl WTI crude oil. Based on strip pricing as of 10/30/20. See appendix for oil basin breakevens.

- Only 21% of the new gas supply needed in the 2020 through 2024 period is forecast to come from associated gas plays where natural gas price is not the driving factor for development
- Remaining 64% of new gas supply must come from dry gas plays where producers generally need high-\$2.00 to low-\$3.00/MMBtu NYMEX natural gas prices to generate a 15% ROR on a full-cycle basis

Rich vs. Dry New Supply



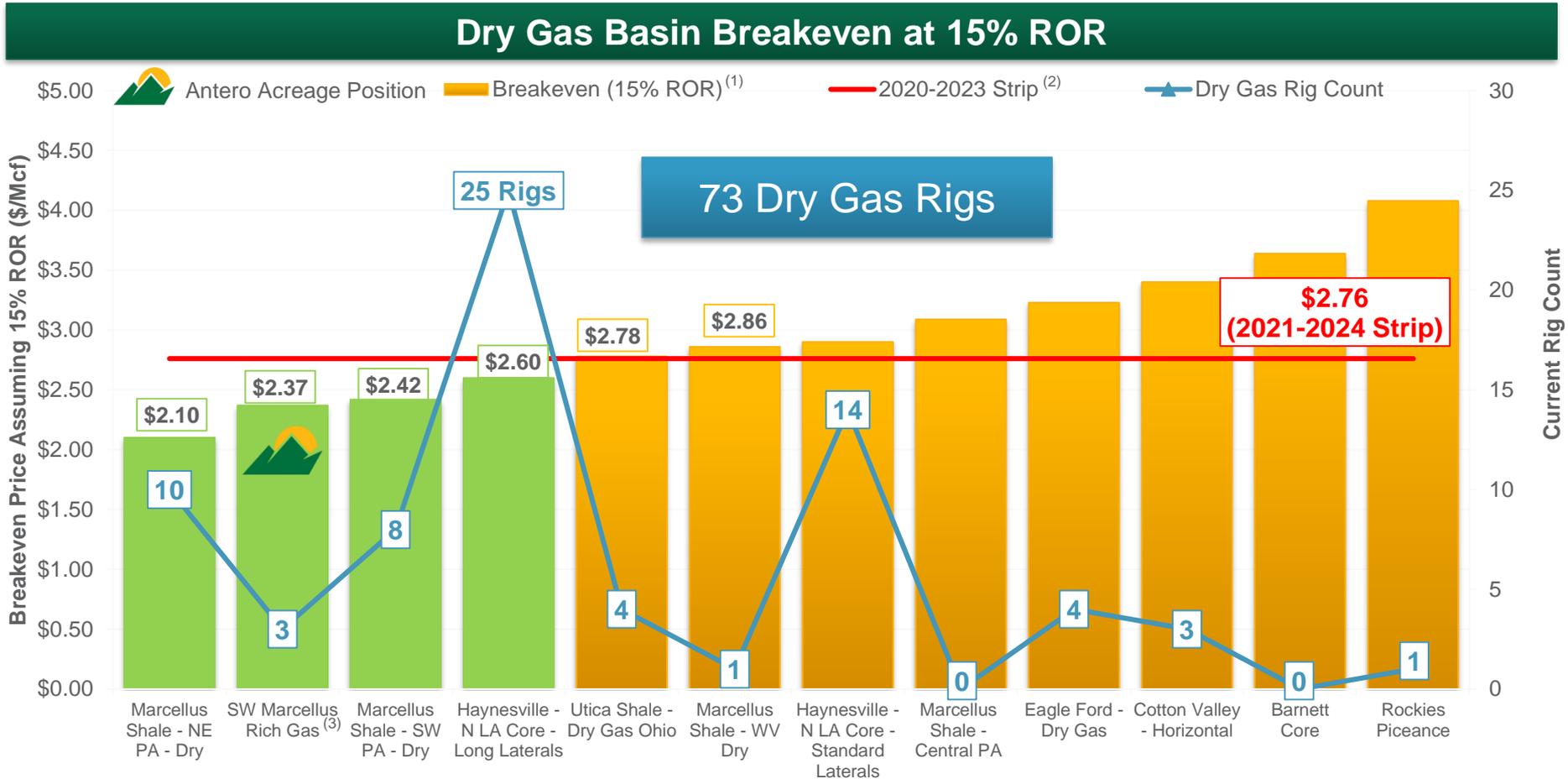
70 Tcf New Supply
Needed Through 2024 ⁽¹⁾

1) Platts Analytics forecast supply growth.

Dry Gas Basin Breakeven Analysis

Most of the dry gas plays in the U.S. have breakeven prices above the current 2021-2024 strip at \$2.76/MMBtu

- Dry gas producers will require higher realized prices than the current strip to incentivize the drilling activity needed to deliver new supply
- Dry gas rig count has declined 41%, or 50 rigs, since January 2020



Breakeven analysis source: J.P. Morgan Equity Research estimates in April 2020 report. RigData report dated 11/2/20.

1) Breakeven price is defined as full cycle pre-tax ROR of 15%. Excludes rich gas basins; SW Marcellus Rich, SCOOP/STACK, DJ Basin,

