Testimony Before the House Subcommittee on Oversight and Investigations for the Hearing Titled, **"Unleashing the Golden Age of American Energy Dominance"**



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Change in Oil Production Relative to 2010



In 2010, the U.S. produced less than 10% of the world's daily oil production. By 2023, the U.S. produced 20% of the world's oil each day and accounted for 90% of the increase in daily oil production.



* Includes crude oil, shale oil, oil sands, condensates, and NGLs. Analysis by Glen Sweetnam and Batt Odgerel (EPRINC), data from Energy Institute

Change in Natural Gas Production Relative to 2010



In 2010, the U.S. produced less than 18% of the world's daily gas production. By 2023, the U.S. produced 26% of the world's gas each day and accounted for 51% of the increase in daily gas production.



120 1,800 Rig count peaked at 1,585 in Sep 2008. 1,600 100 Natural gas rigs in operation day 1,400 Billion cubic feet per Phenomenal 1,200 80 increases in natural gas 1,000 Between Sep 2008 & Dec 2024, development 60 natural gas production more than 800 efficiency doubled, from 49.6 bcfd to 105.7 bcfd. 600 **40** As of Jan 2025, there were 400 only 100 rigs in operation. 20 200 0 Ω 2004 2010 2012 2014 2016 2022 2024 2000 2002 2006 2008 2018 2020 **Rigs in operation** Natural gas production (Bcfd)

U.S. Natural Gas Production Efficiency



Analysis by Batt Odgerel (EPRINC), data from US EIA

Incremental Production from Increased Federal Leasing







Growth in Federal Revenues

Billion U.S. Dollars (2026-2035)

Year	Bonus Bid	Rents	Royalties	Corporate Taxes	Individual Taxes	Grand Total
2026	\$2.4B	\$0.0B	\$0.0B	\$0.0B	\$0.3B	\$2.8B
2027	\$3.1B	\$0.1B	\$0.0B	\$0.0B	\$0.8B	\$4.0B
2028	\$3.1B	\$0.1B	\$0.0B	\$0.0B	\$1.2B	\$4.5B
2029	\$1.6B	\$0.2B	\$0.0B	\$0.0B	\$1.5B	\$3.2B
2030	\$1.6B	\$0.2B	\$2.1B	\$1.4B	\$1.4B	\$6.7B
2031	\$1.6B	\$0.3B	\$4.4B	\$3.2B	\$1.3B	\$10.7B
2032	\$1.6B	\$0.3B	\$7.0B	\$5.4B	\$1.1B	\$15.5B
2033	\$1.6B	\$0.3B	\$9.7B	\$7.9B	\$1.2B	\$20.7B
2034	\$1.6B	\$0.4B	\$12.0B	\$10.0B	\$1.2B	\$25.2B
2035	\$1.6B	\$0.4B	\$14.0B	\$11.6B	\$1.2B	\$28.7B
Total	\$19.7B	\$2.4B	\$49.2B	\$39.5B	\$11.2B	\$122.0B



Breakdown of total revenues (2026-2035)



Analysis by Matthew Sawoski and Max Pyziur (EPRINC)

History of Oil Production Forecasts Shows Consistent Under Estimate



(data from over 1 million holes drilled in San Joaquin and Permian Basins)

	1964	1982	2000
SAN JOAQUIN VALLEY			
Cumulative Discoveries	7.7	11.8	16.1
Estimated Ultimate Recoverable	8.0 - 9.5	11.9 - 12.1	16.1 - 16.2
Cumulative Production as of	5.8	8.7	13.0
Year 2000 Production as Projected in (Thousand Barrels/Day)	44 – 112 (forecasted)	189 (forecasted)	597 (actual in 2000)
PERMIAN BASIN			
Cumulative Discoveries	17.6	27.9	35.2
Estimated Ultimate Recoverable	19 – 27.5	28.5 – 30.5	35.8 – 37.5
Cumulative Production as of	10.5	22.4	30.2
Year 2000 Production as Projected in (Thousand Barrels/Day)	162 – 479 (forecasted)	326 – 479 (forecasted)	910 (actual in 2000)

Forecasted 2000

production for San Joaquin Valley and Permian Basin using Hubbert Method, in 1964 and 1982, turned out to be significantly lower than **actual** production in 2000.

Source: Does the Hubbert Method Provide a Reliable Method for Predicting Future Oil Production, Richard Nehring, 2006 and republished 2013 by Energy Policy Research; <u>https://eprinc.org/wp-content/uploads/2023/08/HubbertMethod_Nehring.pdf</u> Estimates are billions of barrels unless otherwise noted.

Incremental Revenue to OPEC+ from Their Production Cuts



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Elastic U.S. Supply Reduces OPEC+'s Market Power



	<i>Normal</i> US Supply	<i>More Elastic</i> US Supply	<i>Less Elastic</i> US Supply
Inputs			
Base Oil Price (USD/Barrel)		62	
Global Demand Elasticity		-0.3	
Rest of World Supply Elasticity		0.1	
U.S. Supply Elasticity	0.4	0.5	0.3
Outputs			
Optimal OPEC+ Cut (Million Barrels/Day)	-6.6	-3.8	-9.5
Price After OPEC+ Cut (USD/Barrel)	72.3	67.4	78.5
Incremental Revenue for OPEC+ (Daily, USD Million)	28	9	64
Change in GDP (10 Years, USD Billion)	N/A	+823	-1378
Change in Federal Revenues (10 Years, USD Billion)	N/A	+148	-248

Ramp Up in Electricity Load Is Expected





Analysis by Batt Odgerel (EPRINC), data from various sources

U.S. Pipeline Capacity Additions Are Lagging





With the 2000s' surge in U.S. hydrocarbon production producers sped to add needed liquids (crude oil, gas liquids, and petroleum products) and natural gas pipeline capacity.

Natural gas additions peaked at 3.6 thousand miles in 2008 (*left pane*); liquids additions topped out in 2014 at 12.5 thousand (*right pane*).

Source: Analysis by Max Pyziur (EPRINC), data from US EIA