October 2022

# The Cost of Biden's War on Oil and Gas: Nearly $100 Billion a Year in Lost Output

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# Executive Summary

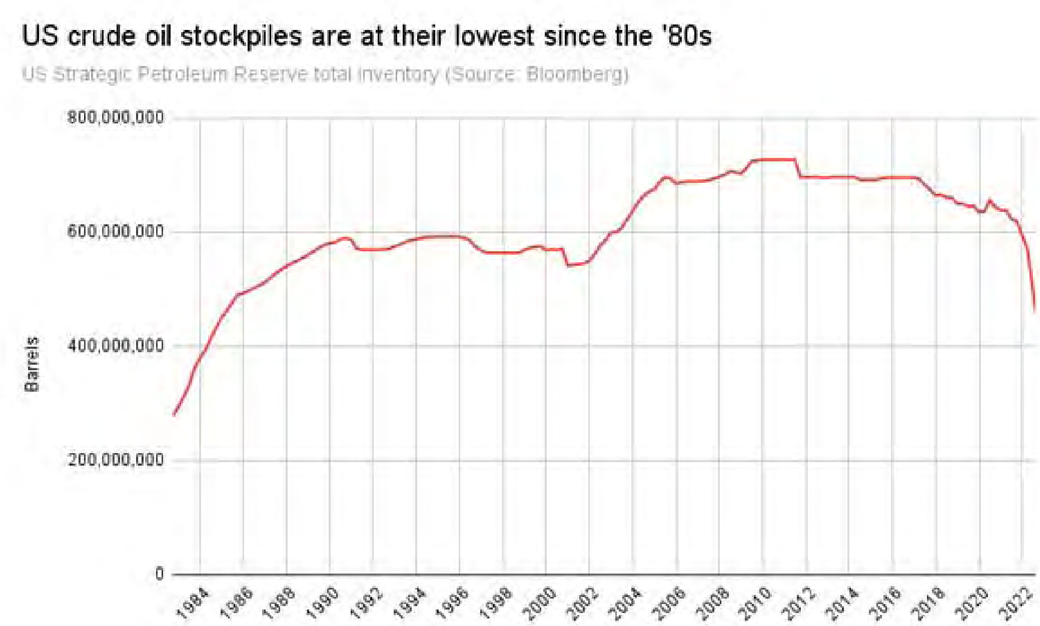
The Biden administration has sent conflicting messages to the U.S. oil and gas industry. On one hand, Biden has promised to set the U.S. on a course of eliminating U.S. oil and gas over the next two decades. He has said that his long-term goal would be to "shut down" oil and gas production as part of his climate change strategy. He has also canceled pipelines, reduced drilling on public lands, and instituted tough new environmental standards that raise the cost of drilling. His new climate change legislation imposes new taxes on the oil and gas industry.