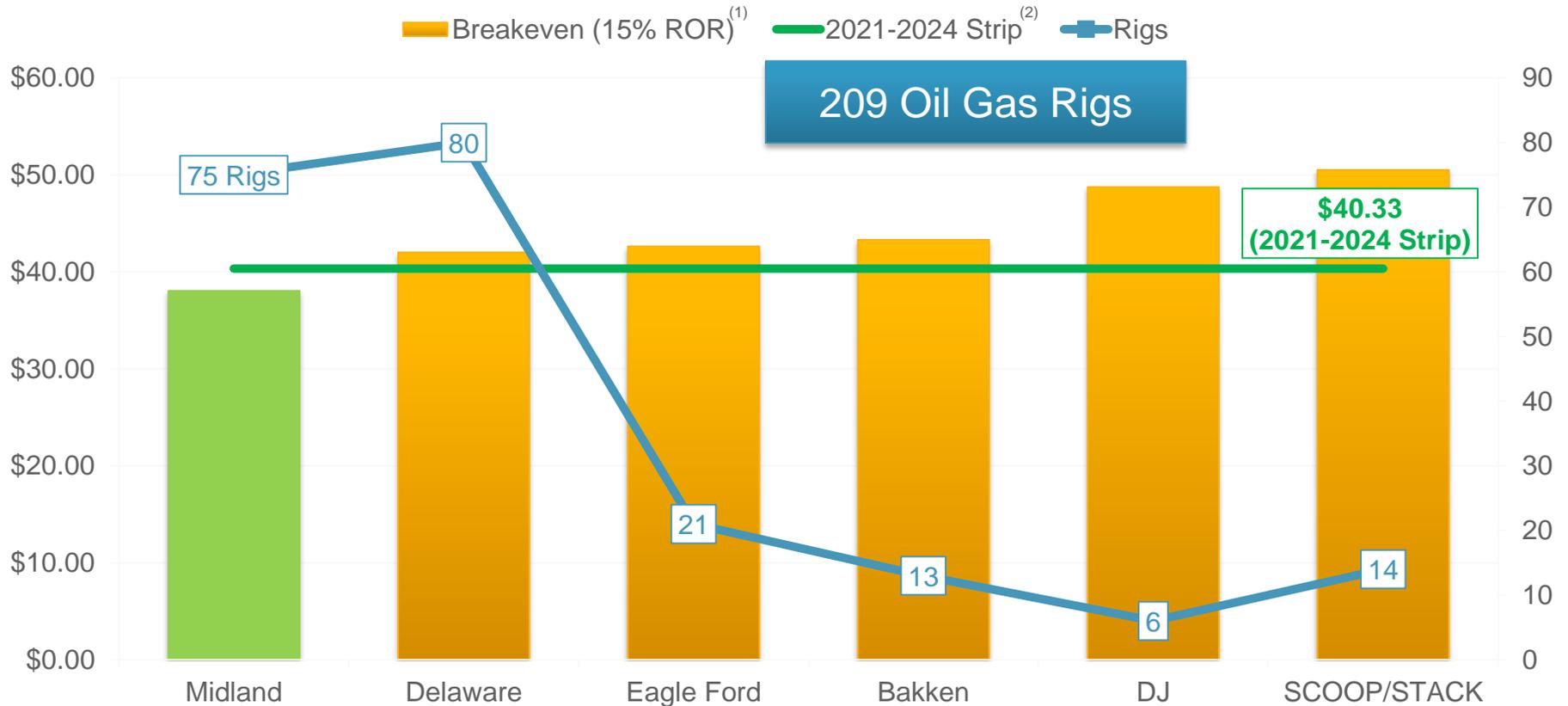
2) 2020-2023 average Nymex Henry Hub price. Strip pricing as of 10/30/20.

3) Based on AR weighted average full cycle well economics for AR's position within area. Assumes 12,000' lateral lengths and excludes land and G&A costs. Assumes \$45/Bbl WTI and 60% of WTI C3+ NGL pricing.

Most of the oil plays in the U.S. have breakeven prices above the current 2021-2024 strip at \$40.33/Bbl

- Oil rig count has declined 68%, or 441 rigs, since January 2020
- These shale oil plays contribute 24% of natural gas supply as well

Oil Basin Breakeven at 15% ROR



Breakeven analysis source: J.P. Morgan Equity Research estimates in April 2020 report. RigData report dated 10/30/20.

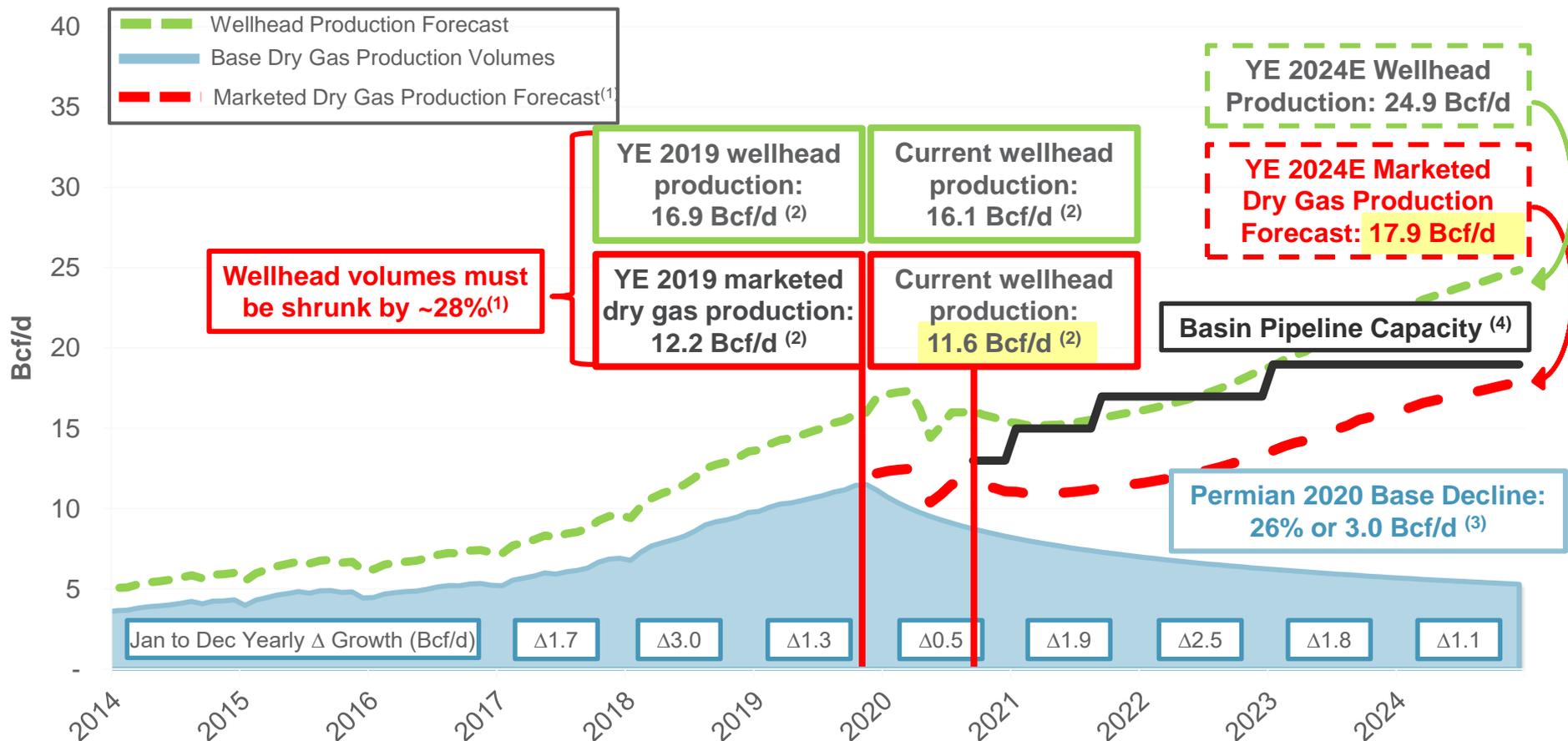
1) Breakeven price is defined as full cycle pre-tax ROR of 15%.

2) 2021-2024 average NYMEX WTI price. Strip pricing as of 10/30/20.

