

118TH CONGRESS  
1ST SESSION

# H. R. 4072

To direct the Administrator of the Environmental Protection Agency to conduct a measurement-based national methane research pilot study to quantify methane emissions from certain oil and gas infrastructure, and for other purposes.

---

## IN THE HOUSE OF REPRESENTATIVES

JUNE 13, 2023

Mr. LIEU (for himself, Ms. BONAMICI, Ms. STEVENS, Mrs. McCLELLAN, Mr. CASTEN, Mrs. FOUSHÉE, Ms. SALINAS, and Ms. LOFGREN) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

---

## A BILL

To direct the Administrator of the Environmental Protection Agency to conduct a measurement-based national methane research pilot study to quantify methane emissions from certain oil and gas infrastructure, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-  
2       tives of the United States of America in Congress assembled,*

**3 SECTION 1. SHORT TITLE.**

4       This Act may be cited as the “Methane Emissions  
5       Research Act”.

1     **SEC. 2. NATIONAL METHANE RESEARCH PILOT STUDY.**

2         (a) IN GENERAL.—The Administrator, in collabora-  
3         tion with the Administrator of the National Oceanic and  
4         Atmospheric Administration, and in consultation with the  
5         Secretary of Energy, the Administrator of the National  
6         Aeronautics and Space Administration, the Administrator  
7         of the Pipeline and Hazardous Materials Safety Adminis-  
8         tration, the Director of the National Institute of Stand-  
9         ards and Technology, and the heads of other Federal  
10        agencies as appropriate, shall conduct a measurement-  
11        based national methane research pilot study (in this sec-  
12        tion referred to as the “pilot study”) to quantify methane  
13        emissions from covered oil and gas infrastructure. The Ad-  
14        ministrator shall employ a technology or suite of tech-  
15        nologies for methane emissions measurement, research,  
16        and analysis. To the extent practicable, the Administrator  
17        shall consider utilizing innovative technologies for methane  
18        emissions measurement and quantification.

19         (b) REQUIREMENTS.—The pilot study shall—

20                 (1) encompass two regions, which shall be de-  
21                termined by the Administrator;  
22                 (2) identify areas consisting primarily of cov-  
23                ered oil and gas infrastructure within each such re-  
24                gion;

(3) develop and implement methodologies and procedures for a measurement-based evaluation of methane emissions from such infrastructure;

7                         (5) consult with Federal, State, local, academic,  
8                         nonprofit, and private sector entities, as appropriate.

9 (c) REPORT.—Not later than two years after the date

10 of the enactment of this Act, the Administrator shall sub-  
11 mit to the appropriate committees of Congress, and make  
12 publicly available, a report assessing the results of the  
13 pilot study. The report shall include the following:

18                   (2) An analysis of how the pilot study could  
19 support and inform the development and implemen-  
20 tation of a national methane census study (in this  
21 section referred to as the “methane census”), to be  
22 undertaken on a recurring basis and encompass all  
23 seven regions. Such analysis shall also examine the  
24 following:

(A) The feasibility of evaluating the amount of methane emissions from covered oil and gas infrastructure by region, industry segment, type of emission source, or any other criterion, as a component of the methane census.

(B) The necessary scope of measurement-based activities within regions in order to carry out the methane census.

(C) Any onshore or offshore gaps within the scope of the pilot study that could merit inclusion as a part of the methane census.

12 (D) The estimated budget that would be  
13 required to oversee the methane census.

(E) Any other relevant topic, as determined by the Administrator.

(3) An analysis of how the measurement-based evaluation of methane emissions from covered oil and gas infrastructure, as completed by the pilot study or contemplated for the methane census, could support efforts to reconcile data generated by top-down methods and bottom-up methods with respect to the Environmental Protection Agency's Inventory of U.S. Greenhouse Gas Emissions and Sinks. Such analysis shall also examine the following:

1                             (A) How methane emissions data from the  
2                             pilot study or methane census could be utilized  
3                             as a part of a reconciliation process to better  
4                             understand and improve data estimates from  
5                             both top-down methods and bottom-up methods.

6                             (B) How methane emissions data from the  
7                             pilot study or methane census could identify  
8                             and help to explore any significant discrepancies  
9                             between top-down methods and bottom-  
10                            up methods for methane emissions from covered  
11                            oil and gas infrastructure.

12                            (C) Any other relevant topic, as determined by the Administrator.

14                            (4) A description of any research or technology  
15                             gaps that were identified during the course of the  
16                             pilot study and could merit additional study to support  
17                             the improvement of methane emissions measurement and quantification.

19                            (5) A description of the methodology of the  
20                             pilot study, which, to the greatest extent possible  
21                             and consistent with appropriate protections for confidential business information and intellectual property, shall include a discussion of the following:

24                             (A) Study design.

25                             (B) Measurement techniques.

(C) Efforts to account for additional significant sources of methane emissions within a region.

(D) Assumptions and uncertainties in the results of the pilot study.

6 (d) METHANE EMISSIONS DATA INTEROPERA-  
7 ABILITY.—The Administrator, to the greatest extent pos-  
8 sible, shall ensure that all data collected as part of the  
9 pilot study adheres to data and metadata standards to  
10 support the public findability, accessibility, interoper-  
11 ability, and reusability of such data. The Administrator  
12 shall consult with the heads of other Federal agencies, as  
13 appropriate, to—

14 (1) facilitate effective data sharing regarding  
15 methane emissions measurement and quantification  
16 data; and

17                   (2) ensure that methane emissions measure-  
18                   ment and quantification data gathered by such other  
19                   Federal agencies can be converted to a format that  
20                   is consistent with the methodologies and procedures  
21                   of the pilot study.

22 (e) AUTHORIZATION OF APPROPRIATIONS.—There is  
23 authorized to be appropriated to carry out this section  
24 \$20,000,000, to remain available until expended.

**25 (f) DEFINITIONS.—**In this section:

1                             (1) ADMINISTRATOR.—The term “Administrator” means the Administrator of the Environmental Protection Agency.

4                             (2) APPROPRIATE COMMITTEES OF CON-  
5                             GRESS.—The term “appropriate committees of Congress” means the Committee on Science, Space, and  
6                             Technology of the House of Representatives and the  
7                             Committee on the Environment and Public Works of  
8                             the Senate.

10                            (3) COVERED OIL AND GAS INFRASTRUC-  
11                             TURE.—The term “covered oil and gas infrastructure” means the infrastructure used for the produc-  
12                             tion, gathering and boosting, processing, trans-  
13                             mission, and storage of oil and natural gas in the  
14                             United States. Such term does not include oil and  
15                             gas distribution infrastructure.

17                            (4) REGION.—The term “region” means any of  
18                             the seven oil and gas regions evaluated by the U.S.  
19                             Energy Information Administration in its May 2023  
20                             Drilling Productivity Report.

