# BENEFITS OF THE BUILD BACK BETTER ACT'S METHANE FEE

JEFFREY RISSMAN

OCTOBER 2021

#### **SUMMARY**

The Build Back Better Act's fee on methane emissions from petroleum and natural gas systems is an important component of the overall legislation, responsible for 65 percent of the Act's reduction of industrial greenhouse gas (GHG) emissions from 2023 to 2050. By 2050, it will avoid 172 million metric tons (MMT) of carbon dioxide equivalent (CO $_2$ e) annually, equal to the annual emissions from more than 36 million gasoline-powered passenger vehicles. The methane fee boosts the economy, creating more than 70,000 jobs by 2050 and increasing gross domestic product (GDP) by more than \$250 billion from 2023 to 2050.

A fee would complement the U.S. Environmental Protection Agency's enforceable pollution limits, which will be proposed this month. Both tools are complementary, not duplicative, and have their own unique roles:

- Enforceable pollution standards are essential to ensure broad and equitable reductions for all communities. In this case, they are likely to disproportionately benefit communities of color.
- A fee on methane leaks does double duty raising revenues and discouraging pollution – while holding industry accountable. A modest methane fee can reinforce regulatory requirements by boosting the incentives for companies to reduce methane emissions. The fee requires companies to internalize the costs of the pollution they emit.

The oil and gas industry can prevent methane emissions through straightforward steps, such as properly casing and sealing wells, monitoring for methane leaks, and improving pipeline and equipment maintenance.



# www.energyinnovation.org

98 Battery Street, Suite 202 San Francisco, CA 94111 policy@energyinnovation.org These steps do not require new technology development and are achievable today at low cost. More than half of the abatement potential costs less than  $$20/\text{ton CO}_2e$ , and more than 95 percent costs less than  $$40/\text{ton CO}_2e$ . Over the 2023 to 2050 period, the total costs paid by the oil and gas industry to implement methane abatement measures plus methane fee payments represent just 0.77 percent of their projected revenues over that period, well below the industry's average profit margin. The industry could absorb these expenses while remaining profitable without increasing prices for consumers.

## **OVERVIEW**

#### **ABOUT THE METHANE FEE**

The Build Back Better Act (H.R. 5376) includes a fee on methane emitted from petroleum and natural gas systems, including production, natural gas processing, transmission, compression, import/export operations, and storage. The fee takes effect in 2023 and applies only to methane leakage in excess of 0.2 percent for oil and gas production, 0.11 percent for natural gas transmission, and 0.05 percent for other oil and natural gas systems. The fee is \$1,500 per ton of methane leaked in excess of the thresholds above, which is equivalent to \$60/ton CO<sub>2</sub>e using methane's 100-year global warming potential (GWP) value of 25. Fee revenues are used to administer the program, provide technical and financial assistance to companies for monitoring and reducing emissions, and support communities impacted by pollution from oil and gas systems.

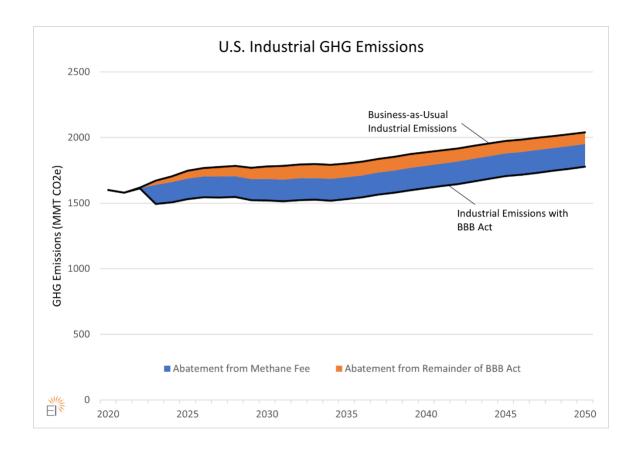
# MODELING THE METHANE FEE'S IMPACTS

The methane fee was modeled in the <u>U.S. Energy Policy Simulator</u> 3.3.0, in a version customized to more accurately represent the complete set of measures in the Build Back Better and Infrastructure Investment and Jobs (<u>H.R. 3684</u>) Acts. The methane fee was tested in the context of a comprehensive set of policies representing other provisions in the Build Back Better Act to capture policy interactions.