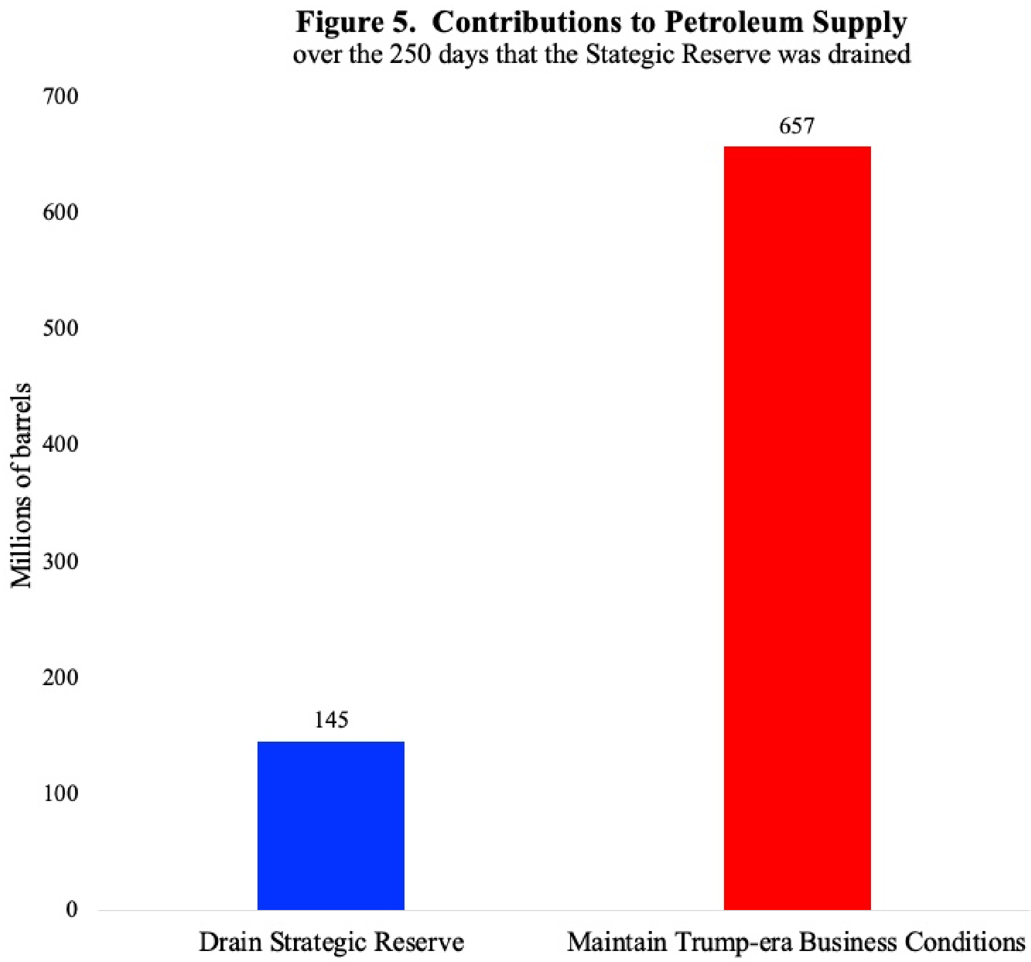
On the other hand, he has said multiple times he is "doing all I can" to reduce gas prices at the pump. He also claims that the U.S. is near "record levels" of oil and gas production in his first year-and-a-half in office.

This study examines what has happened with oil and gas production when we adjust for the large increase in the world price since Biden entered office. We find that Biden's policies have shifted the energy supply curve such that we are producing less oil and gas at the range of current price levels that we would have with the Trump energy policies still in place.

The U.S. would be producing between 2 and 3 million more barrels of oil a day and between 20 and 25 more billion cubic feet of natural gas under the Trump policies. This translates into an economic loss – or tax on the American economy - of roughly $100 billion a year.

This analysis finds that the United States would not have had to sell a single barrel of oil from the Strategic Petroleum Reserve if the Trump drilling policies had remained in place. The amount of domestic oil production lost because of Biden's war on fossil fuels is about four times greater (600 million barrels) than the amount of oil extracted (150 million barrels through July 2022) from the Strategic Petroleum Reserves.






# Introduction

President Biden and others in the White House claim that the U.S. is producing as much oil and gas than ever. Earlier this summer, Biden said we are "approaching record levels of oil and natural gas production."

The implication is that Biden's anti-fossil fuels policies – ranging from taking hundreds of thousands of acres off-line for drilling, to canceling pipelines, to restrictive environmental regulations that make drilling more expensive – are not the reason for the energy crisis and high gas prices at the pump. He points to high profits of major oil companies as evidence that corporate policies, rather than public policies, are to blame.

