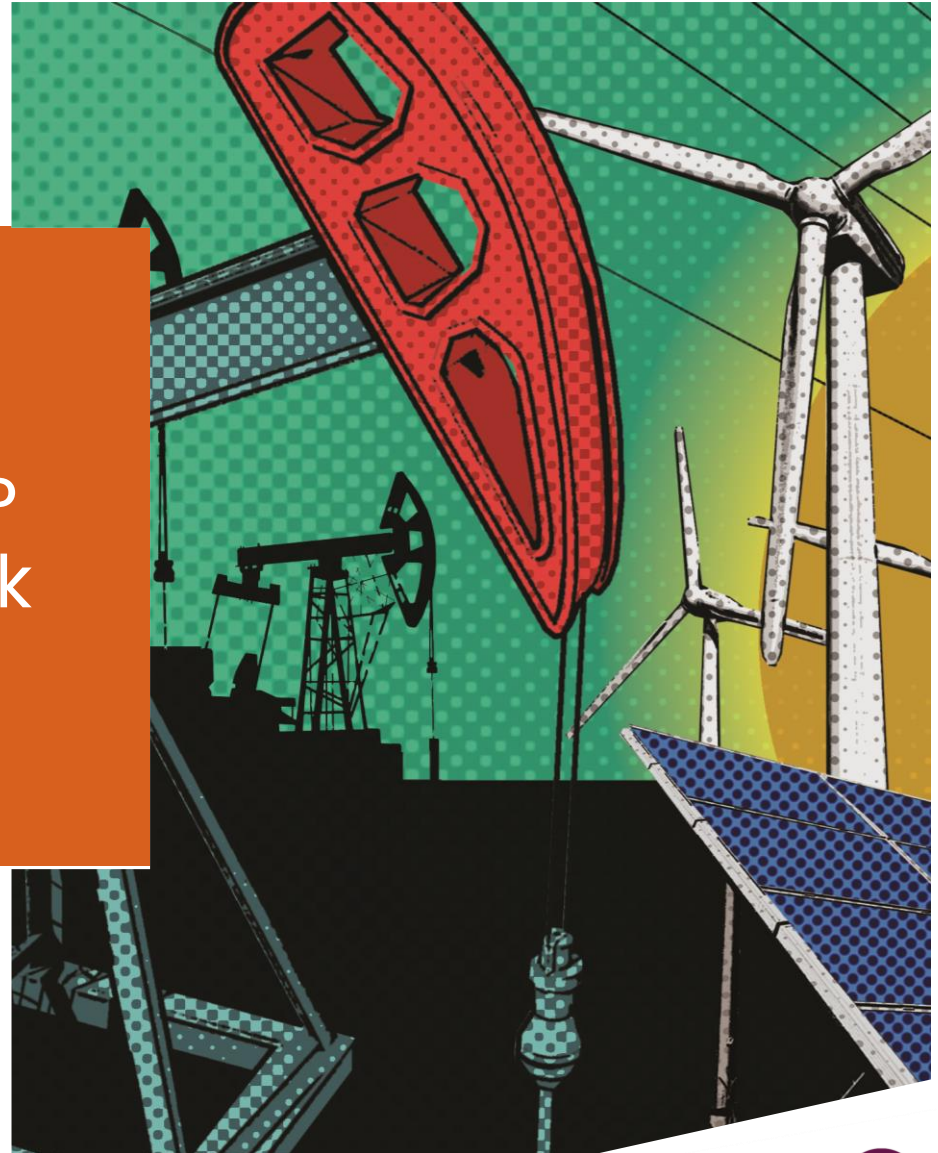


HAYNES BOONE

Haynes and Boone, LLP
Energy Bank Price Deck
Survey: Fall 2021

November 2021



Overview of the Survey

In October 2021, as part of our biannual Energy Bank Price Deck Survey series, we asked leading energy banks to provide their fall oil and gas price decks. These price decks are used by banks to determine oil and gas producers' borrowing bases under their 2021 reserve-based loans. We received responses and data from 15 of these banks by early November 2021.

The borrowing base, which is the amount of credit a lender is willing to extend to an oil and gas producer, is based on a number of factors. Each energy lender has its own proprietary algorithm on how to determine its borrowing base. Future expectations of commodity prices (the price deck) over the life of the loan are not the sole determiner. However, they are a principal variable in a bank's calculations. Therefore, predictions regarding future borrowing base redeterminations are heavily influenced by future commodity price expectations.

By the Numbers: Spring 2021 & Fall 2021 Data

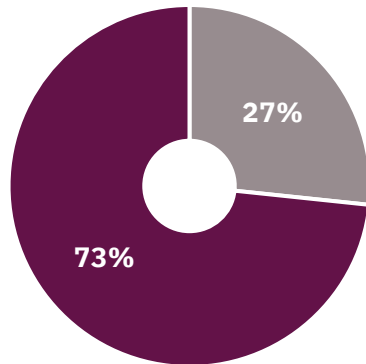
Spring 2021



- 22 banks invited to participate
- 15 banks responded
- 68% participation rate

Sensitivity Analysis

73% of the 15 banks provided sensitivity cases for their spring 2021 price decks.