Permian Gas Supply Growth

While Permian associated gas is expected to be a key contributor to U.S. gas supply growth, the Permian is not expected to dominate the eventual 99 Bcf/d U.S. dry gas supply market

- Permian marketed dry gas production contributed 13% of U.S. gas supply in 2019 and is expected to grow to 18% by 2024
- Permian dry marketed gas makes up only 18% of the 70 Tcf of new supply needed to meet demand through 2024
- Permian wellhead gas production is highly rich gas which must be “shrunk” by ~28% both for processing to extract NGLs and for compression fuel use to get to marketed dry gas production figures ⁽¹⁾
- While Permian gas supply is relatively insensitive to natural gas prices, it is very sensitive to oil prices in a lower oil price scenario
- The below forecast is based on Platts oil price assumption that averages \$49.40/Bbl through 2024 (vs. 10/30/20 strip of 40.33/Bbl)



Source: S&P Global Platts.

1) Associated gas in the Permian is highly rich gas which must be processed and compressed which reduces wellhead gas volumes by approximately 28%, the remainder being marketed dry gas production exiting the basin.

2) Historical and forecast volumes from Platts Analytics and differs from pipeline data scrapes. Decline as of December 2019. Forecast volumes as of September 2020.

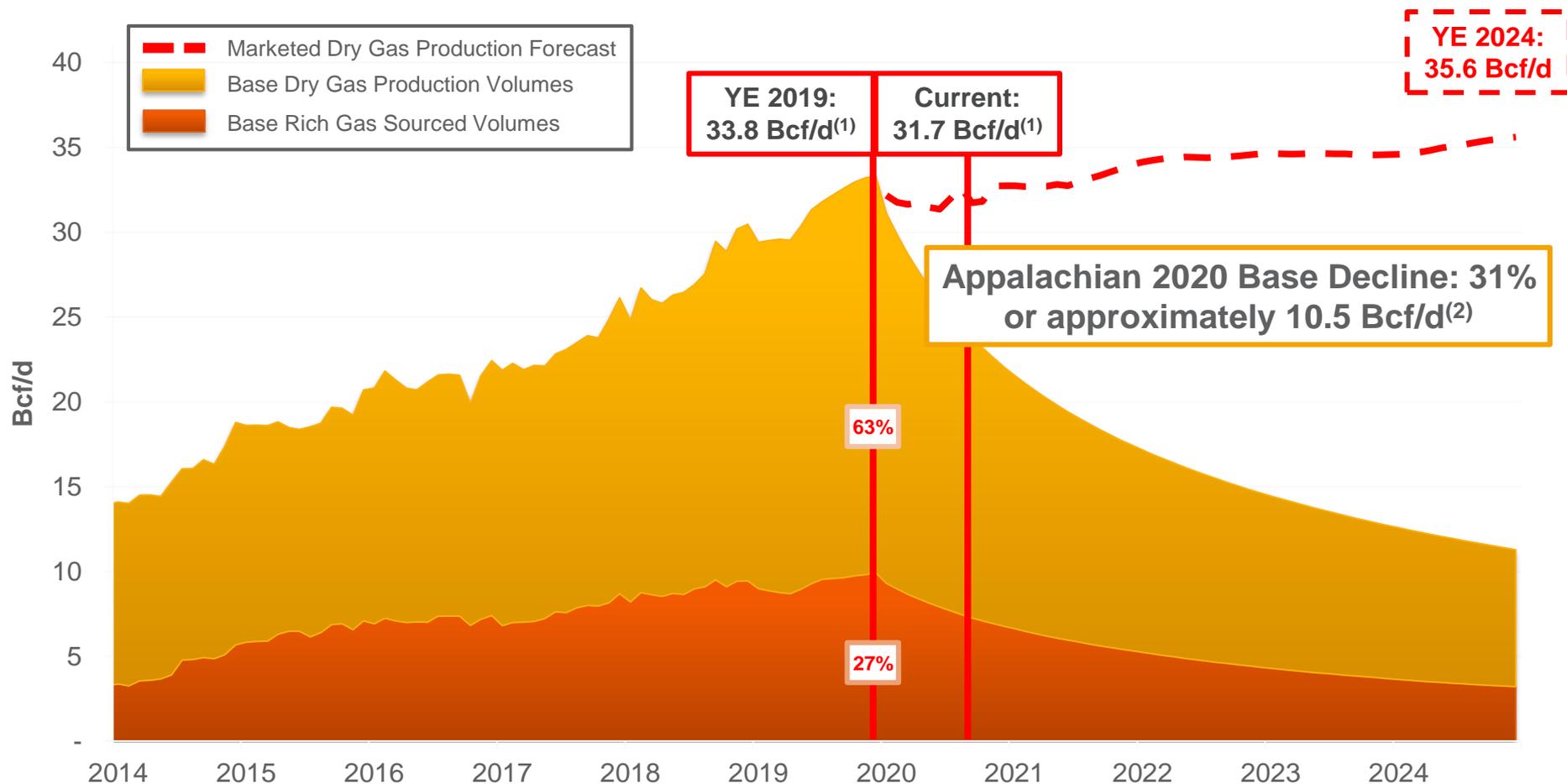
3) Base decline calculated using 4Q over 4Q forecast production rates for all wells producing as of year-end 2019 based on Platts bottoms up well by well analysis. See appendix for detailed calculations.

4) Permian basin capacity forecast includes FID approved pipeline projects only.

Appalachian Gas Supply Growth

Appalachian production including the Marcellus and Utica Shales, contributes 36% of U.S. natural gas supply today and is expected to remain at 36% by YE 2024, or 35.6 Bcf/d

- 31.7 Bcf/d of current production is expected to grow by 3.9 Bcf/d to 35.6 Bcf/d by 2024
- An estimated 31% or 9.7 Bcf/d of Appalachian production is derived from rich gas wells and must be processed for NGLs but is less sensitive to gas prices



