Public Forum on
The Federal Oil and Gas Program

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Principal Deputy Assistant Secretary Daniel-Davis, thank you for the opportunity to appear at today’s forum.

My name is Brian Prest. I am an economist and fellow at Resources for the Future, an independent, nonprofit research institution in Washington, DC. RFF’s mission is to improve environmental, energy, and natural resource decisions through impartial economic research and policy engagement. The institution is committed to being the most widely trusted source of research insights and policy solutions leading to a healthy environment and a thriving economy.

While RFF researchers are encouraged to offer their expertise to inform policy decisions, the views expressed here are my own and may differ from those of other RFF experts, its officers, or its directors. RFF does not take positions on specific legislative proposals.

Today I will provide an economist’s perspective on a specific element of Executive Order 14008, that is, the adjustment of federal oil and gas royalties “to account for corresponding climate costs.” To be clear, my remarks consider accounting for all climate costs, both upstream during production and downstream during fuel use.

Many of the existing rules for federal oil and gas leasing were established more than a century ago, well before the impacts of CO2 emissions were widely recognized as an important policy issue.

To address that issue, economists overwhelmingly support policies such as economy-wide carbon pricing that places a fee on every ton of carbon emitted.1 In the context of federal leasing, an analogous policy would be a carbon fee embedded in oil and gas leases, perhaps based on the social cost of carbon. This would account for and internalize climate externalities and thereby reduce emissions.

This idea is not a new one. In 2017, the Interior scoping report for coal leasing reform listed royalty increases or adders as a top option for achieving both a fair return and accounting for greenhouse gas emissions (DOI 2017).

This policy option is also grounded firmly in more than a century of economics (Pigou 1924). Economics is very clear on this point: maximizing economic efficiency requires externalities like pollution to be

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accounted for through a fee or a comparable regulation. This is true even if the policy can only be applied to one subsector such as federal, but not state or private, lands.

However, policies that increase the cost of operating on federal lands will result in some production shifting to state, private, and foreign producers. This is known as “leakage” and it is a very real drawback of policies with limited coverage. As already mentioned, an ideal policy would involve an economy-wide price, in which case international leakage could be addressed with a border tax adjustment along the lines developed by my RFF colleagues Brian Flannery and Jan Mares.²

Still, leakage is not one-for-one, and again economic efficiency requires a fee at an appropriate level. With leakage, the optimal fee is simply lower than it would otherwise be. The relative carbon intensity of fuels that replace federal production should also be taken into account in this adjustment. Thus, the question is not whether there should be a fee, but what is the right level of the fee.

A key economic principle underlying good policy is the need to balance benefits and costs. From an economic perspective, the climate benefits are the value of reduced emissions, typically measured by the social cost of carbon (SCC). Policies that have leakage merit a somewhat smaller but nonetheless substantial fee reflecting climate impacts because a ton of emissions reductions from covered sources translates into less than a ton reduced globally, after offsetting increases in production elsewhere.

While I have focused on the climate impacts, yet another motivation for raising royalties is the revenues they generate. In fact, the law explicitly states that the public should receive “fair market value” for resources extracted from public lands, and there is substantial evidence that current rates are below that level (see, e.g., GAO 2019, Covert and Kellogg 2021). Further, because half of the royalties from onshore production are shared with the producing state, these revenues can help support state and local budgets during the energy transition.

In a recent paper, my co-author James Stock and I calculated the optimal carbon fees in various scenarios, accounting for leakage. These different scenarios depend on the policymaker’s goal (maximizing either revenues or economic efficiency), on the value of the SCC (say $50/ton or $125/ton) and on the chosen policy lever (royalty rates, in percentage terms as is customary, versus fees in terms of emissions, as in dollars per ton of CO2).

You can find all of the detailed numbers in our paper, and I encourage you to take a closer look at these as I don’t have sufficient time to share them right now. You will find that the results reveal that there are multiple (not just one) policy approaches that can be used to reduce emissions, some by tens of millions of tons of CO2 annually. At the same time, these measures can generate billions of dollars every year to support local communities. Any one of the multiple approaches we evaluated would strike a balance between the two extremes of doing nothing and completely shutting down federal leasing. This middle path of implementing carbon fees to reflect climate externalities can be an economically efficient approach to leasing reform, and I would be pleased to continue to aid in assessing the merits of these different options.

Thank you again for this opportunity to appear before you today, and I look forward to the discussion.

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