- Provided data
- Did not provide data

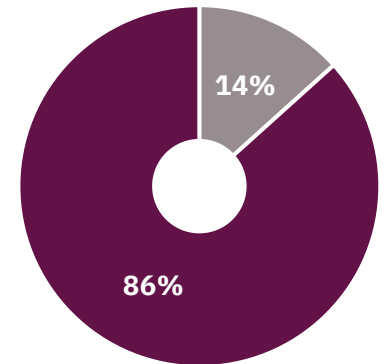
Fall 2021



- 24 banks invited to participate
- 15 banks responded
- 62% participation rate

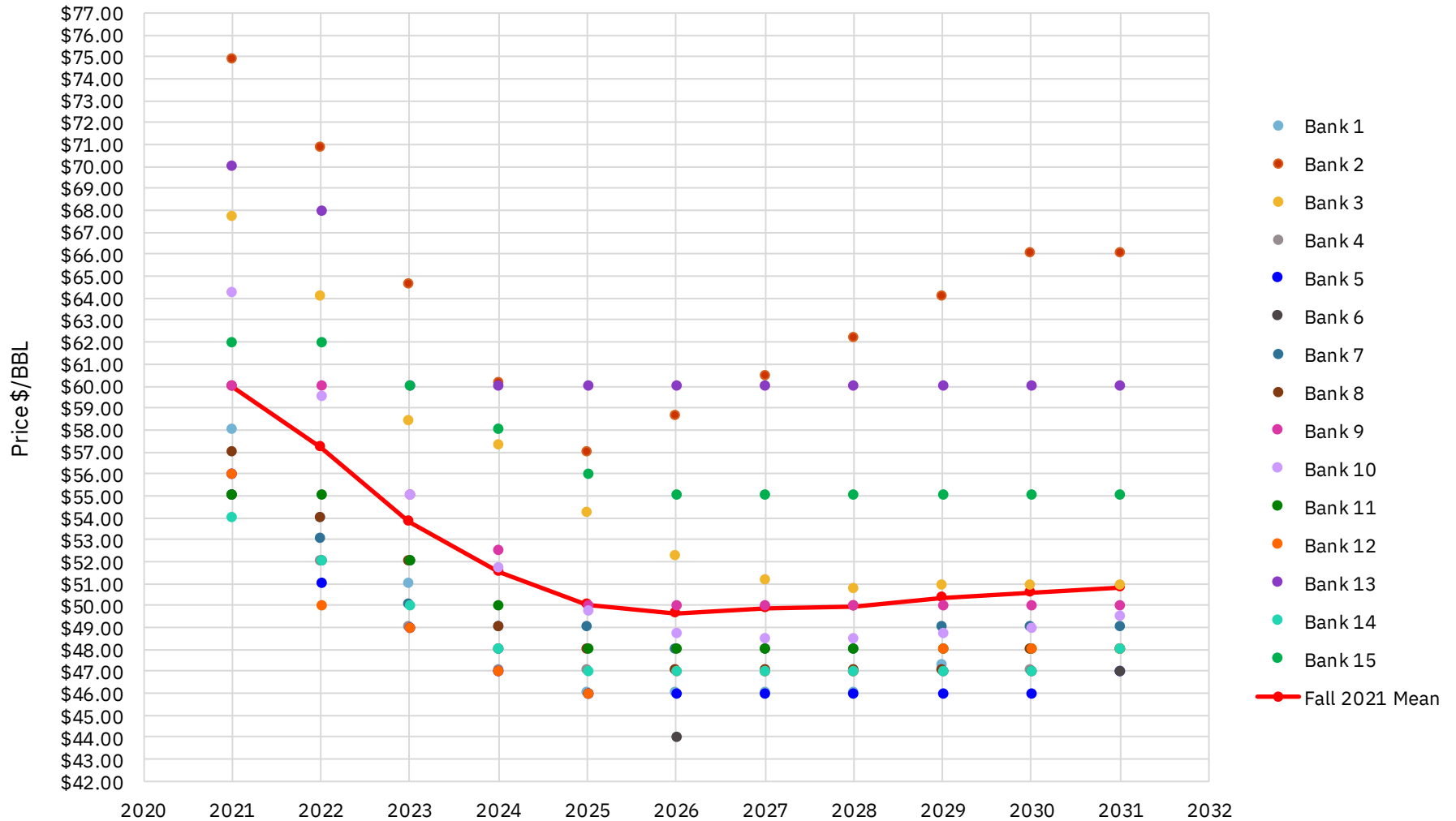
Sensitivity Analysis

86% of the 15 banks provided sensitivity cases for their fall 2021 price decks.