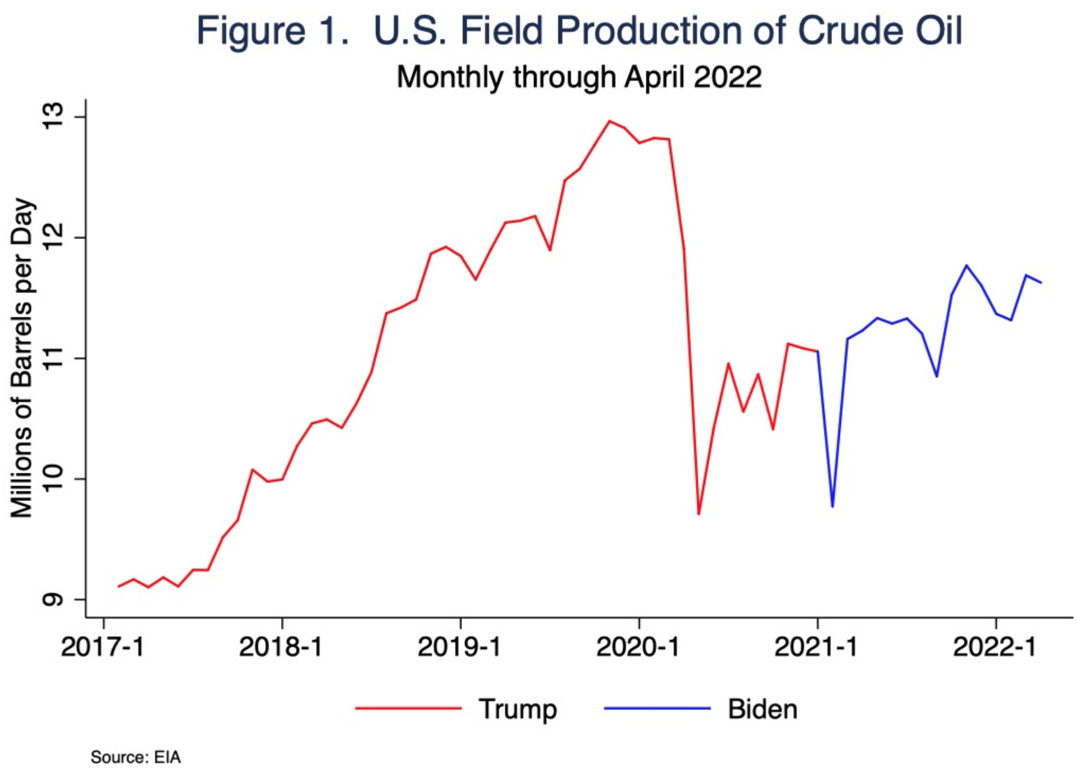
The hostility – both in terms of rhetoric and policy - of the Biden administration toward the oil and gas industry is well-established. The Institute for Energy Research has chronicled dozens of actions and orders by the Biden administration that have blocked or created financial disincentives for drilling. This has contributed to, among other things, inflation-adjusted U.S. natural gas prices in August that were more than triple from 3 years earlier.

While it is undoubtedly true that the Russian invasion of Ukraine has contributed to rising energy prices around the world, the real question is why United States energy companies are not filling that gap in output given the financial production incentive of today's high prices.

The evidence suggests that Biden's anti-fossil fuel policies have had a negative effect on U.S. oil and gas output.

First, let's examine what has happened with energy production under the Trump administration. By 2019, we had achieved Trump's goal of energy independence. That is to say, the U.S. was a net *exporter* of oil, gas, and coal. The Energy Information Agency had predicted that the U.S. could produce as much as 15 million barrels of oil per day under trends at the time.

