Fact Sheet

Analyzing the effects of fossil fuel leasing and development on greenhouse gases

To meet its legal obligations and commitments to consider the impacts of climate change in decision-making, the Bureau of Land Management (BLM) has created interim tools to assist with analysis of greenhouse gas emissions for decisions related to the leasing and development of fossil fuels, including:

- An annual report on greenhouse gas emissions
- A lease sale emissions tool
- Standardized methodology for consideration of the social cost of greenhouse gases in lease sales, building off interim guidance from Council on Environmental Quality (CEQ)

Climate change

Climate change is driven by the concentration of greenhouse gases, such as carbon dioxide and methane, in the Earth’s atmosphere. The incremental contribution of greenhouse gases from a single proposed land management action cannot currently be precisely translated into its potential effect on global climate change or any localized effects in the area specific to the action. However, climate change models allow for projections of potential impacts on people, natural resources, and plant and animal species attributable to changes in the level of greenhouse gas emissions.

Executive Order 14008

On January 27, 2021, President Biden issued Executive Order 14008: Tackling the Climate Crisis at Home and Abroad, which states that the “Federal Government must drive assessment, disclosure, and mitigation of climate pollution and climate-related risks in every sector of our economy, marshaling the creativity, courage, and capital necessary to make our Nation resilient in the face of this threat.” The BLM’s report on greenhouse gas emissions is the most comprehensive effort the agency has undertaken to meet that assessment and disclosure goal.

BLM’s Report on Greenhouse Gas Emissions and Climate Trends

The “2020 BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends” presents the estimated emissions of greenhouse gases attributable to fossil fuels produced on lands and mineral estate managed by the BLM. More specifically, this report is focused on estimating greenhouse gases emissions from coal, oil and gas development that is occurring, and is projected to occur, on the federal onshore mineral estate.

The report includes a summary of emissions estimates from reasonably foreseeable federal fossil fuel development and production over the next 12 months, as well as longer term assessments of potential onshore
federal fossil fuel greenhouse gas emissions and the resulting anticipated climate change impacts. The report is an important tool for evaluating the cumulative impacts of greenhouse gas emissions from fossil fuel energy leasing and development authorizations on federal onshore mineral estate relative to several emission scopes and base years. The report, available at XXX, is not static; it will be regularly updated with new leasing and development data and methodological enhancements.

Within oil and gas leasing environmental assessments, the BLM has evaluated the potential effects of proposed leasing actions on climate change by estimating and analyzing potential greenhouse gas emissions from projected oil and gas development on the parcels proposed for leasing using estimates based on past oil and gas development and available information from existing development within states.

The BLM cannot develop a precise emissions inventory at the leasing stage due to numerous uncertainties, including the type (oil, gas, or both), scale and duration of potential development; the types of equipment being used on-lease; individual company investment decisions; and the mitigation measures that a future lessee may propose in their development plan. To estimate reasonably foreseeable emissions from leasing, the BLM uses estimates based on state data for past lease development combined with per-well drilling, development and operating emissions data, plus oil and gas production levels from representative wells in the area.

**Social cost of greenhouse gases**

The BLM is incorporating the social cost of greenhouse gases (carbon, nitrous oxide and methane) into the environmental analysis of fossil fuel leasing and development. The social cost is an estimate of the monetized damages associated with incremental increases in greenhouse gas emissions and provides a useful measure of the benefits of greenhouse gas emission reductions to inform agency decision-making.

The social cost of greenhouse gas estimates are based on complex models describing how greenhouse gas emissions affect global temperatures, sea level rise and other biophysical processes; how these changes affect society through agricultural, health, and other impacts; and monetary estimates of the market and nonmarket values of these impacts.

Executive Order 13990: *Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis*, emphasized the importance of ensuring federal agencies “capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account,” and established an Interagency Working Group on the Social Cost of Greenhouse Gases (IWG). BLM’s analysis uses the interim estimates of the social costs of carbon, methane and nitrous oxide published by the IWG in February 2021.