Source: S&P Global Platts

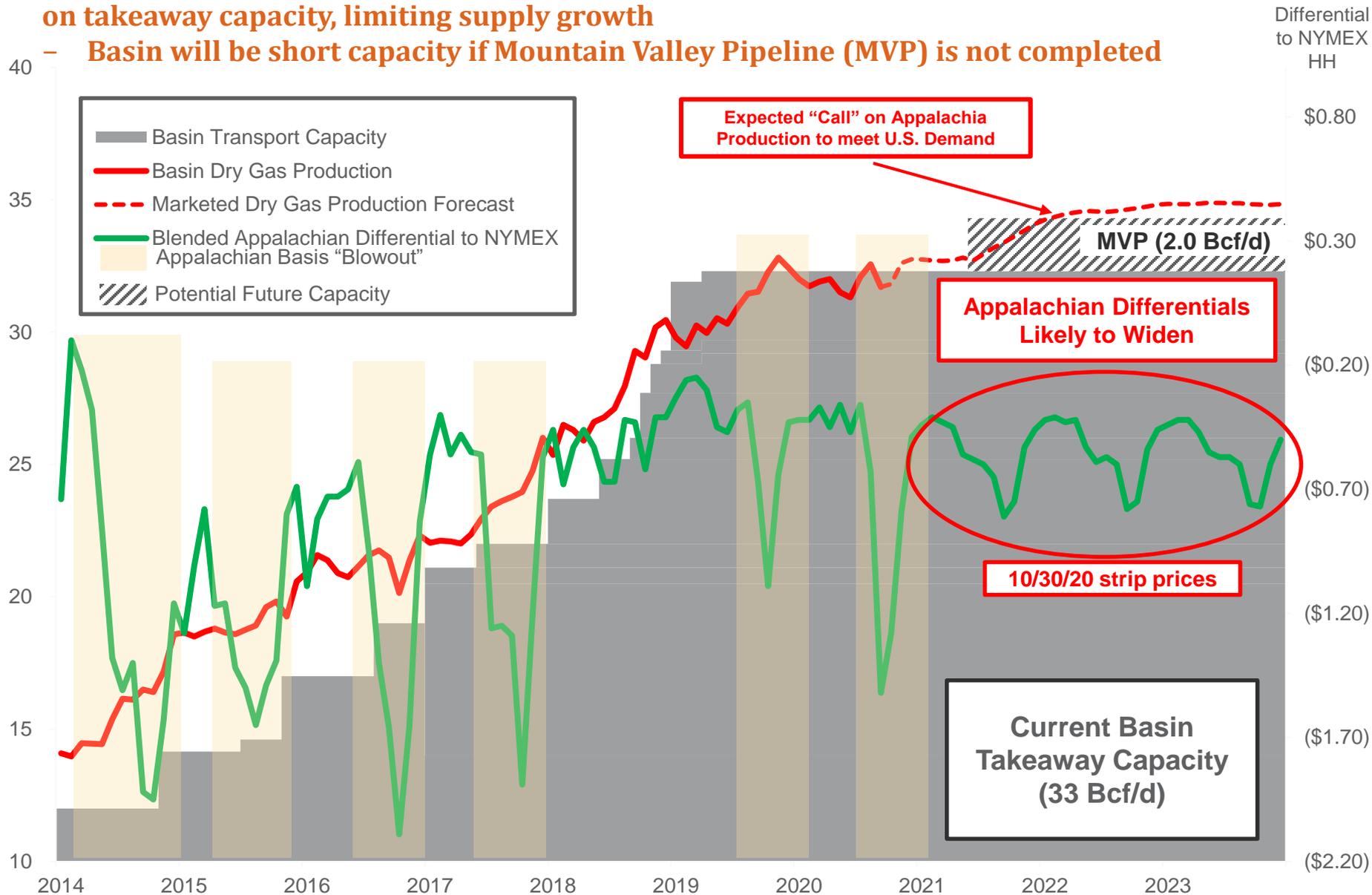
1) Historical and forecast volumes from Platts Analytics and differs from pipeline scrape data. Forecast volumes as of October 2020.

2) Base decline calculated using 4Q over 4Q forecast production rates for all wells producing as of year-end 2019 based on Platts bottoms up well by well analysis. See appendix for detailed calculations.

Appalachian Takeaway Capacity

With uncertainty on future pipeline projects, the Appalachian Basin is expected to be tight on takeaway capacity, limiting supply growth

Basin will be short capacity if Mountain Valley Pipeline (MVP) is not completed

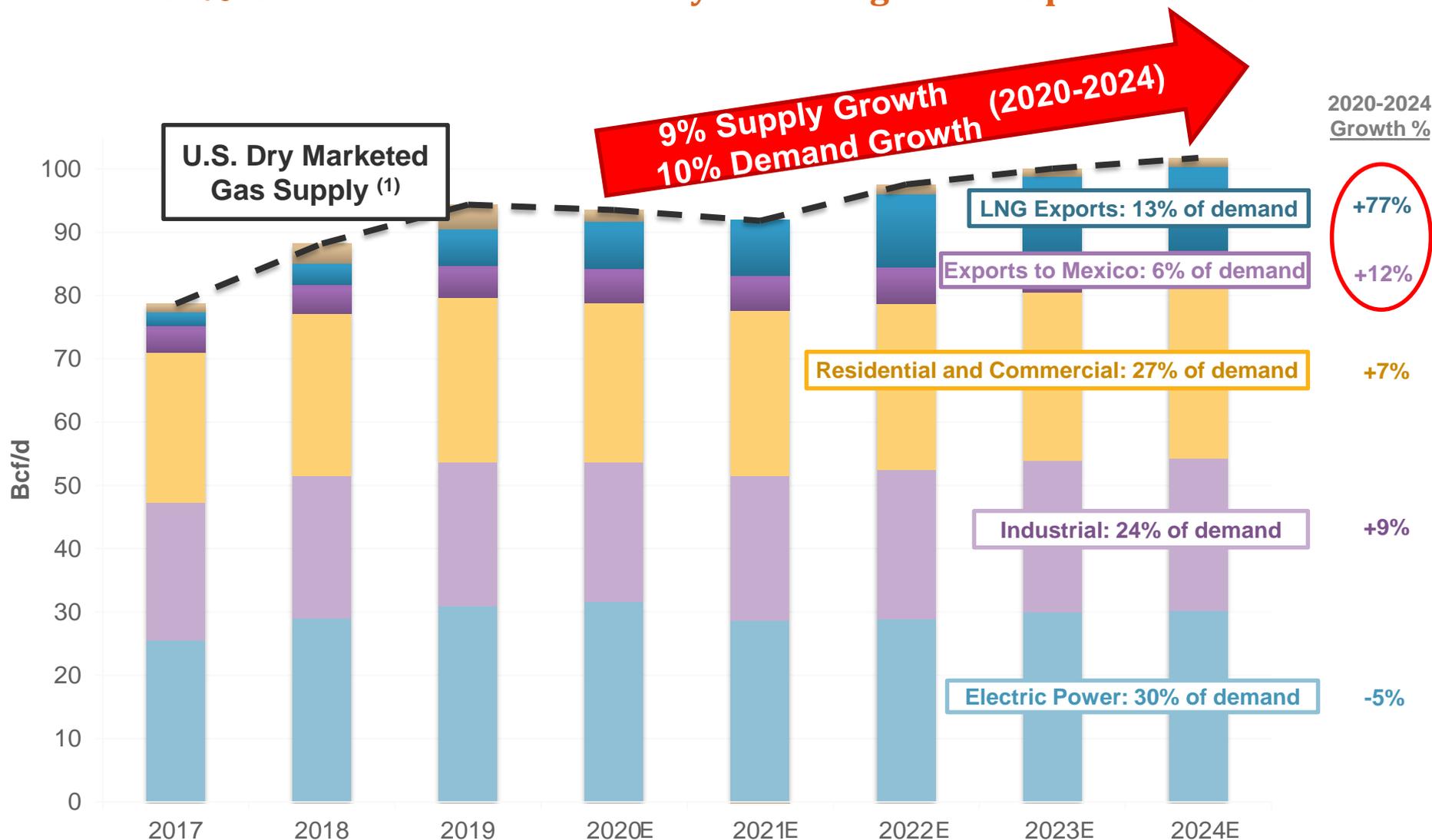


Source: S&P Global Platts. In-basin differentials represent an average of TETCO M2 and DOM S differentials to NYMEX Henry Hub. Actuals through September 2020 and 10/30/2020 strip pricing thereafter.