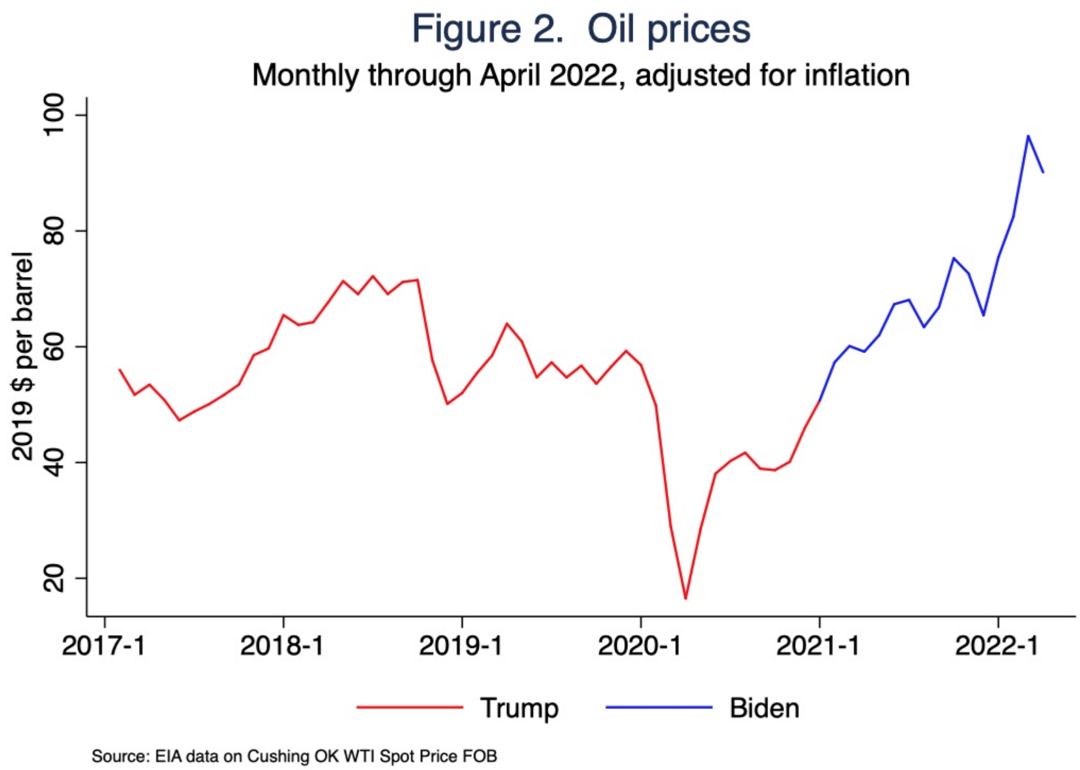
Another data point: in November 2019, shortly before the Covid crisis shutdown the American economy, the United States oil and gas industry reached peak production at a record 13 million barrels of oil a day, according to the U.S. Department of Energy's Energy Information Administration (EIA).




According to EIA, in April 2022 (the latest U.S. data available), U.S. oil production was roughly 11.6 million barrels. That production level has probably risen a bit over the last two months, but it is assuredly *less* than the 13 million peak we reached under Trump.

Our best guess is that in raw numbers, production is down by between 1 to 1.5 million barrels today from the Trump peak. At the average price this year of roughly $100 a barrel, this is $100 to $150 million a day in lost revenue for the U.S. oil industry.