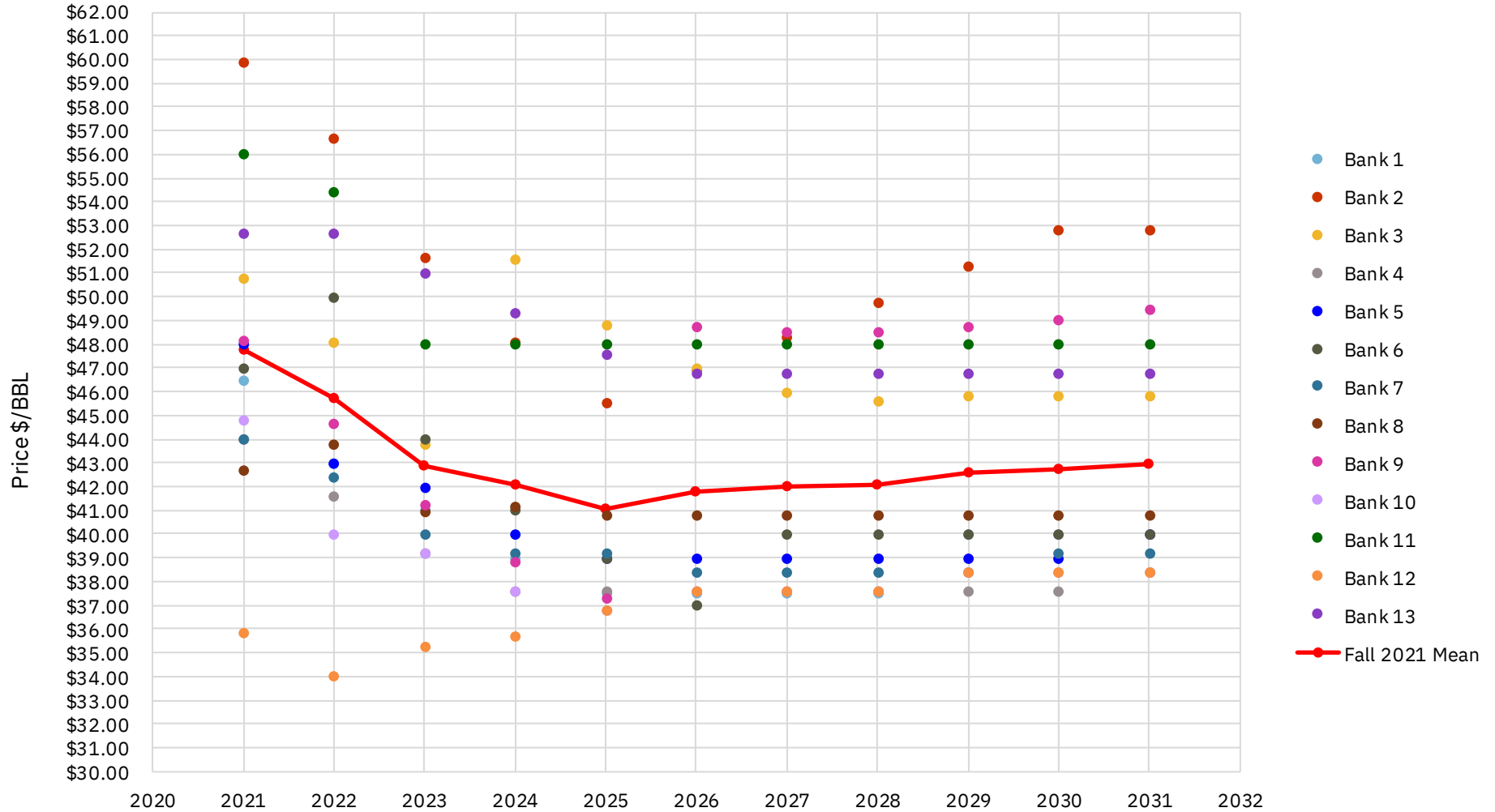


- Provided data
- Did not provide data

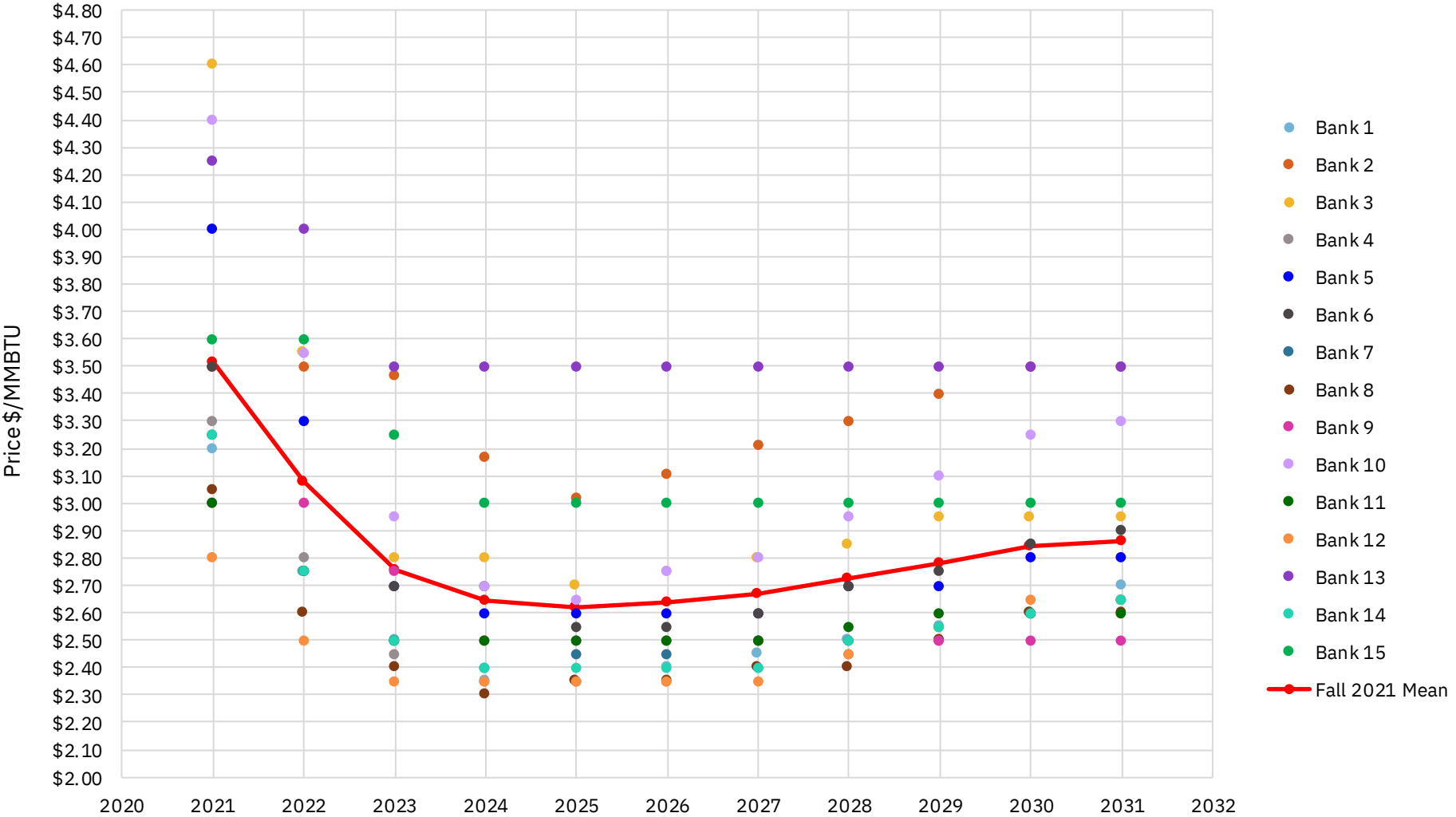
Oil Base Case – Fall 2021



