Big Oil Blames Biden Administration Public Land Policies For High Energy Costs – But International Markets And World Events Are What Really Impact Prices

SUMMARY: As Americans are paying more to heat their homes and fuel up their cars, Big Oil is making billions in profits and attempting to blame higher energy costs on the Biden administration's policies towards oil and gas production on public lands.

Despite Big Oil's claims, this new analysis of the federal onshore oil and gas program shows drilling, permitting, and acres offered for lease on public lands are not driving up the price of oil and gas throughout the supply chain. With less than 10% of both US crude oil and US natural gas coming from federal lands, and industry leaving huge swaths of leases on public lands undeveloped, and thousands of approved drilling permits unused, it is clearly not Biden's public land policies that are impacting energy prices.

Key Takeaways:

- Both the retail price of gasoline and the price of natural gas that is delivered to consumers are largely driven by crude oil and natural gas spot prices, which are primarily influenced by global markets and events – not the drilling that occurs on federal public lands in the United States.
- Production of crude oil and natural gas on public lands has not been found to have any impact on consumer energy prices. These prices are highly dependent on what is happening in international markets, outside of the US (where the vast majority of crude oil and natural gas production occurs on non-federal lands).
- Additionally, the oil and gas industry notoriously stockpiles federal drilling permits and hoards millions of acres of public lands without developing them, meaning new permits and offering new leasing has not been found to increase production. The large majority of production on public lands also occurs on leases that were issued decades ago, not new leases.
- Retail gasoline prices and home heating costs have always gone up and down, seemingly unaffected by the energy policies enacted during any presidential term – regardless of how those policies affect the amount of oil and gas produced on public lands or the number of federal leases and permits issued.
- The reality is consumers are often left to suffer for longer than necessary with high prices as oil and gas companies are quick to raise prices but slow to lower them to continue raking in profits at the expense of American consumers.

Oil and gas prices are both heavily influenced by outside factors well beyond the Biden administration's public land policies. Contrary to Big Oil's blame game, extreme weather and civil unrest across the globe do much more to influence the prices consumers pay to heat their homes and fill up their cars than the policies of a given US president.

Contrary To What Big Oil Says, Consumer Energy Prices Aren't Tied To Public Lands Oil And Gas Production, Permitting, or Leasing.

Oil And Gas Prices Reflect A Host Of Global Factors Ranging From Civil Unrest Overseas To Extreme Weather Events.

Spot Prices Are The Cost Of Fuel When Oil And Gas Are Bought And Handed Over To Refiners And Users. "“Spot” purchases refer to fuel that is physically traded either on a pipeline or on the water (via barge or cargo). We call it “spot” because you negotiate for the fuel “on the spot.” Unlike the NYMEX, physical product actually changes hands in this market. Refiner X sells diesel to end-user Y to put into a tank at location Z." [OPIS, 09/11/17]

Since Oil Is A Global Commodity, Its Price Is Determined By Global Events And Production…

As A "Globally Traded Commodity," Oil Prices Are Heavily Impacted By World Markets, Even If It Is Produced Locally. "Oil will continue to be a globally traded commodity, even if the U.S. is getting its crude from Texas and North Dakota instead of Saudi Arabia and Venezuela, so the world market will set its price, said Rayola Dougher, senior economist at the American Petroleum Institute." [Global Energy Institute, 10/08/12]

…While Gas Spot Prices Are More Reactive To Local Issues Like Hurricanes.

Significant Events Like Weather Shocks Can Create "Substantial Deviations" From The Typical Price Ratios Of Oil And Gas Spot Costs. "Furthermore, our analysis shows that factors such as weather shocks and changes in storage can lead to substantial deviations from this long run price ratio. […] While there is strong evidence of this stable long run price relationship between oil and natural gas prices, as mentioned above, we find that seasonal fluctuations and other factors such as abrupt changes in weather, supply disruptions and inventory trends can alter this price relationship in the short term." [Baker Institute, November 2007, accessed 01/20/22]

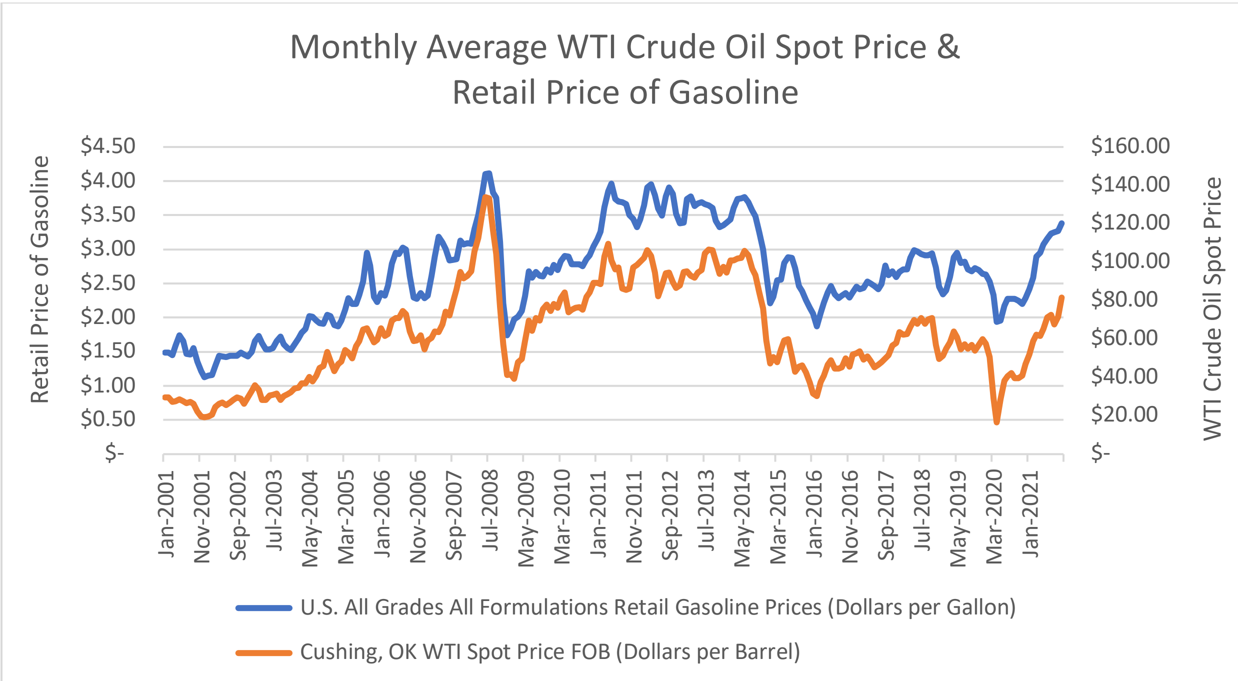
The Relationship Between Oil And Gas Spot Prices Is "Slowly Evolving", With Gas Prices Adjusting To Changes While Oil Remains The Same. "Villar and Joutz (2006) examine the apparent decoupling of the prices of WTI crude oil and Henry Hub natural gas in more details, finding a cointegrating relationship between the two prices that exhibits a positive time trend. This indicates that the prices have a long run relationship that is slowly evolving rather than constant. […] Specifically, Villar and Joutz find that the price of natural gas adjusts to deviations in the long run evolving relationship, but these deviations do not affect the price of WTI." [Baker Institute, November 2007, accessed 01/20/22]

