

Responses to Questions for the Record

Modernizing Energy Development Laws for the Benefit of Taxpayers, Communities, and the Environment

Brian C. Prest

Questions from Rep. Porter

- 1. Is the current 12.5% onshore federal royalty rate in line with market royalty rates charged by major oil and gas producing western states?**

The 12.5% rate falls well short of rates charged by major oil- and gas-producing states, which are typically in the range of 16.67% to 18.75% and can be as high as 25%, which is the rate charged in the major oil-producing state of Texas (GAO 2019).

- 2. If the current 12.5% royalty rate is below market royalty rates charged by states, then is the federal government actually receiving “fair market value of the use of the public lands and their resources” as legally mandated (43 U.S.C. § 1701(a)(9) (2012))?**

Respectfully, my role as an analyst is not to determine what is fair, but to conduct research to support others in making this determination. We can observe that royalty rates are lower on federal lands than on state and private lands. Economic theory and evidence suggest that royalties arising in competitive private markets are likely to be economically efficient. Further, if oil and gas developers have some degree of market power over private landowners, then observed market royalties in private markets could be lower than the efficient levels. Both findings suggest that higher royalty rates on federal lands could be justified on economic grounds alone, before consideration of the environmental impacts. As Mr. Murphy noted, it is conceptually possible that bonus bids may adjust in some cases to partially offset the revenues raised by increased royalties, but this is not generally binding because of minimum bid amounts and noncompetitive leasing.

Further, royalties account for the vast majority of federal oil and gas revenues, leaving little “cushion” for bonuses to fall in response. For example, in 2020, 96% of onshore federal oil and gas revenues derived from royalties (\$2.23 billion), compared to only 2% from bonuses (\$0.05 billion).¹ As a simple, back of the envelope calculation shows, if those onshore royalties were 50% larger (corresponding to an 18.75% rate instead of 12.5%), they would have produced an additional \$1.1 billion in revenues in 2020 alone. This gain would not be eliminated by a reduction in bonuses, which amounted to less than \$0.05 billion that year anyway.

¹ <https://revenue.data.doi.gov/downloads/revenue-by-month>

Question from Rep. Dingell

1. Dr. Prest, in your research paper from last year, you state that not even a permanent leasing moratorium would be sufficient to achieve net-zero emissions from public lands and waters by 2040. Why is this, and what other steps would need to be taken to achieve a net-zero target from public lands by this date?

Yes, that is correct. The figure below (Figure 1: Federal Emissions Reductions by Policy and Year, as a Percent of Baseline), which is from my paper, shows that a permanent end to leasing would reduce emissions from federal oil and gas production gradually over time, but this reduction would only reach about 70% by 2040, relative to business-as-usual levels.

A cessation of new leasing does not achieve net-zero emissions from public lands, simply because drilling will continue on existing leases for up to a decade. Under existing law, wells on those federal leases can continue operating until the resource is exhausted, which could be decades beyond that. That will remain true unless terms on existing leases are modified. To my knowledge, no such policy has been proposed by the administration or the committee.

If oil, gas, and coal emissions do not decline to zero in gross terms, achieving net zero on public lands would require other compensating emissions reductions from other sources, such as the following:

- clean energy development on public lands
- nature-based solutions that increase carbon uptake on those lands, such as in forests and soils
- technology solutions such as deployment of direct air capture or carbon capture

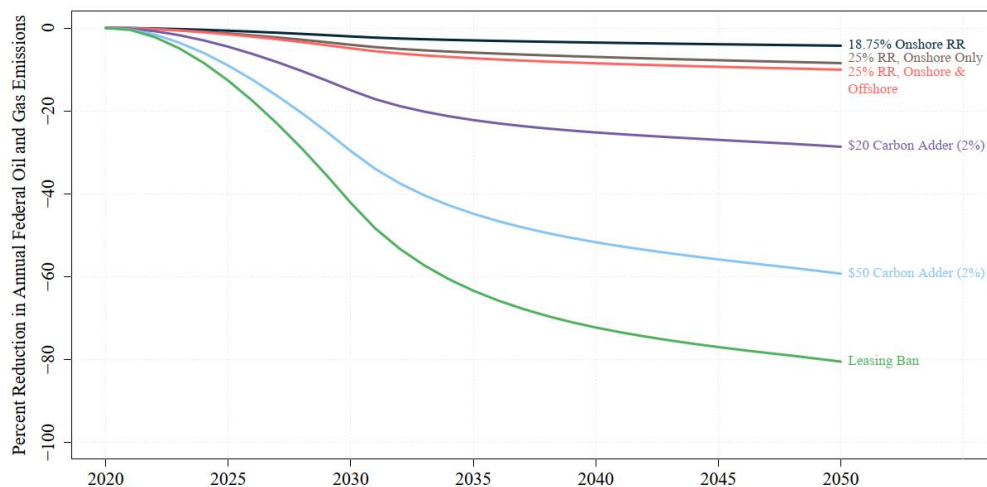


Figure 1: Federal Emissions Reductions by Policy and Year, as a Percent of Baseline

Notes: RR = royalty rate. Figure only shows emissions reductions from oil and gas produced on federal lands. Values are presented as a percent of such federal oil and gas emissions in the baseline in each year, not including emissions from other sources, such as coal.