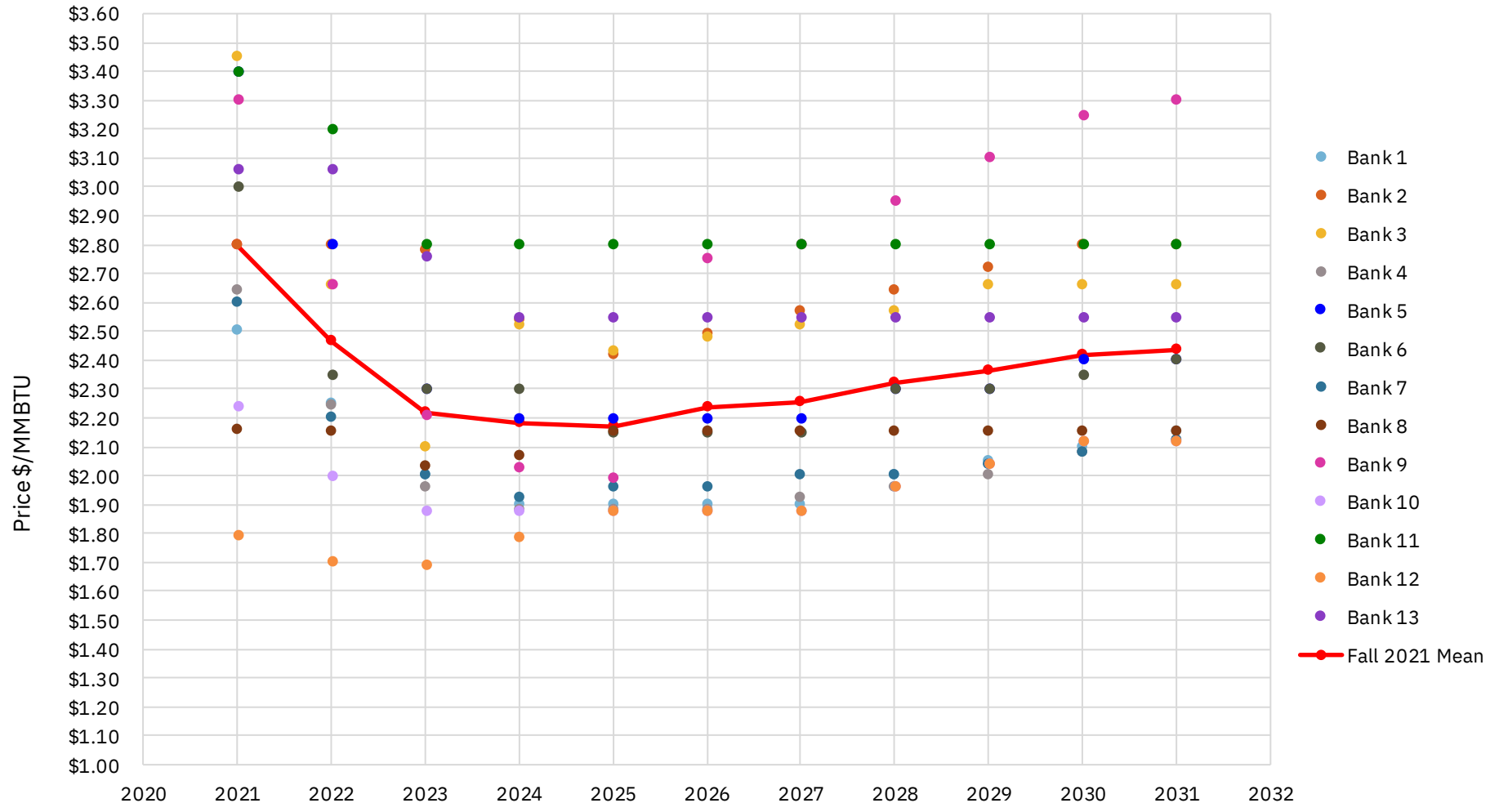
Oil Sensitivity Case – Fall 2021



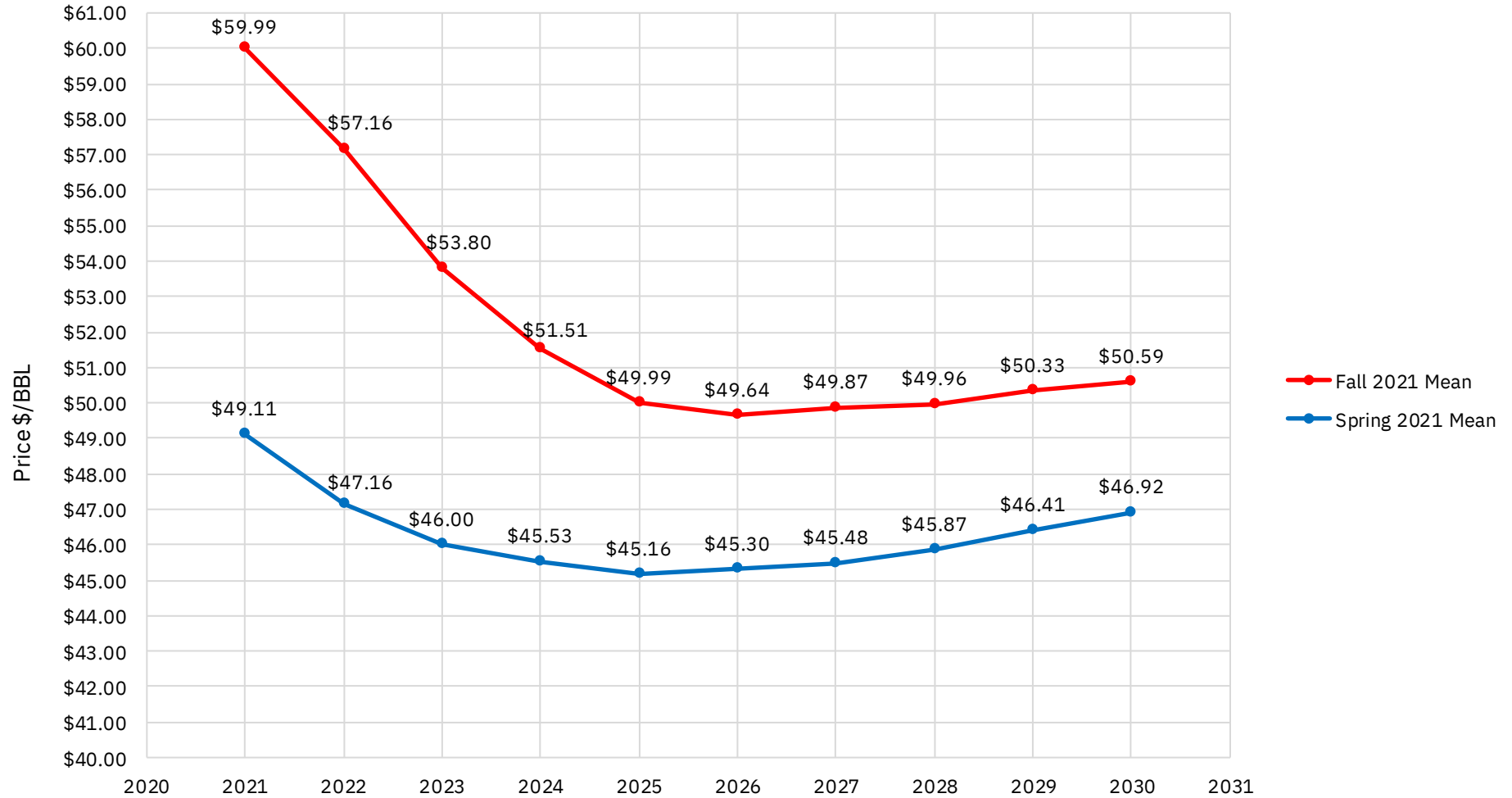
Gas Base Case – Fall 2021



Gas Sensitivity Case – Fall 2021