Consumer Gasoline And Natural Gas Prices Are Driven By Commodity Prices

The Retail Price Of Gasoline Tracks Oil Commodity Prices…

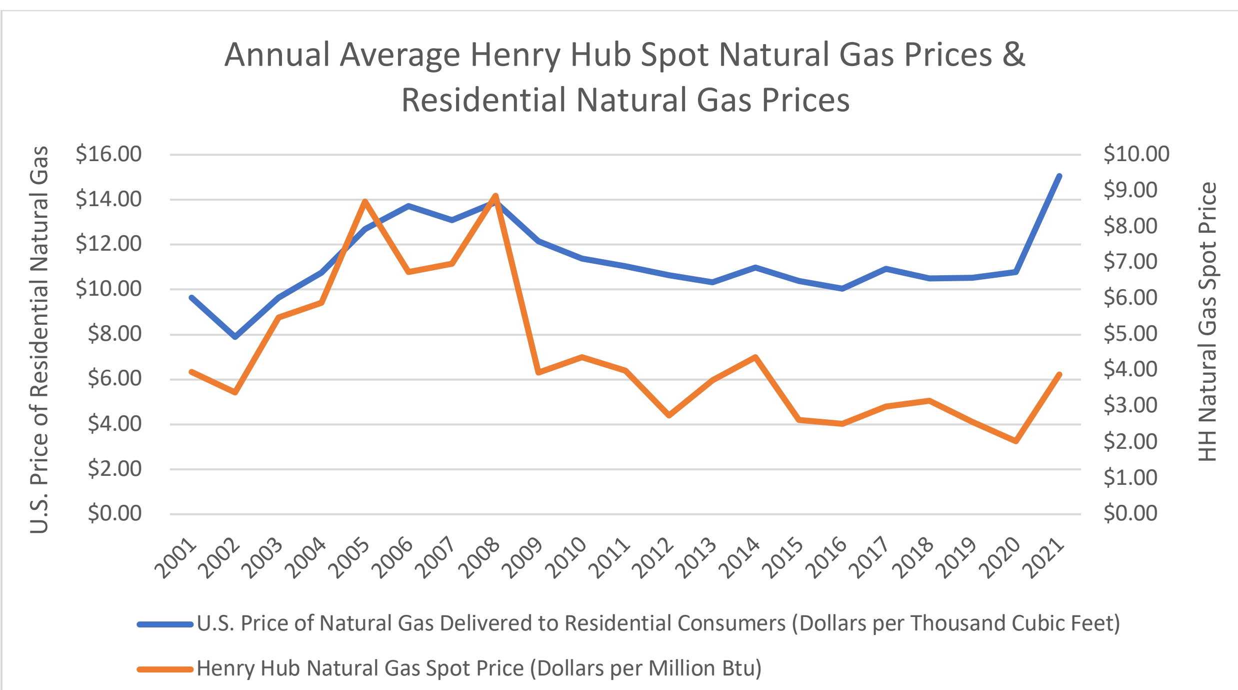
The Price Of Oil Makes Up Around 70% Of The Retail Price Of Gasoline. "Crude oil—the main component of gasoline—makes up nearly 70 percent of the pump price of regular gasoline. Therefore, it is not surprising that the per gallon price of retail gasoline follows a similar pattern to the price of crude oil." [St Louis Fed, 10/01/14]

Retail Gas Prices And Oil Spot Prices Are Closely Aligned. [EIA, accessed 01/22/22] [EIA, accessed 01/22/22] [EIA, accessed 01/22/22]



Source: US Energy Information Agency

…While The Price Of Natural Gas That Is Delivered To Residential Consumers – How Many Americans Heat Their Homes In The Winter – Tracks Natural Gas Commodity Prices.



Source: US Energy Information Agency

So What Doesn't Affect Prices At The Pump And The Prices Americans Pay To Heat Their Homes? Data Plainly Show That Production, Permitting, And Leasing On Public Lands Are Not To Blame

Federal Onshore Natural Gas Production Has Nothing To Do With Keeping Home Heating Costs Down For Americans…

Annual Average Residential Natural Gas Prices Have Followed Average Annual Federal Onshore Gas Production Over The Past 17 Years—But It's A Positive Relationship. If more federal onshore natural gas production led to lower residential prices, then a year when an increased total amount of natural gas was produced on public lands would be quickly followed by a decrease in home heating costs. But instead, natural gas production and residential prices have closely followed the same curve for nearly 20 years – meaning residential natural gas prices have been higher in the years when more natural gas has been produced from federal public lands, and lower in the years when industry has developed less natural gas on public lands. [EIA, accessed 02/09/22] [ONRR, accessed 02/09/22] (Figure 1)

