

117TH CONGRESS
2D SESSION

H. R. 8991

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

SEPTEMBER 28, 2022

Ms. JOHNSON of Texas (for herself, Ms. LOFGREN, Ms. BONAMICI, Ms. STEVENS, and Ms. SHERRILL) 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 of 2022”.

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

2 (a) IN GENERAL.—The Administrator, in consulta-
3 tion with the Secretary of Energy, the Administrator of
4 the National Aeronautics and Space Administration, the
5 Administrator of the National Oceanic and Atmospheric
6 Administration, the Administrator of the Pipeline and
7 Hazardous Materials Safety Administration, the Director
8 of the National Institute of Standards and Technology,
9 and the heads of other Federal agencies as appropriate,
10 shall conduct a measurement-based national methane re-
11 search pilot study (in this section referred to as the “pilot
12 study”) to quantify methane emissions from covered oil
13 and gas infrastructure. The Administrator shall employ a
14 technology or suite of technologies for methane emissions
15 measurement, research, and analysis. To the extent prac-
16 ticable, the Administrator shall consider utilizing innova-
17 tive technologies for methane emissions measurement and
18 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;

(4) assess diverse approaches to the characterization of methane emissions from such infrastructure; and

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:

14 (1) An overview of the findings of the pilot
15 study pertaining to the quantification and character-
16 ization of methane emissions from covered oil and
17 gas infrastructure.

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.

14 (E) Any other relevant topic, as deter-
15 mined 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 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 July 2022
20 Drilling Productivity Report.