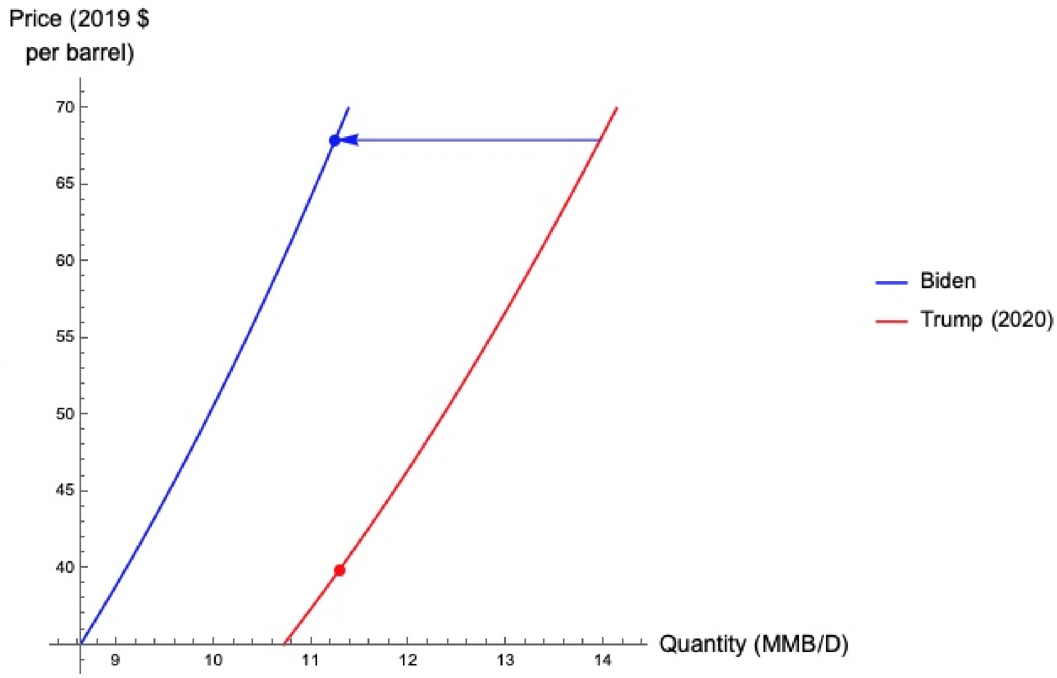
But that is *not* the end of the story. The price of oil today is *much* higher than the price when Trump was president. Adjusted for inflation, the average world price throughout Trump's presidency was $54 a barrel, and rarely exceeded $65. During Biden's presidency, the average was $71 through April 2022 and averaged $86 in 2022. See Figure 2.




# Missed Opportunities for American Industry

Oil production is sensitive to the world price, especially in the U.S. where shale oil is such a dominant resource. At $54 a barrel, the producers make some money, but many wells become unprofitable. As prices rise, so do drilling from marginal reserves and effort to discover new reserves. This happened during the last oil price spike in 2018. The EIA has estimated the size of this effect, which we have illustrated in the chart below as the red supply curve showing the relationship between price and production. At every price on the supply curve, the U.S. is producing less oil under Biden than under Trump.

Figure 3. Something reduced the supply of oil after 2020




Circles are actual price-quantity points.
The supply shift (arrow) is -2.5 MMB/D in the quantity dimension.
Supply elasticity of 0.4 from US EIA.

Our estimate is that if the Trump supply conditions had remained in place, daily U.S. oil production would be 2-3 million barrels higher, and daily gas production 20-30 billion cubic feet greater. The U.S. would again be the lead energy producer.