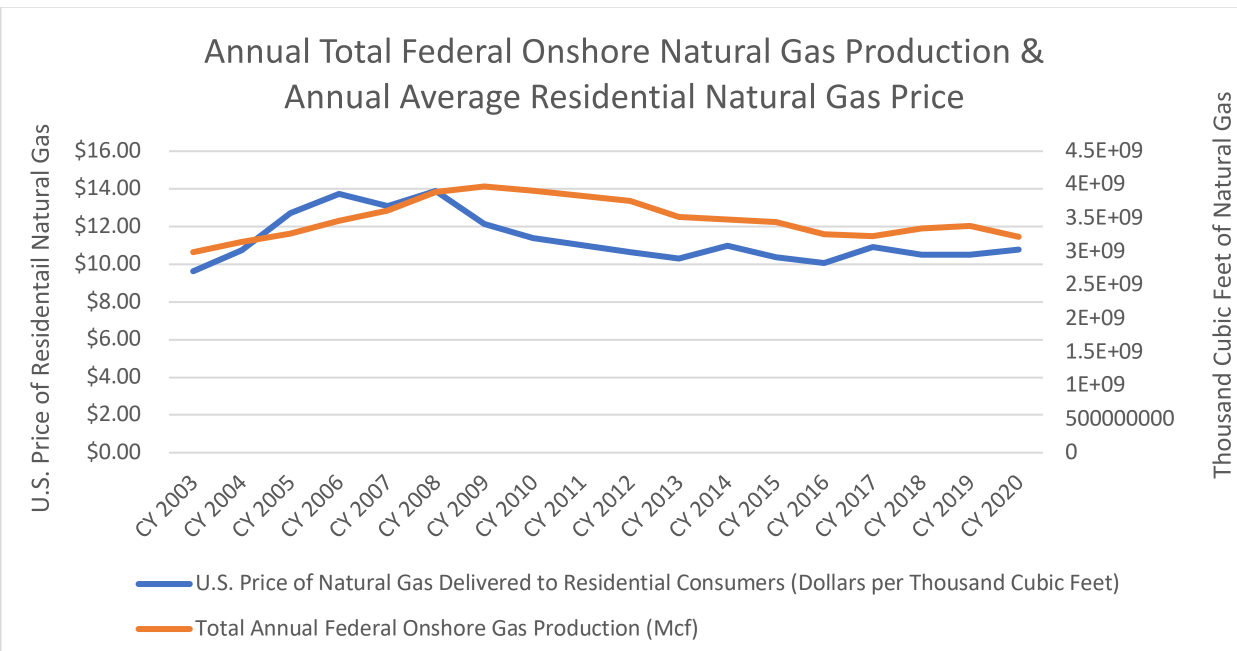


Figure 1: Source: US Energy Information Agency and US Natural Resources Revenue Data

…Because The Vast Majority Of The Country's Natural Gas Production Doesn't Even Occur on Public Lands.

Natural Gas Production on Federal Public Lands Makes Up Too Small Of A Percentage Of The Country's Total Natural Gas Production – Just 9 Percent – To Impact The Spot Price Of Natural Gas, Let Alone Consumer Prices. Because federal onshore natural gas production makes up such a small share of the country's total natural gas production – in addition to the fact that it is primarily global markets and events that drive energy prices – the amount of gas produced on public lands has no effect on natural gas spot prices.

- Since 2008, the annual average Henry Hub natural gas spot price has fallen by more than 77 percent, while total annual federal onshore gas production has shifted by less than 20 percent over that same timeframe. [EIA, accessed 02/09/22] [ONRR, accessed 02/09/22] (Figure 2)

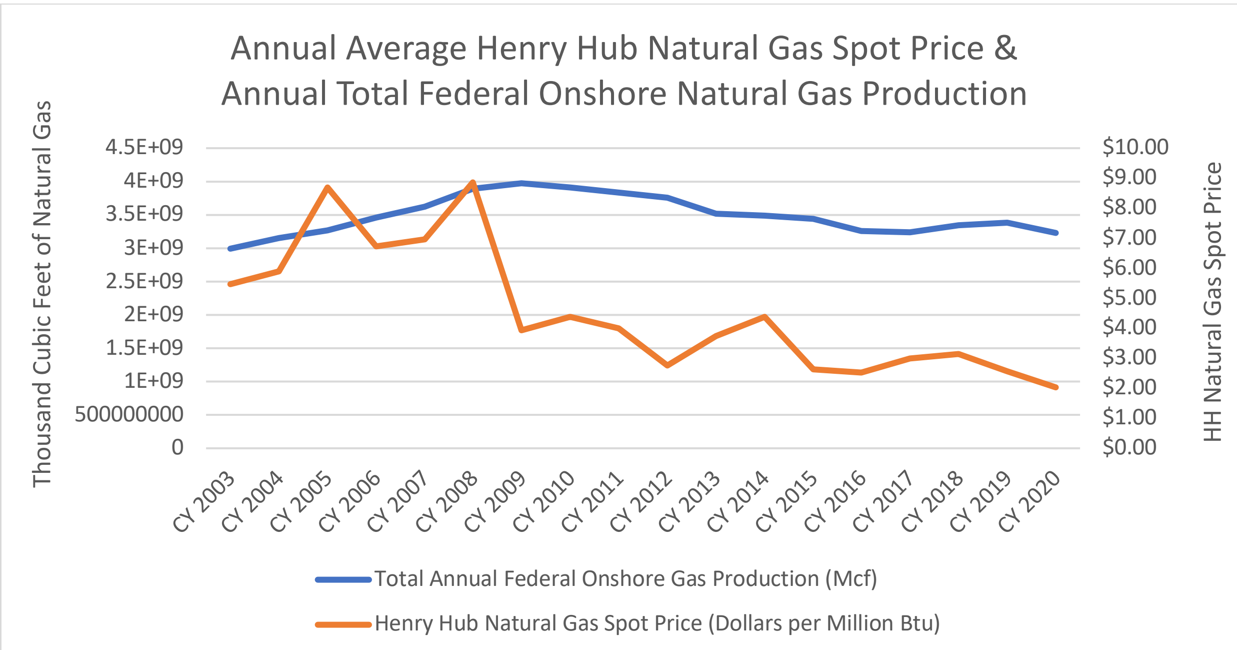


Figure 2: Source: US Energy Information Agency and US Natural Resources Revenue Data

*Even If Natural Gas Prices Did Respond To Natural Gas Production Levels on Public Lands, **Which They Do Not**, Increasing Federal Permitting Doesn't Even Necessarily Lead To Increased Production, As Oil and Gas Companies Are Known To Stockpile Federal Permits.*

- **In The Last Three Months Of The Trump Administration, The Industry Secured More Drilling Permits Than Any Other Period During The Trump Administration.** "Companies submitted more than 3,000 drilling permit applications in a three-month period that included the election, according to data from the U.S. Bureau of Land Management. Officials approved almost 1,400 drilling applications during that time amidst the pandemic. That's the highest number of approvals during Trump's four-year term, according to AP's analysis." [Associated Press, 01/10/21]

An Analysis of Federal Drilling Permits And Federal Onshore Natural Gas Production Shows That Industry Has Maintained Fairly Steady Production Levels On Federal Lands, Regardless Of The Number of Approved Drilling Permits Received Over The Past 18 Years. Since FY 2004, the total amount of natural gas produced on federal public lands has remained close to the 18-year average of 3.5 billion Mcf/fiscal year, despite the number of permit approvals swinging from a high of more than 7,000 in FY 2007 to a low of just over 2,000 in FY 2016.