- 1) Basin capacity based on pipeline flow data scrapes.
- 2) Production forecast and new build In-Service dates based on Platt's Estimate.

U.S. Natural Gas Demand Forecast

Total U.S. natural gas demand is expected to grow by approximately 8.7 Bcf/d, or 10% from 2020 - 2024 driven by LNG feedgas and exports to Mexico



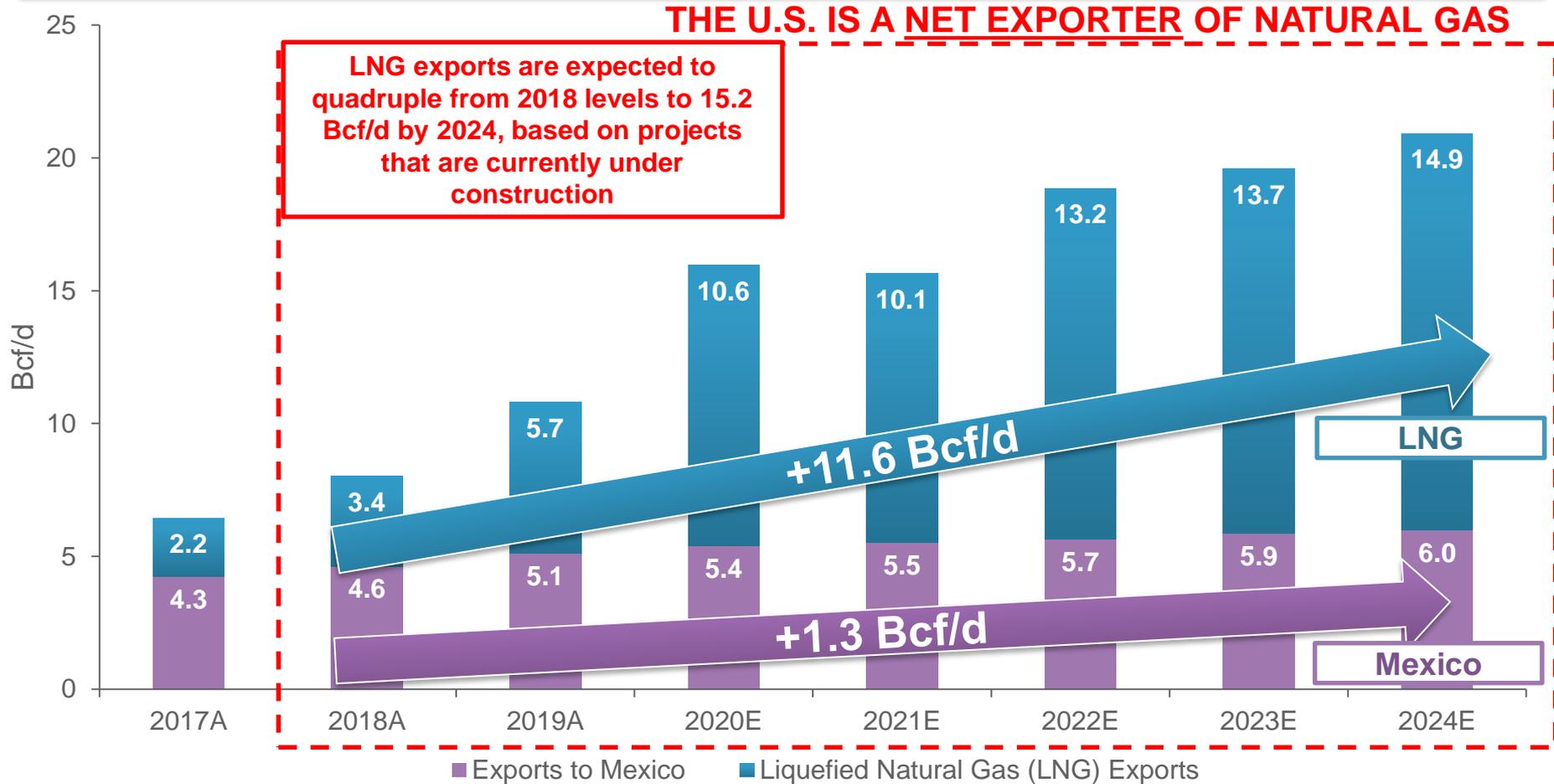
Source: S&P Global Platts.

1) Note that Platts U.S. supply includes Canadian and other imports and assumes that supply balances with expected Platts demand.

~11.5 Bcf/d increase expected in U.S. natural gas exports from 2018-2024

LNG projects under construction and exports to Mexico will drive U.S. demand

U.S. Natural Gas Exports (Bcf/d)