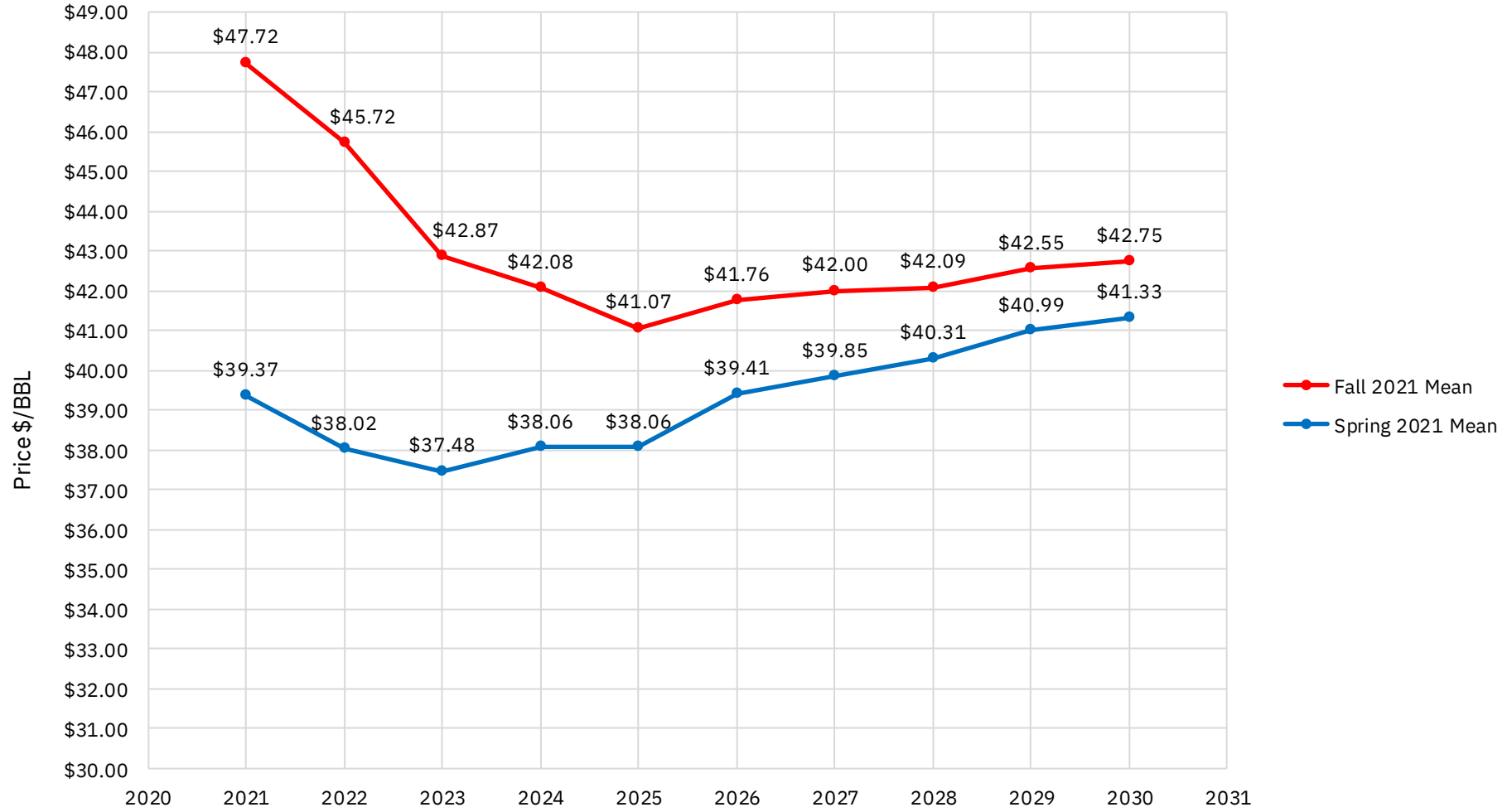


Oil Base Case – Spring 2021 vs. Fall 2021

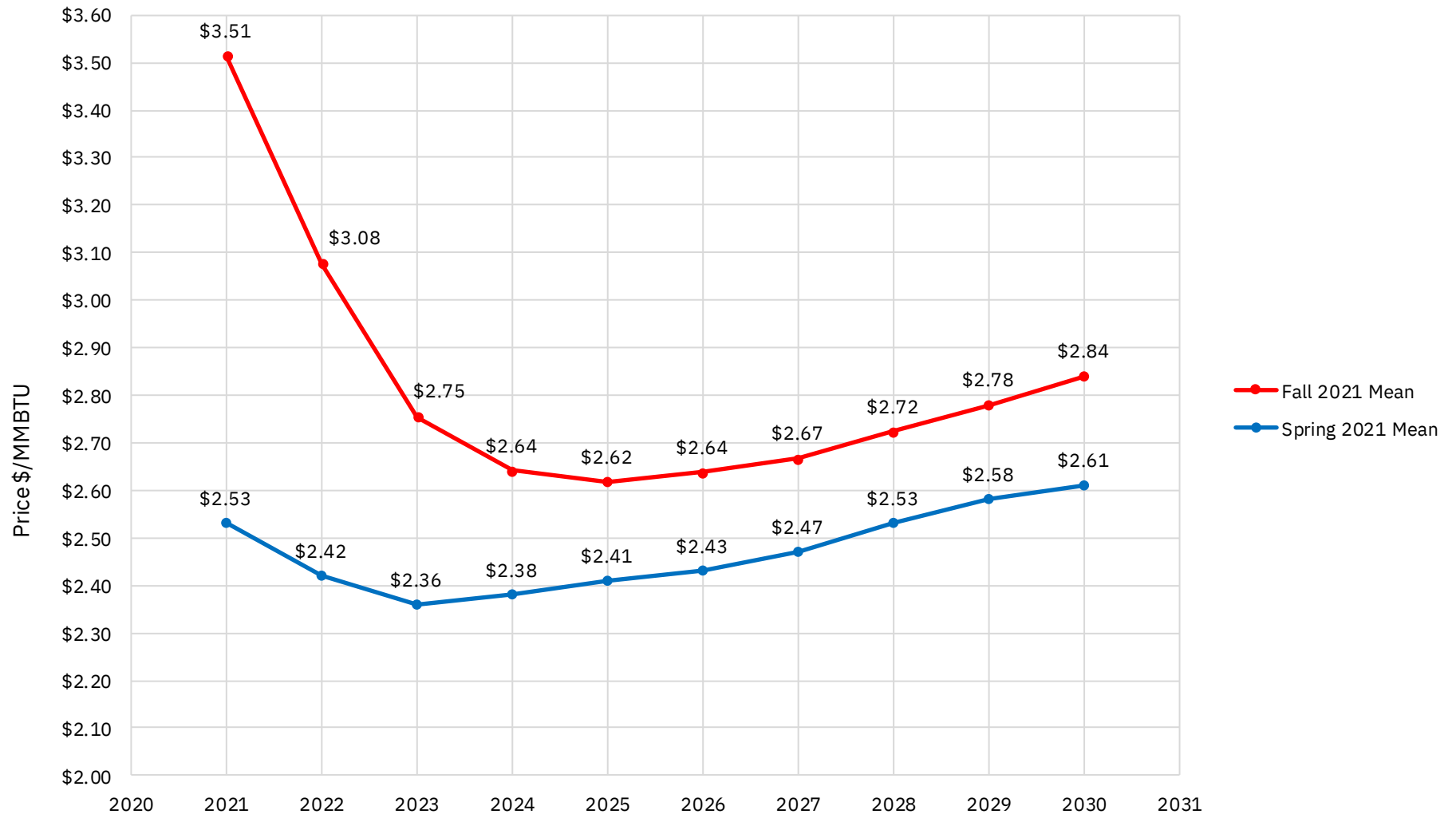