- If federal permitting and production were positively correlated, then a year with a larger number of drilling permit approvals would be quickly followed by an increase in production. Instead, in recent years we've seen that as permit approvals have increased every year since roughly FY 2016, federal onshore natural gas production has remained relatively even. [ONRR, accessed 02/17/22] [BLM, accessed 02/17/22] (Figure 3)

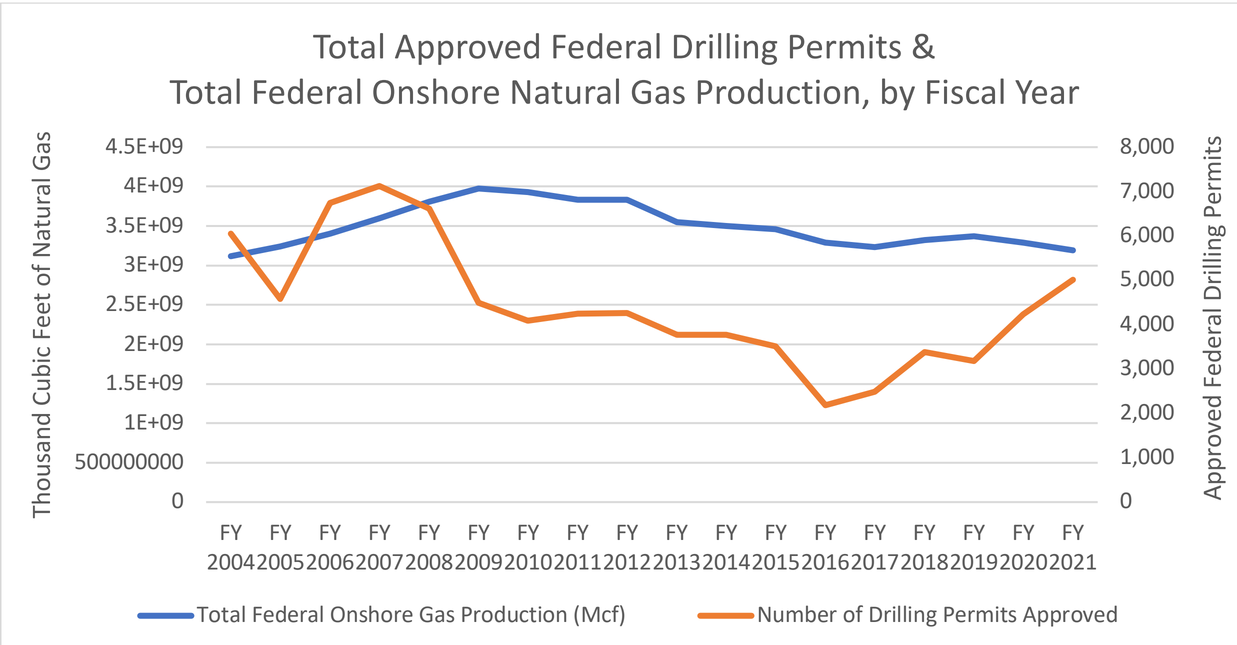


Figure 3: Source: US Natural Resources Revenue and Bureau of Land Management

And For Years Industry Has Been Leasing Millions More Acres Of Public Lands Than They've Put Into Production…

As Of The End Of FY 2020, The Oil And Gas Industry Had 26 Million Acres Of Public Lands Under Lease, More Than Half Of Which – 13.9 Million Acres – Were Unused And Nonproducing. Companies are taking advantage of higher prices to pay their shareholders more, rather than investing in new production, which – according to their misleading claims – would help bring prices down. [BLM, accessed 02/09/22]

- **Oil Producers Reinvestment Rate Reached Record Lows In The Third Quarter Of 2021, Dropping To 46% From The Historical Average Of 130%.** "The rate at which U.S. shale producers put cash from operations into drilling for oil and gas fell to a record low last quarter, data from consultancy Rystad Energy showed, as those firms returned cash to shareholders through dividends and stock buybacks. The third-quarter reinvestment rate was 46%, below the historical average of 130%, Rystad said in a report this week. Reinvestment could fall further, its analysts said." [*Reuters*, 11/23/21]

- **Oil Companies Are Not Increasing Production And Rig Counts In Accordance With Demand.** "Although crude topped $80 a barrel this month, the highest since 2014, Big Oil isn't in a rush to ramp up production and meet the growing demand for gasoline, jet fuel and natural gas sparked by a world venturing out after the worst of the pandemic. […] As evidence of drillers' reluctance to jump head first back into the oil patch, the rig count over the past two weeks has risen by one to 544. This key leading indicator of the industry's production is still higher than the 296 operating rigs tallied in the U.S. a year ago but far from the peak of almost 1,100 at the end of 2018, according to oilfield services giant Baker Hughes." [*Houston Chronicle*, 10/29/21

…Which Is Why Increasing The Amount Of Public Land Offered for Drilling Doesn't Lead To A Lower Natural Gas Spot Price Or Have Any Impact On The Price Consumers Pay For Natural Gas.

An Analysis Of Acres Of Public Lands Offered At Auction And Natural Gas Spot Prices Shows That Larger Lease Sales Do Not Lead To Lower Natural Gas Prices. The amount of public land offered for leasing has fluctuated greatly over the past 10 years – from nearly 12 million in 2017 to less than 1 million in 2020, and yet residential natural gas prices have not shifted in response because federal lands leasing does not impact natural gas spot prices. [EIA, accessed 01/22/22] [BLM, accessed 01/22/22] (Figure 4)