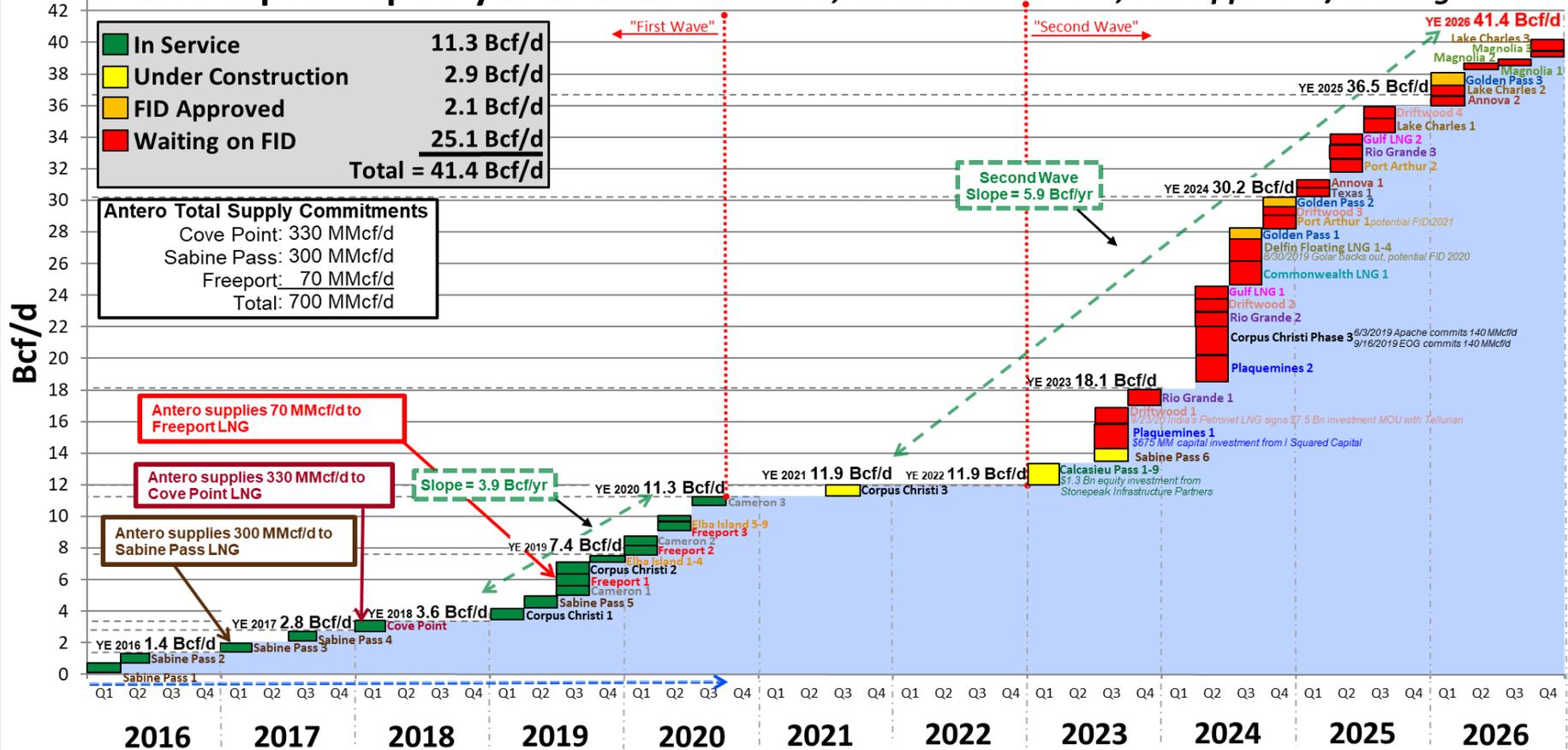


11.3 Bcf/d of LNG capacity in service today with multiple "2nd wave" projects seeking FID

AR is a top U.S. LNG supplier with commitments equaling 700 MMcf/d

U.S. LNG Export Capacity (2016-2026)

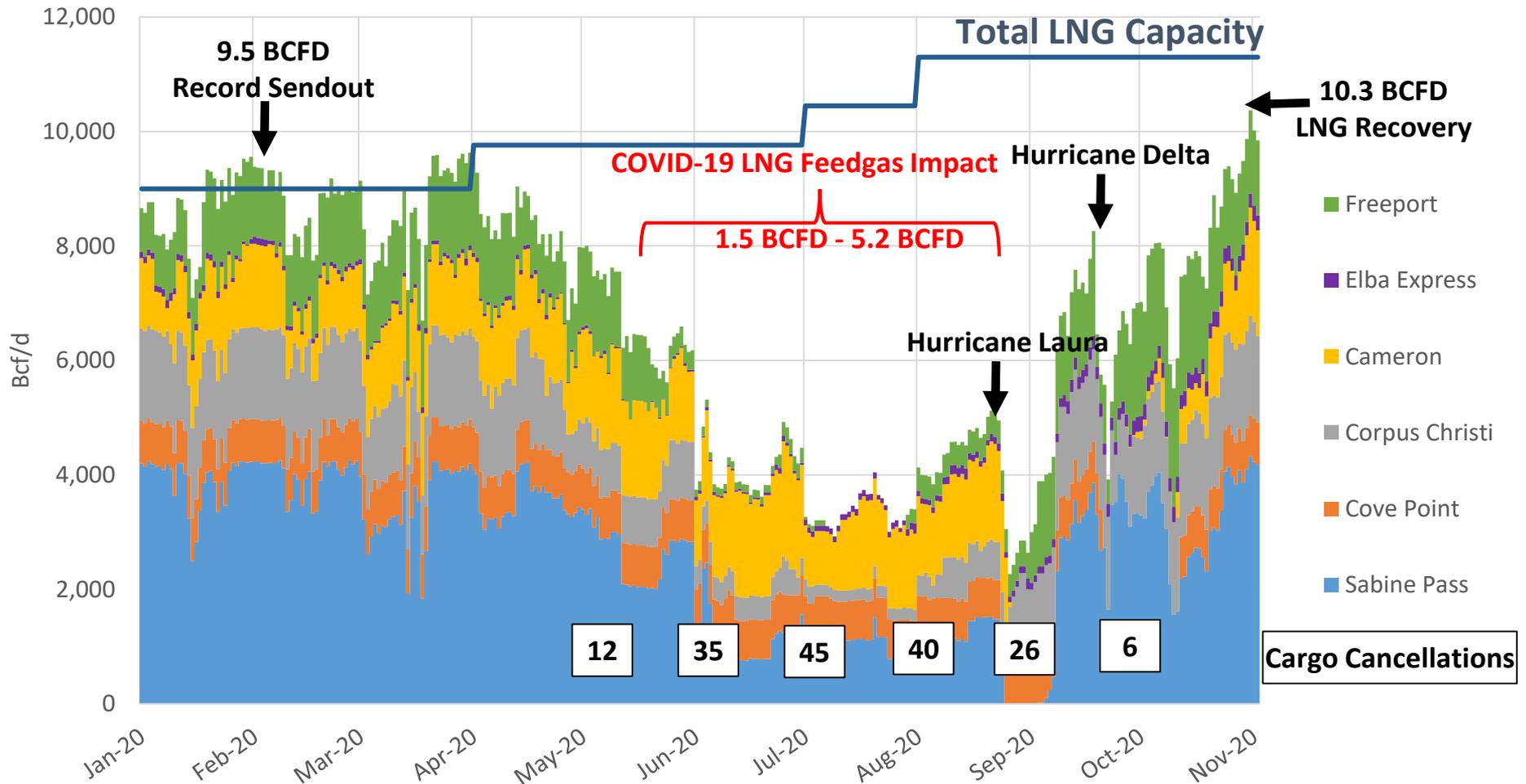
U.S. LNG Export Capacity 2016-2026: In Service, Under Construction, and Approved/Waiting on FID