This chart displays the cumulative mean for spring 2021 and fall 2021 price decks.

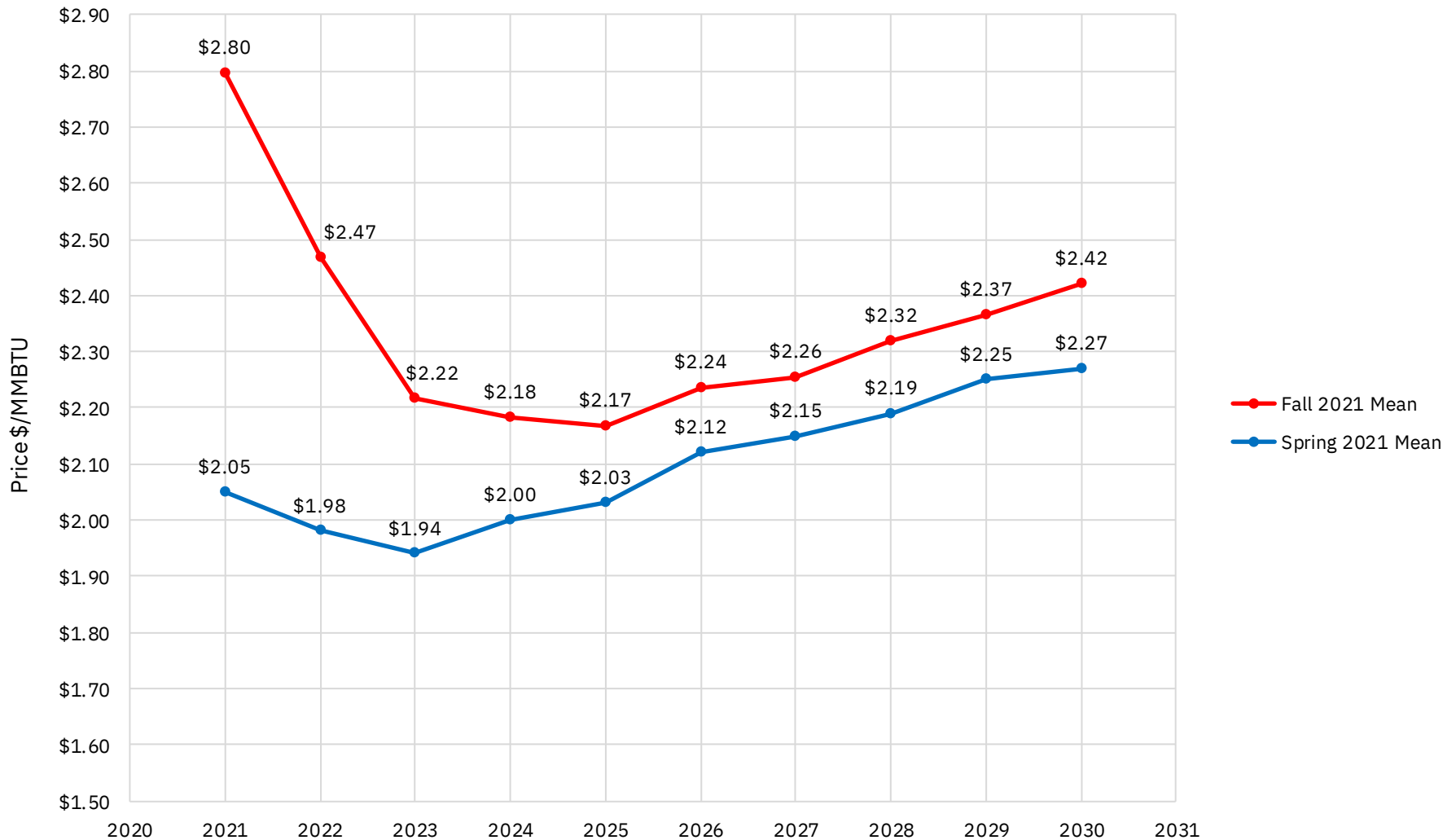
Oil Sensitivity Case – Spring 2021 vs. Fall 2021