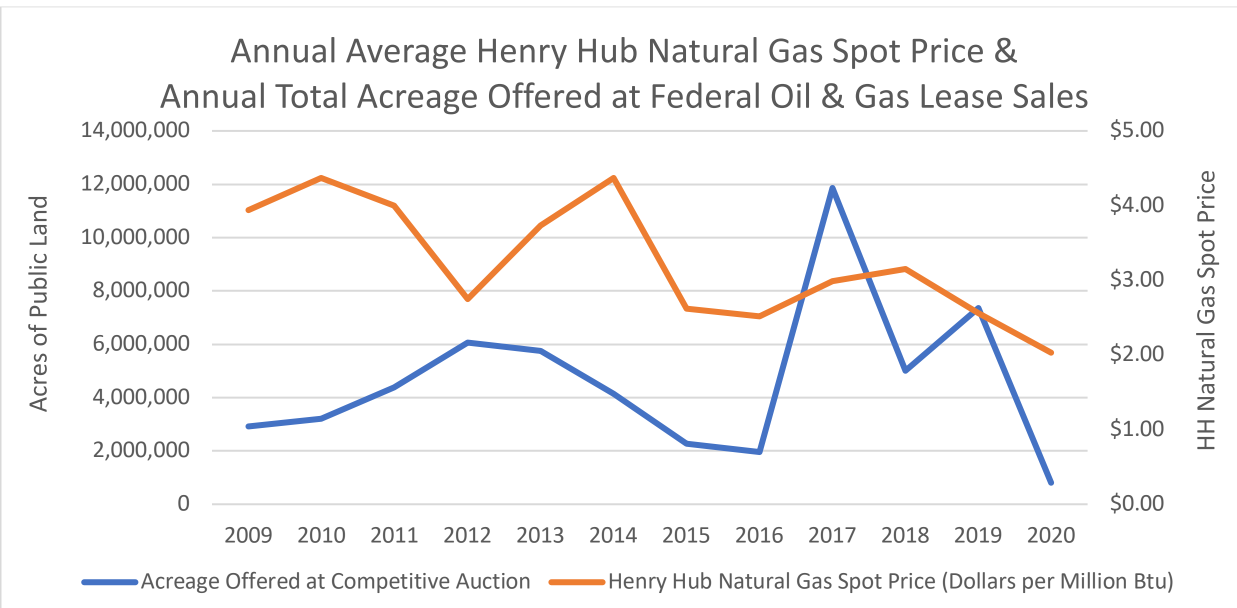


Figure 4: Source: US Energy Information Agency and Bureau Of Land Management

The Price Of Natural Gas For Residential Consumers Has Remained Steady Between $10 And $12 Per Thousand Cubic Feet Despite Vast Fluctuations In Public Lands Acres Offered For Lease. If lease sale size and residential natural gas prices were inversely correlated, then a year when a larger amount of public lands acres were offered for leasing would be quickly followed by a decrease in home heating costs. Instead, we've seen residential natural gas prices continue to remain fairly constant -- even since 2017, when federal acreage offered for oil and gas leasing topped nearly 12 million acres. [EIA, accessed 01/22/22] [BLM, accessed 01/22/22] (Figure 5)

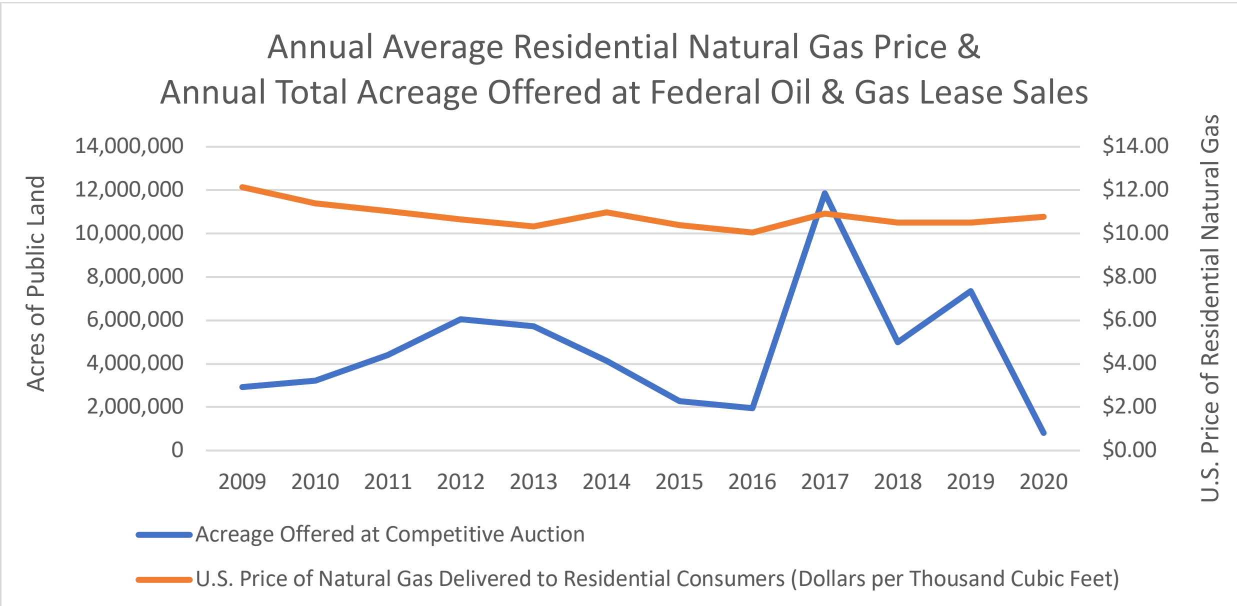


Figure 5: Source: US Energy Information Agency and Bureau Of Land Management

Similar To Residential Natural Gas Prices, Data Plainly Show That Higher Prices At The Pump Are Also Not Tied To Federal Public Lands Oil Production, Leasing, And Permitting.

Increasing Onshore Public Lands Crude Oil Production Doesn't Cause Retail Gasoline Prices To Decrease.

An Analysis Of Federal Onshore Oil Production Shows That Industry Has Steadily Increased Crude Oil Production On Public Lands Since 2003, And Yet Retail Gasoline Prices Have Still Greatly Fluctuated From One Year To The Next. Crude oil production on federal public lands has been increasing since 2008, and yet retail gasoline prices have gone up and down every year because these prices are highly dependent on global markets and events, not the very small share of US oil production that occurs on federal public lands.