Source: S&P Global Platts, FERC

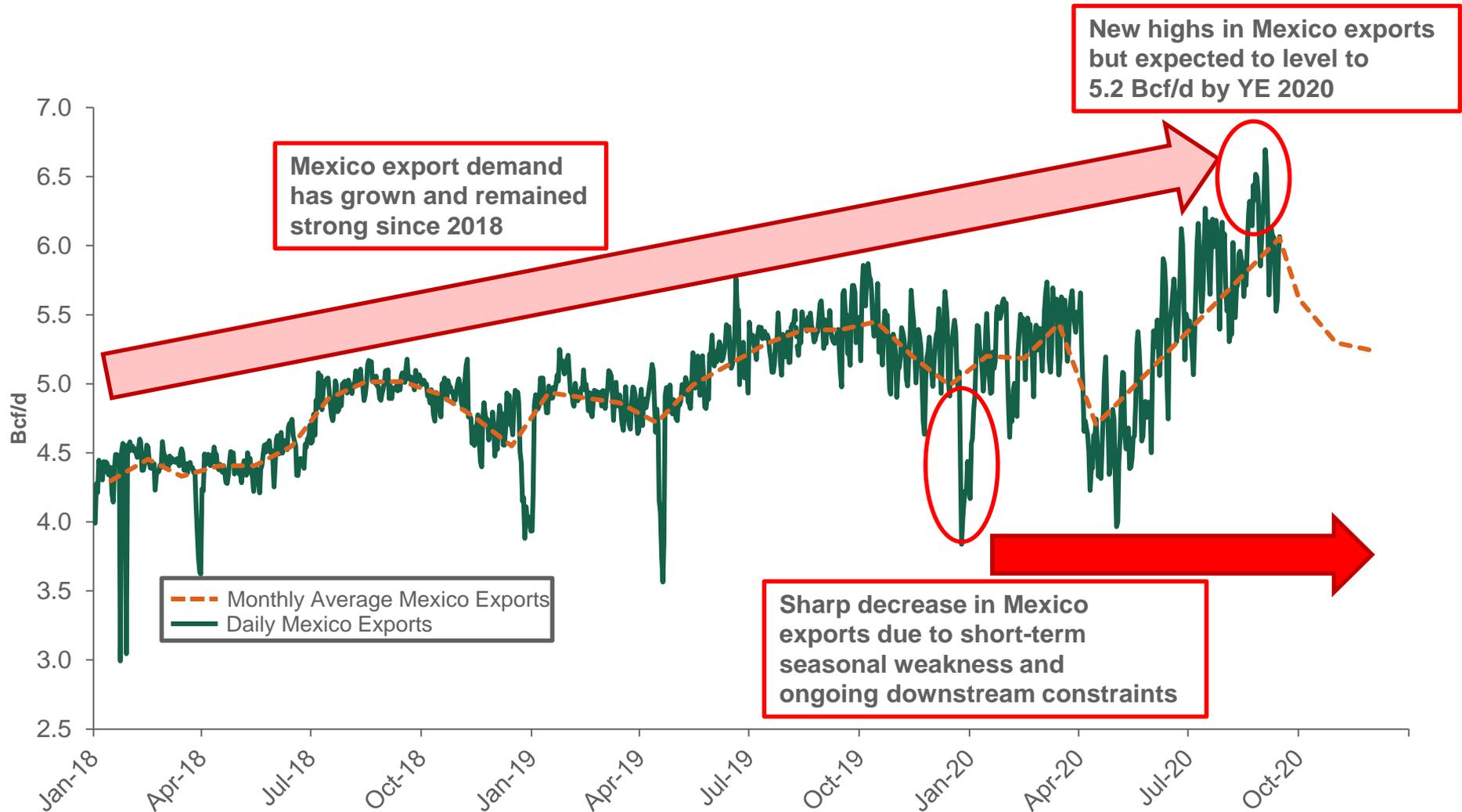
Cargo cancellations due to the pandemic, an active hurricane season and facility maintenance resulted in a sharp decline in export volumes through September 2020. LNG feedgas demand has now recovered to over 10 Bcf/d.

U.S. LNG Export by Facility



Mexico Exports

- Mexico exports have continued to increase steadily since 2018 despite the major delays on connecting downstream projects in Mexico, reaching a high of 6.7 Bcf/d in September of 2020, which represents ~65% of Mexico's total demand⁽¹⁾
- A new pipeline agreement with the Mexican government leads to additional capacity into Mexico, but exports are forecast to moderate toward 5 Bcf/d at year end 2020

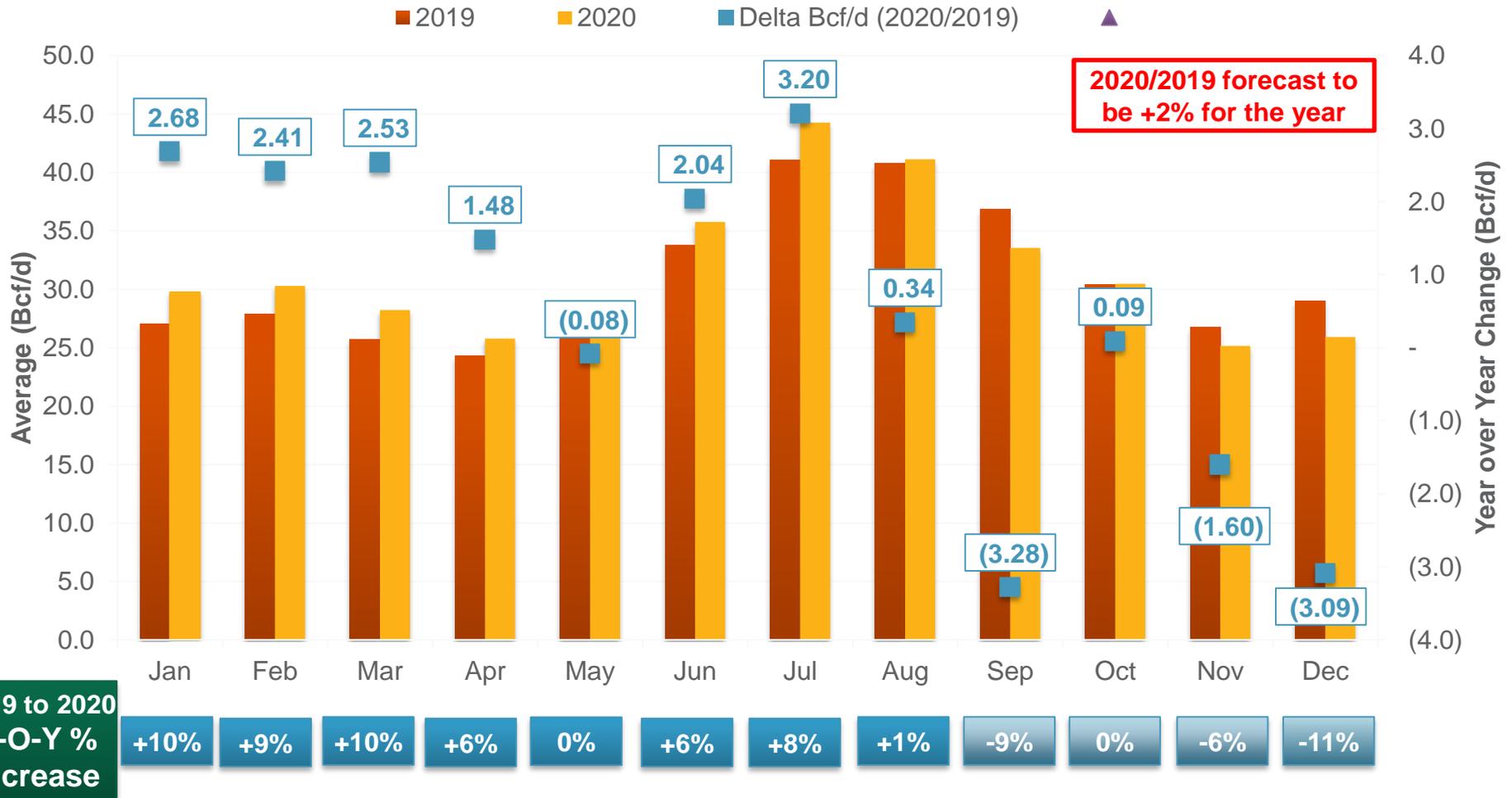


Source: S&P Global Platts.
1) Assumes 9.0 Bcf/d total demand in Mexico.