# **RESULTS**

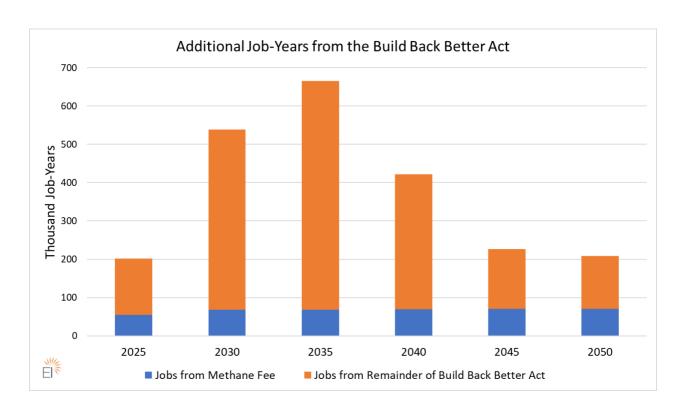
### **GHG EMISSIONS**

By 2050, the methane fee reduces industrial GHG emissions by 172 MMT CO₂e per year, equivalent to 11 percent of <u>today's U.S. industry sector emissions</u>, or the annual emissions from more than 36 million gasoline-powered passenger vehicles. Cumulatively through 2050, the methane fee is responsible for 65 percent of the Build Back Better Act's total industrial GHG emissions reductions.



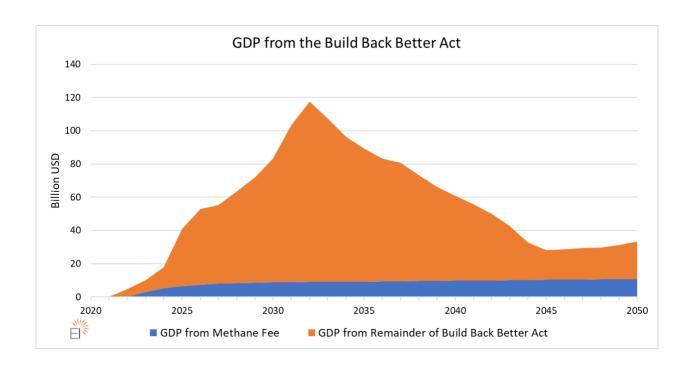
# **JOBS**

The methane fee creates jobs by encouraging investment in workers and equipment, which is projected to create more than 65,000 jobs by 2028. The methane fee would continue creating jobs post-2028 as well, albeit more slowly, reaching about 70,000 positions by 2050. Cumulatively from 2023 to 2050, the methane fee accounts for 17 percent of the roughly 11 million job-years the Build Back Better Act will create. While some of the Act's programs (and associated jobs) do not last beyond 2045, jobs from the methane fee are enduring. As a result, in 2050, the methane fee is responsible for one third of the jobs created by the Act.



## **GDP**

The methane fee increases U.S. GDP through two main mechanisms: It will spur the oil and gas industry to spend more on workers and equipment to prevent methane leaks, and the government will spend methane fee revenues in ways that benefit communities and industry. The fee adds more than \$250 billion to the U.S. economy cumulatively from 2023 to 2050, representing 15 percent of the Build Back Better Act's total GDP contribution through 2050. By 2050, the methane fee will contribute more than \$10 billion per year to the U.S. economy, roughly a third of the Act's GDP impact in that year.



# **COSTS OF STOPPING METHANE LEAKS**

The oil and gas industry can prevent methane emissions through straightforward steps, such as properly casing and sealing wells, monitoring for methane leaks, and improving pipeline and equipment maintenance. These steps do not require new technology development and are achievable today at low cost. More than half of the abatement potential costs less than \$20/ton  $CO_2e$ , and over 95 percent costs less than \$40/ton  $CO_2e$ . The weighted average cost of all abatement measures is \$19/ton  $CO_2e$ .

The proposed methane fee from 2023 to 2050 would spur the U.S. oil and gas industry to spend a total of \$90 billion on methane abatement measures and \$43 billion on methane fee payments, for a total of \$133 billion. This is just 0.77 percent of the industry's projected \$17.2 trillion revenues over that period, and it is well below their average 4 percent profit margin. The oil and gas industry could absorb these costs and remain profitable without increasing prices for consumers. Furthermore, the industry will recoup some of its methane fee expenditures by selling methane that otherwise would have leaked.

The methane fee is a straightforward policy with minor costs and major benefits for the U.S. economy, workers, and the climate.