- If increases in federal onshore oil production led to lower retail gasoline prices, then a year when production increased would be quickly followed by a decrease in gasoline prices. Instead, even as federal onshore production steadily increased since 2016 and into the present, prices at the pump went up, down, and now up again. [EIA, accessed 01/22/22] [EIA, accessed 01/22/22] (Figure 6)

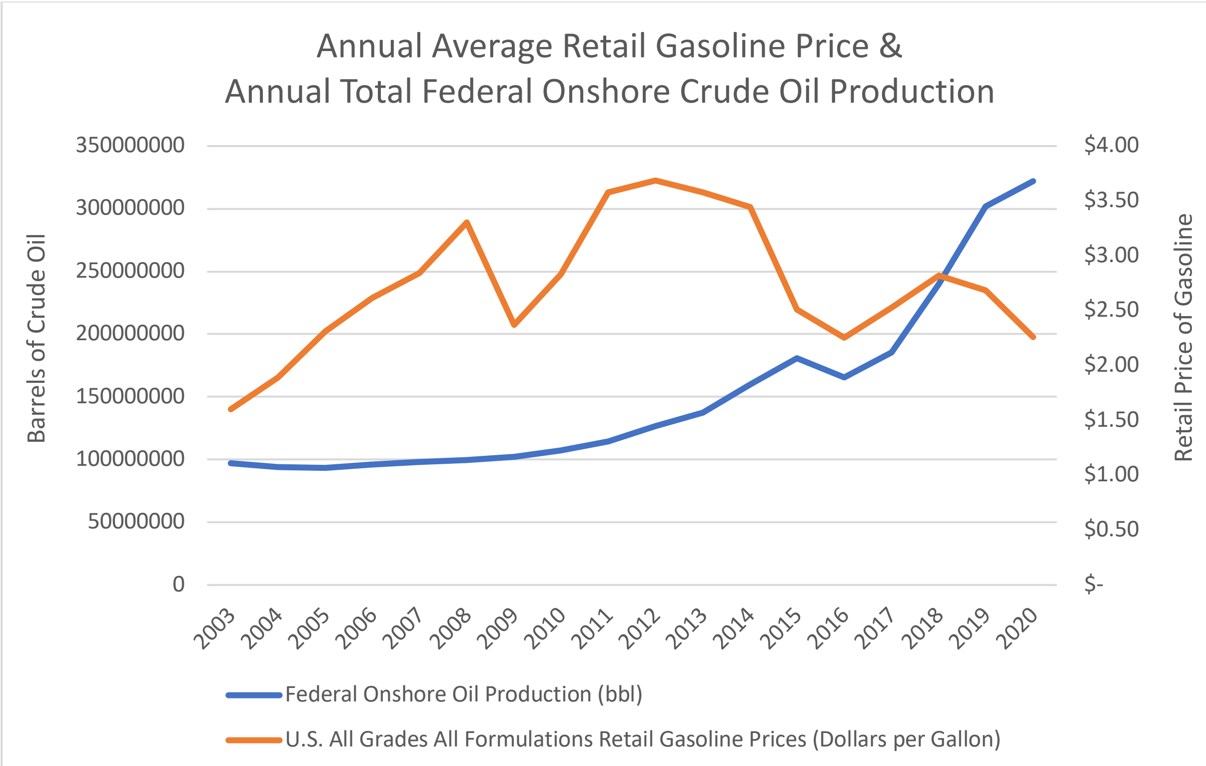


Figure 6: Source: US Energy Information Agency and US Natural Resources Revenue Data

And Because The Vast Majority Of Federal Oil Is Produced On Leases That Were Issued Decades Ago, Onshore Production Has Not Been Impacted By Recent Leasing Trends…

An Analysis Of Federal Lease Sales And Annual Federal Onshore Oil Production Shows That Production Has Steadily Risen Nearly Every Year Over The Past 18 Years, Regardless Of The Amount Of Federal Acreage Offered For New Leasing. The total amount of federal acreage offered for oil and gas leasing has varied considerably over the past 12 years, from a high of nearly 12 million acres in 2017 to fewer than 1 million acres in 2020. But since the vast majority of federal oil and gas is produced on leases that were issued decades ago, industry was able to steadily increase production over that timeframe on the millions of acres of lands they already had under lease. [ONRR, accessed 02/17/22] [BLM, accessed 02/17/22] (Figure 7)

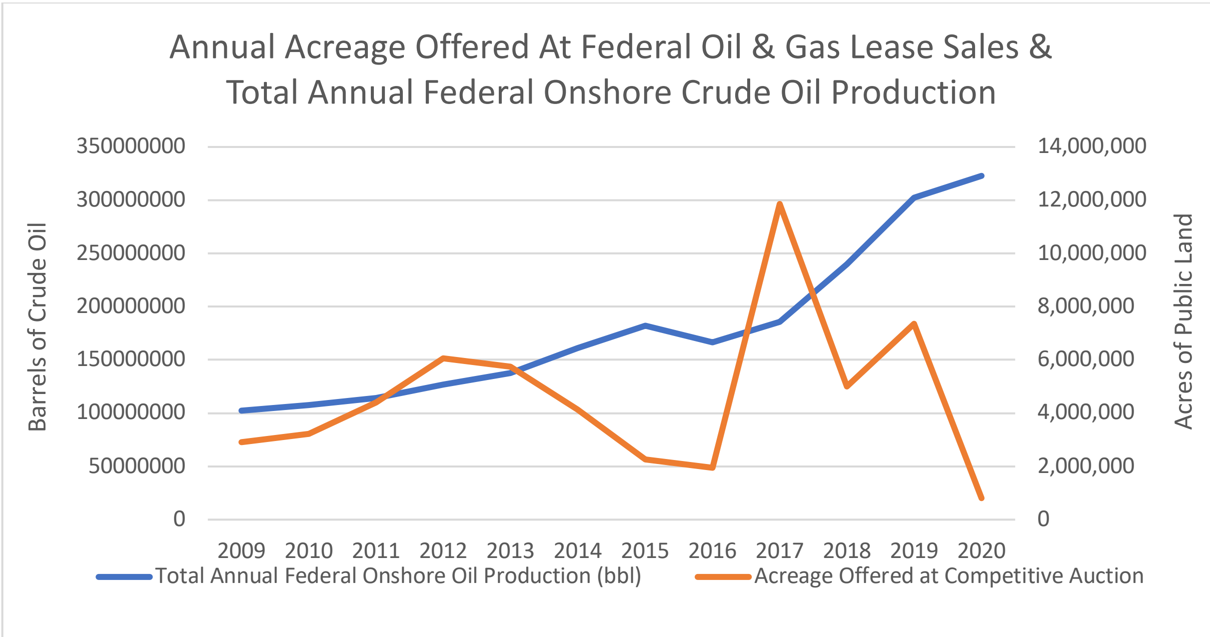


Figure 7: Source: US Natural Resources Revenue and Bureau Of Land Management

*This Is Why, Even If Crude Oil Spot Prices And Retail Gasoline Prices Responded To Oil Production On Public Lands – **Which They Do Not** – Those Prices Have Still Risen Even In Years When More Federal Acreage Was Offered For Lease.*