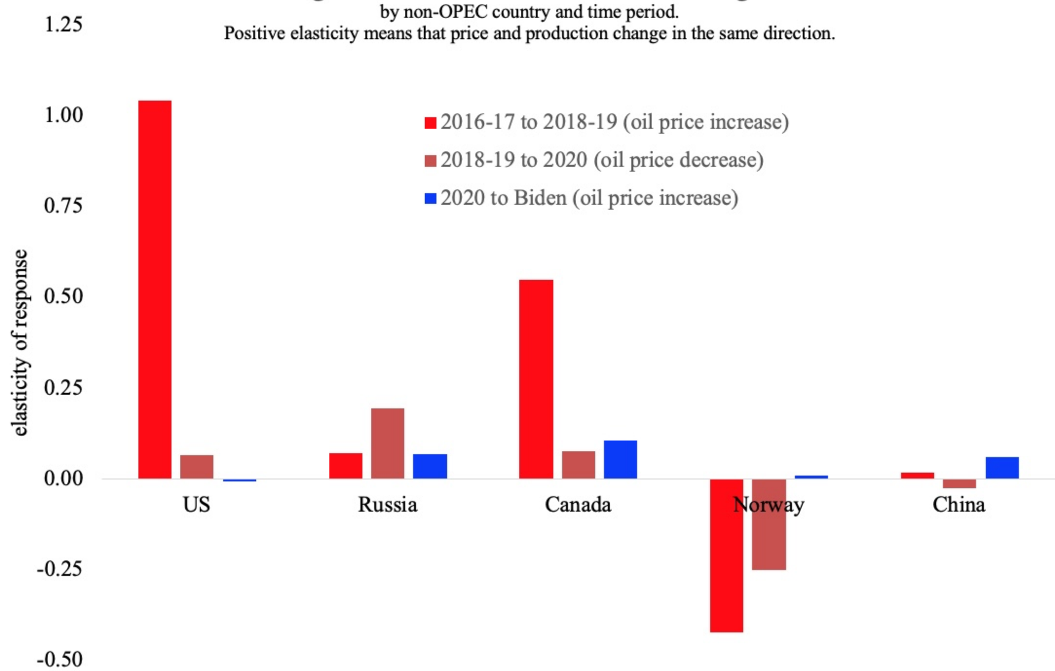
Under that scenario, the U.S. would not have to import a single net barrel of oil from abroad. The U.S. would be producing as much as $300 million more oil output per day.

Oil and gas suppliers face several new headwinds, many of which originate with, or are exacerbated by, Biden administration policies. One uniquely American headwind is a failure to maintain an investment-friendly business tax code as some of the provisions of Trump's tax cuts expire. Inflation adds to the problem because the investment deductions are not indexed to inflation, which allows the U.S. Treasury to further increase its take from businesses without any Congressional action. Oil and gas industries are especially hard hit by these two headwinds because they are so capital intensive.

It doesn't help that Biden is urging Joe Manchin and others in Congress to further increase business tax rates, and is actively regulating everything from banking to the environment to "transition" the U.S. away from fossil fuels. So-called ESG investing ("environmental, social, and governance") further piles on the obstacles in the way of U.S. production. Biden and Democratic leaders in Congress are also floating the idea of some type of carbon/energy tax to help pay for as much as $500 billion new spending – including additional taxpayer-financed, green energy projects. The Biden-Schumer plan is to tax the oil and gas companies and give the money raised to their competitor industries - wind, solar and electric cars.

Because some of these headwinds are especially American, we expect U.S. oil and gas production to suffer the most. Indeed, when Trump left office, the U.S. suddenly changed from the leading country in terms of raising production in the face of high oil prices to one of the few that holds its production fixed. The chart below illustrates this with data from the major non-OPEC countries.

**Figure 4. Oil Price and Production Changes**
by non-OPEC country and time period.
Positive elasticity means that price and production change in the same direction.




Sources: U.S. EIA monthly data. "Biden" = Feb 2021 - Feb 2022
Note: Elasticity of response = country's log production change divided by world log price change.

Three episodes are shown in the Figure 4: a price increase from 2016-17 to 2018-19 as world demand increased while OPEC reduced production, and price decrease 2018-19 to 2020 as demand collapsed during the pandemic, and price increase 2020 through the Biden administration, which we measure from February 2021 through the latest available international production data (February of this year, most of which predated the 2022 Ukraine invasion). A normally functioning industry would respond by moving production in the same direction as world prices, which the chart shows to be typically the case by calculating the elasticity of response. A 0.5 elasticity means that the country increases its production 1 percent for every 2 percent that the inflation-adjusted world oil price increases.

Indeed, we see the U.S. leading the charge toward more production when oil prices were high in 2018 and 2019, with a percentage production increase almost double Canada and far past Russia and China. The upward bars in the middle period show those countries that reduce oil production going into the pandemic as world prices fell (that is, a negative price change is associated with a negative production change).