Gas Base Case – Spring 2021 vs. Fall 2021

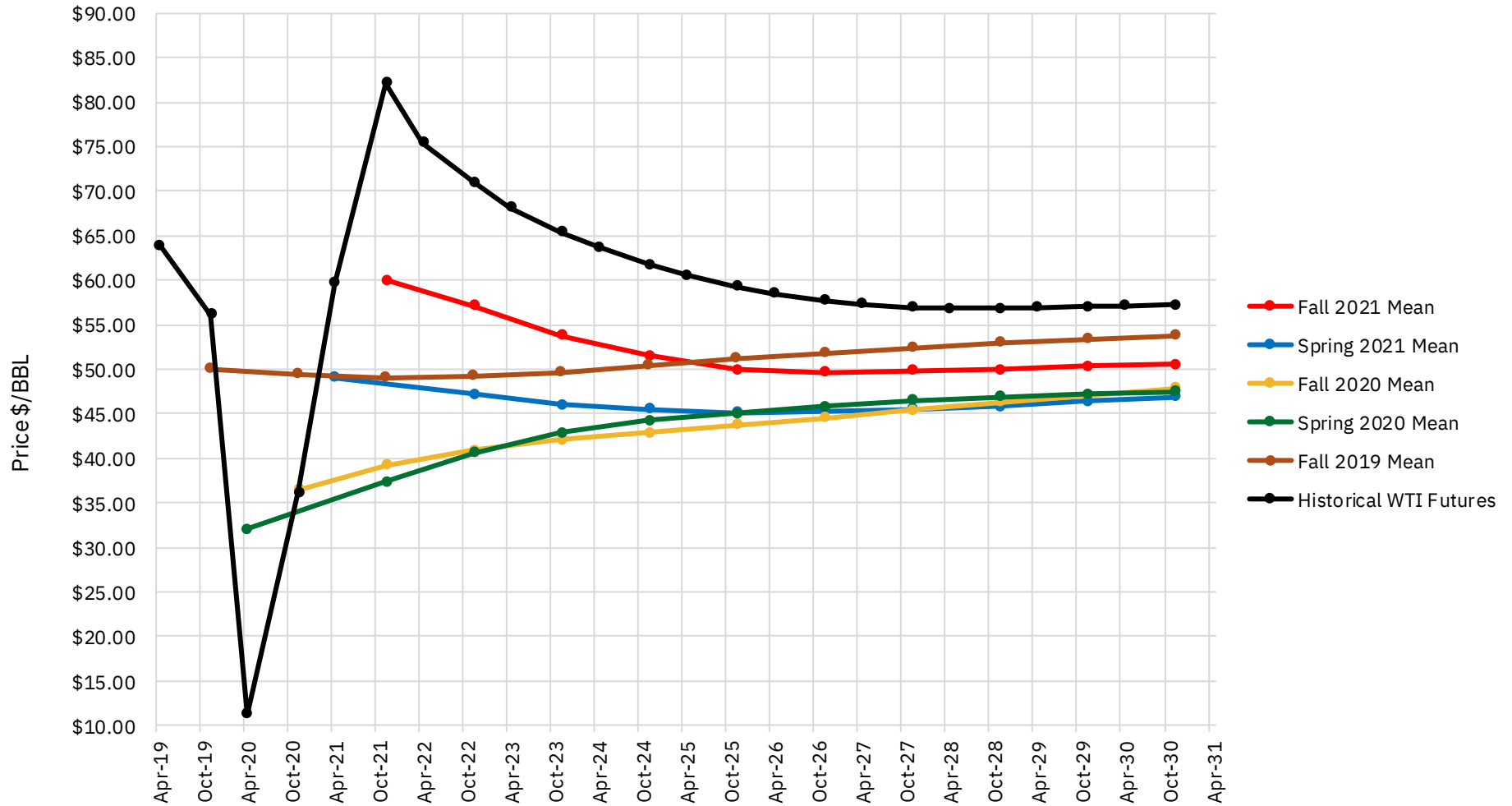


Gas Sensitivity Case – Spring 2021 vs. Fall 2021



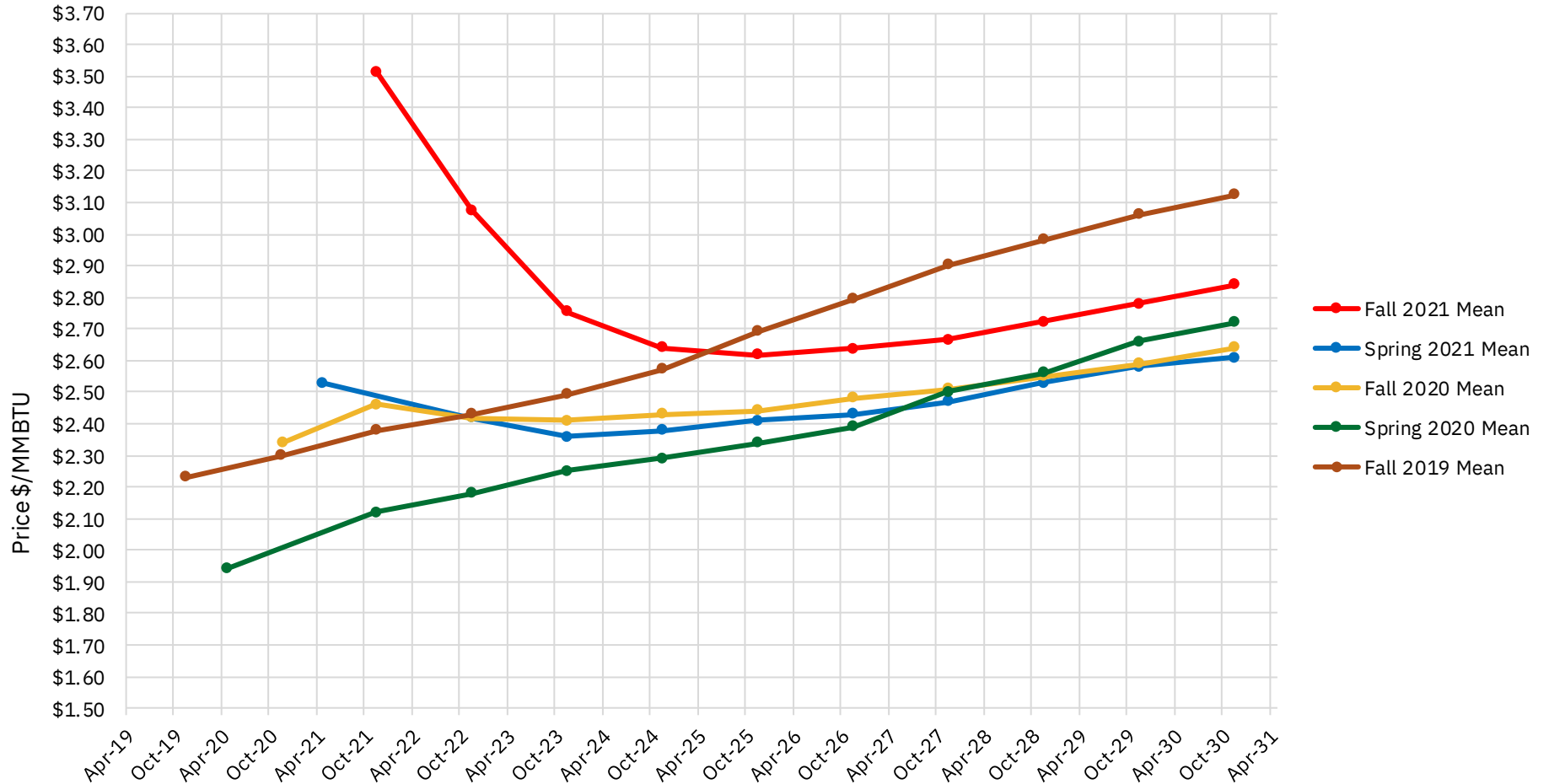
This chart displays the cumulative mean for spring 2021 and fall 2021 price decks.