Between 2009 And 2016, Retail Gasoline Prices Rose Even In The Years When Industry Had More Acreage Available For Leasing. From 2009 through 2016, crude oil prices and nationwide retail gasoline gas prices rose even in the same years when more public lands were offered for oil and gas leasing or immediately following years with larger sales. Lease sales can't do anything to drive down consumer prices, since the little share of the country's total crude oil production that occurs on public lands is primarily done on older leases, not newer ones – and because these prices are highly dependent on what's happening outside of the US, in the international markets. [EIA, accessed 01/22/22] [EIA, accessed 01/22/22] [BLM, accessed 01/22/22] (Figures 8, 9)

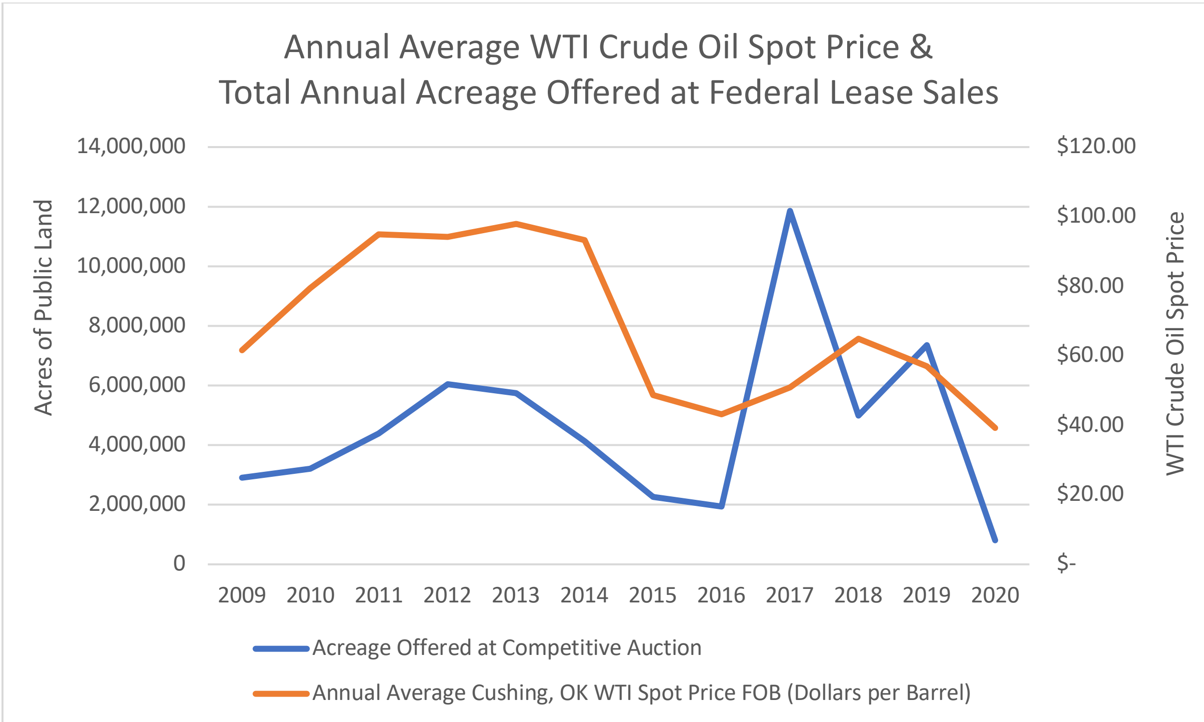


Figure 8: Source: US Energy Information Agency and Bureau Of Land Management

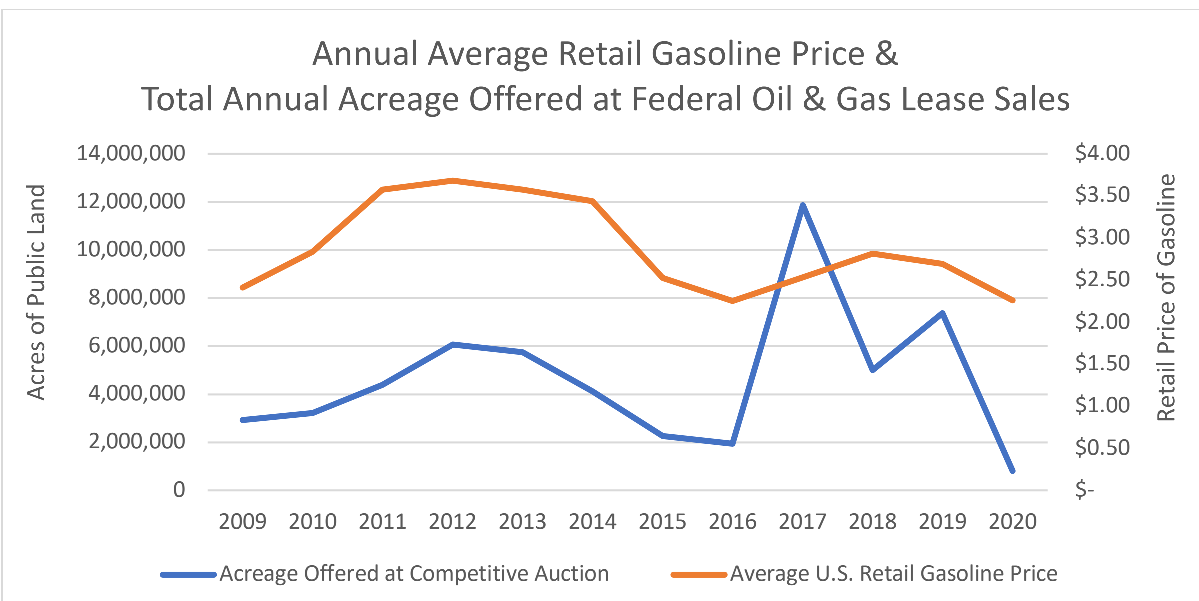


Figure 9: Source: US Energy Information Agency and Bureau Of Land Management

So Regardless Of How Much Oil Or Gas Is Produced On Our Public Lands, Or How Many Federal Leases Are Offered Or Permits Are Issued, Energy Prices Will Still Be Driven Primarily By Global Events And Markets.

Over The Past Twenty Years, The National Average Retail Price of Gasoline And Home Heating Costs Have Risen and Fallen During Each and Every Presidency.