The U.S. stands out under Biden, when oil prices were higher than 2020 but U.S. produce was not. Russia, Canada, China, and even Norway managed to produce more in 2021. (Norway's government-run oil extraction was unusually slow to adopt some of the new and cheaper extraction techniques).

# The Natural Gas Story

Now shifting to natural gas, the story is similar.  Natural gas production today is at or near its high point under Trump. That is true. In January of 2020 the production peaked at just over 3 billion cubic feet. And that is close to where we are today.

But as with oil there is a price effect that these numbers don't account for. When the natural gas price is low, many drillers won't even bring it to market. In oil-rich areas like Williston, North Dakota, when gas prices are low, the drillers capture the "wet stuff" oil and flare off the natural gas because they can't make a profit on it.

Throughout most of the Trump presidency, the price of natural gas ranged between $3 and $4 per thousand cubic feet. This year the price has ranged between $6 and $8 per thousand cubic feet. In other words, prices have doubled, but U.S. production has been basically flat.

Incidentally, the price of natural gas in Europe has soared to about quadruple our own elevated prices. In the summer of 2022 natural gas prices exploded to 10 times their "normal price," according to the Financial Times. The country that has gained the most has been Russia. But the U.S. could easily be exporting more American natural gas to Europe at very profitable levels if we had more liquefied natural gas (LNG) terminals and more accommodative shipping rules.

# A $100 Billion in Annual Energy Industry Waste

Thus, both the domestic and international evidence show that when we adjust for the higher international price for oil and gas, the U.S. is drilling not record amounts of oil and gas, but far below what market conditions would dictate. As illustrated in Figure 3, it takes a higher oil price to motivate the same supply during the Biden administration.

Much of this reflects the higher production costs already cited: higher tax rates; additional regulatory burdens; the suspending of needed energy infrastructure, such as pipelines; prohibitions on drilling on public lands and off-shore; and perhaps most importantly the political risk of investing billions of dollars only to have operations shut down by this administration.

Our best estimate is that given current prices for oil and gas, the Biden war on American fossil fuels and anti-business policies generally would mean 2 to 3 million more daily barrels of oil produced in the U.S. and 23 billion more daily cubic feet of natural gas. See Table 1.

**Table 1. Energy Production Losses**
*February 2021 - April 2022*

| | Oil, MMB/D | Natural gas, Bill ft3/D |
|---|---|---|
| Actual production | 11.2 | 101.3 |
| Production if Trump supply conditions instead | 13.9 | 124.2 |
| Difference | -2.6 | -23.0 |
| Addendum: prior peak | 13.0 | 106.3 |

# Economic Cost of Energy Production Restrictions

What would this mean for the economy, if U.S. oil and gas industries were still benefiting from Trump's regulatory and tax policies? U.S. oil and gas industries would be producing more, at lower cost per barrel and cubic foot. The combined addition to the U.S. GDP would be roughly $100 billion a year for as long as the policies could be continued.

Some of this increase in production would surely bring *down* prices, so it would be a win-win for America. Indeed, increasing U.S. production would go a lot further to reducing energy prices than President Biden's policy of releasing 145 million barrels (over about 250 days) from the Strategic Petroleum Reserve, both because of the comparatively small magnitude of the releases and because Biden administration is already arranging petroleum *purchases* to replenish the reserve.

Policies more friendly to oil and gas production would mean more jobs, more GDP, lower trade deficits, and lower gas prices at the pump.

In recent months there has been increased concern that the U.S. Strategic Petroleum Reserve is now at its lowest level of oil reserves since the summer of 1984 due to the continued sales of oil from the national stockpile.

But if domestic production had risen with the price of oil over the past year and a half, the SPR would not have been cut by 40%. Instead, U.S. production would have been four to five times higher than the amount that has been withdrawn from the reserve. For this reason, the Biden energy policy has put more geopolitical power into the OPEC nations and Russia with all the attendant national and energy security dangers associated with that development.

The SPR is now at its lowest level of oil reserves since the summer of 1984 due to the continued sales.

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