Average Oil Base Case: Fall 2019 – Fall 2021



This chart displays the cumulative mean for price decks from fall 2019 through fall 2021 (the five periods in which we have conducted our survey).

Average Gas Base Case: Fall 2019 – Fall 2021



This chart displays the cumulative mean for price decks from fall 2019 through fall 2021 (the five periods in which we have conducted our survey).

Key Takeaways for Oil – Fall 2021

- “A Rising WTI Lifts All Price Decks.” WTI prompt month prices have been above the \$70/bbl mark for almost two months since the beginning of September, a welcome change from the nadir sub-\$20/bbl in the spring of 2020. Bankers’ price expectations, as reflected in their oil base case price decks, paint a much rosier outlook for oil prices, especially in the near term from the fall of last year. On balance in the near term, price deck prices are up 40% above last year’s Fall Base Case Mean.
- Between Spring 2020-Spring 2021 (a.k.a. the “COVID Crash”), bank price decks in the out years (2025-2030), coalesced between \$43-\$46/bbl. This Fall, bank price decks, however, have broken out of this narrow band tracking almost 10% higher, just above \$50/bbl by 2030.
- The correlation between price decks and borrowing base redeterminations is not 100%, but a 10% increase in the banks’ expectation of future oil prices bodes well for producer’s fall 2021 borrowing base redeterminations.

Key Takeaways for Gas – Fall 2021

- The banks Fall '21 price deck for natural gas is 28% higher in near term than they targeted in their Spring '21 price decks' base case mean.
- Similar to the banks' oil price decks, however, out year prices for gas (2025-2030) revert more closely to the prior years' natural gas bank price deck base price means.
- Both the natural gas and oil price decks reflect a wide variation among the participating banks on future prices. It can pay producers to shop around for debt capital with the caveat that the price deck alone does not determine the borrowing base banks will be willing to lend. Banks with higher price decks may only give credit for producing wells but require liens on all of the borrowers' oil and gas properties, or such banks may require borrowers to lock in a greater percentage of future production under hedges at current prices, which could prevent the company from benefiting from any uplift in prices over the next couple of years.

Participating Banks

We would like to acknowledge and thank the following banks that participated in our Fall 2021 Survey:

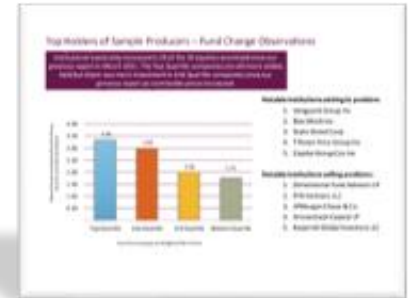
- 🏦 Amegy Bank
- 🏦 Citizens Bank
- 🏦 Comerica
- 🏦 East West Bank
- 🏦 FirstCapital Bank of Texas
- 🏦 First Horizon Bank
- 🏦 Frost Bank
- 🏦 Modern Bank
- 🏦 Pegasus Bank
- 🏦 SMBC Group
- 🏦 TD Securities
- 🏦 Truist Bank
- 🏦 U.S. Bank
- 🏦 Wells Fargo

Haynes and Boone Energy Reports

Haynes and Boone's oil and gas lawyers have been helping clients make the right connections and navigate the ever-changing legal maze to successfully close deals. Take advantage of our other reports, surveys and publications that help keep you one step ahead:

- **Haynes and Boone and EnerCom Oil & Gas ESG Tracker:** our report that monitors how oil and gas companies are responding to the growing demand that they advance and develop ESG policies and communicate them to investors, lenders, regulators and other stakeholders.
- **Borrowing Base Redeterminations Survey:** a forward-looking survey that reveals what lenders, borrowers and others in the industry expect regarding the borrowing base redeterminations in light of oil price uncertainty.
- **Midstream Report:** includes details on midstream companies that have filed for bankruptcy since 2015.
- **Oil Patch Bankruptcy Monitor:** includes details on oil and gas producers that have filed for bankruptcy since 2015.
- **Oilfield Services Bankruptcy Tracker:** includes details on oilfield services companies that have filed for bankruptcy since 2015.

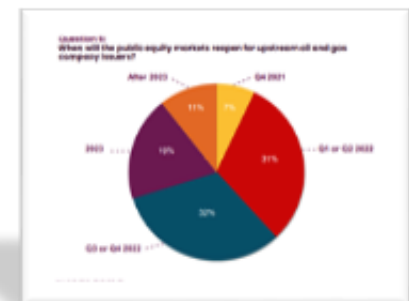
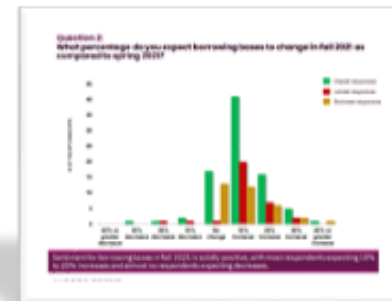
Contact **Hal Means** at hal.means@haynesboone.com to receive our latest reports, alerts and surveys, and invitations to our energy-related events.



Question 1: Significant capital is being invested in Assets with an ESG focus. Values increased as a result of stock price rising.

The top 10 Environmental issues of top 10 companies in the industry are listed below. An additional list of companies of ESG focus is provided in the Appendix of this report.

Company	Environmental Issue	Value
1. Baker Hughes	Water Pollution	100
2. ConocoPhillips	Water Pollution	80
3. E.ON Energy	Water Pollution	70
4. Enbridge	Water Pollution	60
5. Hess	Water Pollution	50
6. Marathon Petroleum	Water Pollution	40
7. Occidental Petroleum	Water Pollution	30
8. Plains	Water Pollution	20
9. Royal Dutch Shell	Water Pollution	10
10. Valero	Water Pollution	10



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