Consumer Prices Have Always Gone Up And Down, Seemingly Unaffected By The Energy Policies Enacted During Any Presidential Term, And Instead Driven Primarily By Global Markets and Events. This means that regardless of how much federal acreage the Interior Department offers for leasing, how many federal drilling permits the Bureau of Land Management approves, or how much oil and natural gas are produced from federal lands, retail gasoline prices and home energy costs are still going to be largely driven by crude oil and natural gas spot prices, which are influenced primarily by global markets and events. (Figures 13, 14)

- **A President's Actions Are "Unlikely" To "Materially Affect Oil Prices."** "Although a president's actions — including Biden's climate policies — can nudge the price of oil, the effect is marginal at best, experts say. 'the scale of the global oil market,' said Pavel Molchanov, an oil analyst at Raymond James, 'is so massive that it would be extremely unlikely for any single political decision, anywhere in the world, to materially affect oil prices'" [*Washington Post*, 11/12/20]

- **An Oil And Gas Economist Said Gas Prices Would Probably Not Change Much Due To Biden's Executive Order, As Prices Are Determined By Crude Oil Prices, Which Are Settled In The International Markets.** "What effect could this order have on consumers? Could gas prices change? 'Probably not much,' according to [University Of Wyoming Oil And Gas Economist Chuck] Mason, the UW economist, said on Tuesday. 'Gasoline prices are determined by crude oil prices, and crude oil prices settle in the international markets. So having a five to 10% reduction in crude production, you will not be able to see the difference in international crude markets." [Casper Star-Tribune, 01/27/21]

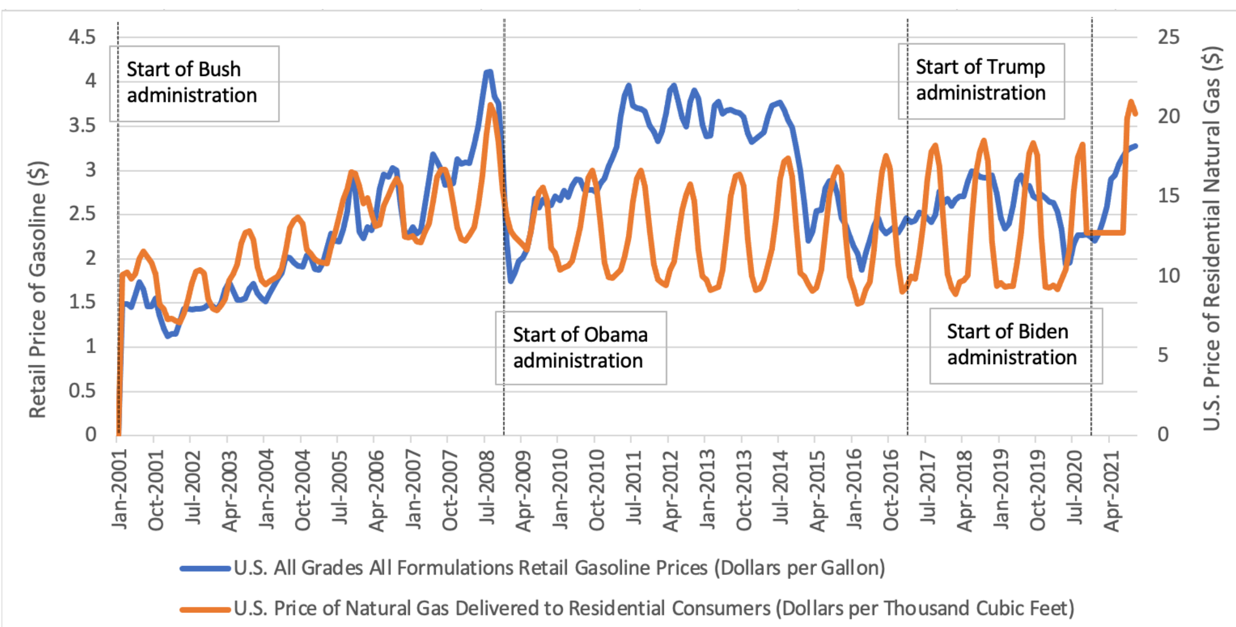


Figure 13: Source: US Energy Information Agency

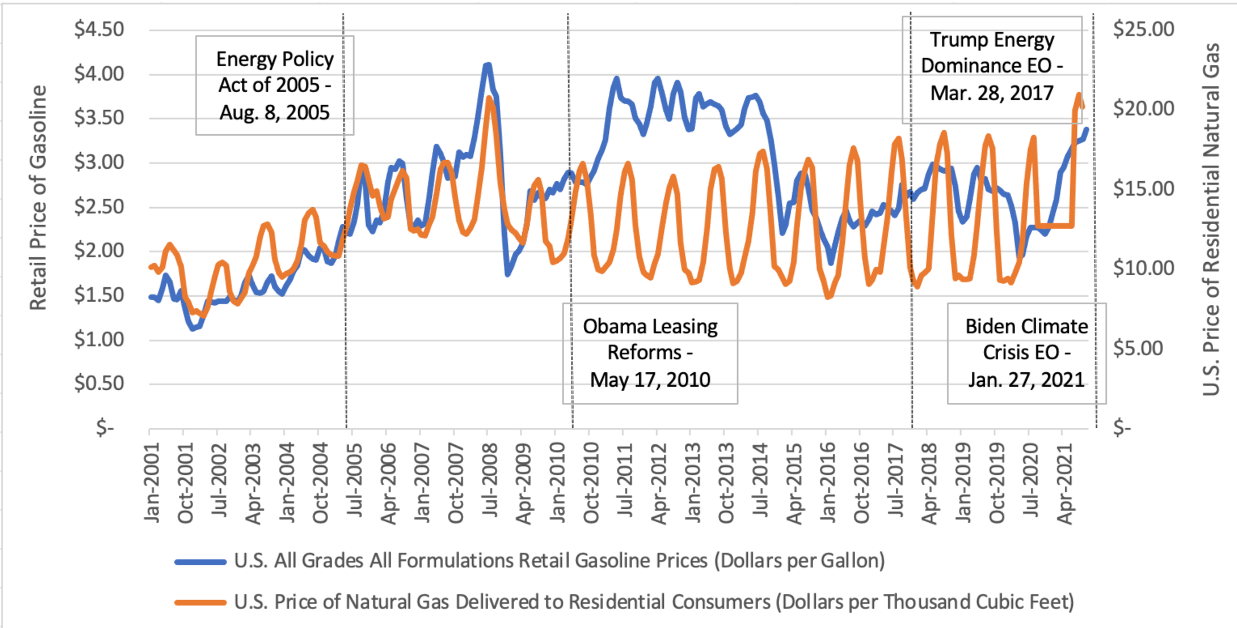


Figure 14: Source: US Energy Information Agency