Near Term Natural Gas Fundamentals – Power Burn

Despite negative heating/cooling degree day comparisons, average monthly power burn increased 0.7 Bcf/d from 2019 to 2020 on an annualized basis and year to date and is 14% above the five year average

U.S. Natural Gas Demand From Power Burn (2019-2021)

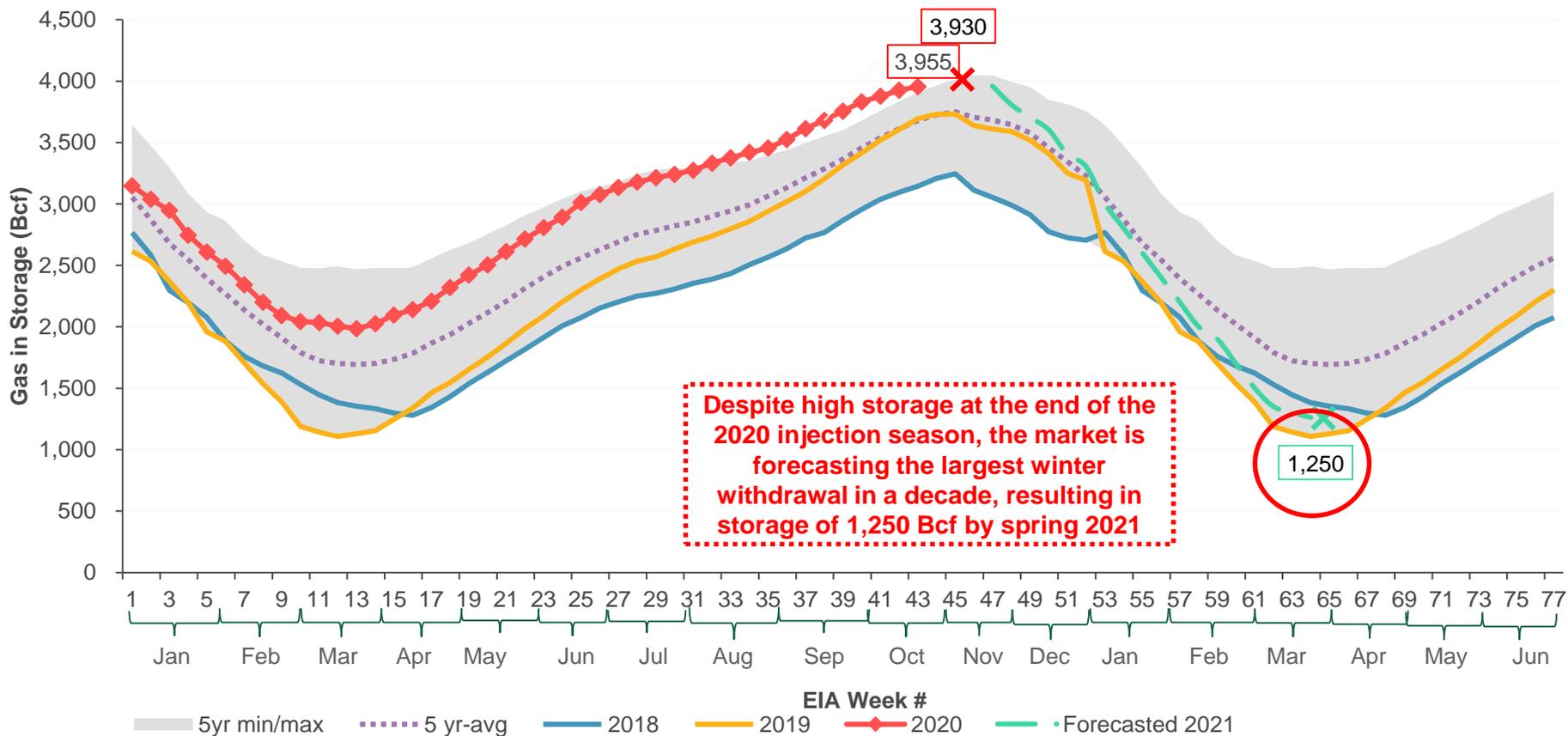


Strong Near-Term Natural Gas Fundamentals

Current 3,955 Bcf storage level is 12% above the 5-year average

2021 end of withdrawal is currently trading at 1,250 Bcf which is **30% below** the 5-yr average

Total Natural Gas Storage (Bcf)



Moderated Supply Growth, Strong Demand Growth and Challenges to New Supply Are Underappreciated by the Market

Following a Supply Decline in 2020 Due to a Decline in “Associated Gas”, Supply Growth in 2021 is Expected to be limited with Oil Below \$45/Bbl

Exports Lead Strong U.S. Natural Gas Demand Growth Through 2024

U.S. LNG Exports Expected to Increase to a Record High 10 Bcf/d-plus in December 2020, Expected 50% Growth by 2024 to 14.9 Bcf/d

Associated Gas Alone cannot Deliver the New Supply Needed to Address Base Decline + Demand Growth

Current Natural Gas Strip Prices (\$2.76/MMBtu) Not Expected To Incentivize the Drilling Activity Required by Dry Gas Producers to Address Base Decline + Demand Growth

Results in Bullish Multi-year Outlook for Natural Gas Prices



Appendix

U.S. Overall Decline Rate Detail		
Time	Average (Bcf/d)	Year-Over-Year Decline Rate (%)
Q4 2019	91.97	-
Q4 2020	66.94	-27%
Q4 2021	55.01	-18%
Q4 2022	47.73	-13%
Q4 2023	42.60	-11%
Q4 2024	38.70	-9%

Permian Decline Rate Detail		
Time	Average (Bcf/d)	Year-Over-Year Decline Rate (%)
Q4 2019	11.36	-
Q4 2020	8.42	-26%
Q4 2021	7.12	-15%
Q4 2022	6.32	-11%
Q4 2023	5.75	-9%
Q4 2024	5.32	-8%

Appalachia Overall Decline Rate Detail		
Time	Average (Bcf/d)	Year-Over-Year Decline Rate (%)
Q4 2019	32.91	-
Q4 2020	22.62	-31%
Q4 2021	17.75	-22%
Q4 2022	14.84	-16%
Q4 2023	12.85	-13%
Q4 2024	11.39	-11%

Note: Base decline calculated using 4Q over 4Q forecast production rates for all wells producing as of year-end 2019 based on Platts bottoms up well by well analysis.