

117TH CONGRESS
1ST SESSION

S. _____

To require the Secretary of the Treasury to levy a fee on methane emissions from oil and natural gas facilities, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. WHITEHOUSE introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To require the Secretary of the Treasury to levy a fee on methane emissions from oil and natural gas facilities, 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 Reduction Act of 2021”.

6 **SEC. 2. FINDINGS.**

7 Congress finds that—

8 (1) methane is a potent heat-trapping gas that
9 absorbs 28 to 36 times the quantity of energy that
10 carbon dioxide absorbs over a 100-year period;

1 (2) increased methane concentrations in the at-
2 mosphere are responsible for approximately 25 per-
3 cent of observed global warming;

4 (3) approximately $\frac{1}{3}$ of global anthropogenic
5 methane emissions are produced by the production
6 and transmission of fossil fuels;

7 (4) recent estimates suggest that methane emis-
8 sions from oil and natural gas operations in the
9 United States are 60 percent higher than previously
10 believed, representing 2.3 percent of natural gas pro-
11 duction;

12 (5) methane emissions from oil and natural gas
13 operations in the United States represent approxi-
14 mately \$2,000,000,000 in lost natural gas that could
15 be used to fuel 10,000,000 homes;

16 (6) estimates from the International Energy
17 Agency suggest that $\frac{1}{2}$ of methane emissions from
18 global oil and natural gas supply chains may be
19 eliminated at zero net cost;

20 (7) some oil and natural gas companies have
21 announced plans to reduce methane emissions from
22 the operations of those companies to below 0.2 per-
23 cent of production, demonstrating that significant
24 reductions in methane emissions are technically and
25 economically feasible; and

1 (8) numerous companies in the United States
2 are developing innovative technologies to allow oil
3 and natural gas companies to more cost-effectively
4 detect and reduce methane emissions.

5 **SEC. 3. DEFINITIONS.**

6 In this Act:

7 (1) **BASIN.**—The term “basin” means a geo-
8 logic province (as defined by the American Associa-
9 tion of Petroleum Geologists).

10 (2) **EMPIRICALLY DETERMINED.**—The term
11 “empirically determined” means determined through
12 the collection of sufficient data in situ, including
13 measurement on the ground or by drone, airplane,
14 or satellite, for the purpose of accurately estimating
15 the quantity of methane emissions from a basin.

16 (3) **METHANE.**—The term “methane” means a
17 chemical compound with the chemical formula CH_4 .

18 (4) **METHANE EMISSION.**—The term “methane
19 emission” means the release of methane from the ex-
20 traction, production, gathering, processing, compres-
21 sion, transmission, or storage of—

22 (A) oil; or

23 (B) natural gas.

1 (5) METHANE FEE FACTOR.—The term “methane fee factor” means the amount calculated under
2 section 4(b)(2)(D) for the applicable calendar year.

3 (6) NATURAL GAS.—The term “natural gas”
4 has the meaning given the term in section 3 of the
5 Deepwater Port Act of 1974 (33 U.S.C. 1502).

6 (7) OIL.—The term “oil” has the meaning
7 given the term in section 3 of the Deepwater Port
8 Act of 1974 (33 U.S.C. 1502).

9 (8) PERCENTAGE OF VOLUME LOST TO THE AT-
10 MOSPHERE.—The term “percentage of volume lost
11 to the atmosphere” means, for any 1 company with
12 respect to any 1 basin—

13 (A) for companies that use the fee cal-
14 culated under section 4(b)(2)(B)(i), the per-
15 centage determined for the basin under the pro-
16 gram established under section 4(a); and

17 (B) for companies that use the fee cal-
18 culated under clause (iii) of section 4(b)(2)(C),
19 the quotient obtained by dividing—

20 (i) the methane emissions in the basin
21 during the applicable calendar year, as de-
22 termined by the company using a protocol
23 validated by the Secretary under clause (ii)
24 of that section; by
25

1 (ii) the total quantity of natural gas
2 produced, gathered, processed, trans-
3 mitted, or released and lost to the atmos-
4 phere by the company in the basin during
5 the applicable calendar year, as determined
6 by the company using a protocol validated
7 by the Secretary under clause (ii) of that
8 section.

9 (9) SECRETARY.—The term “Secretary” means
10 the Secretary of the Treasury.

11 **SEC. 4. FEE ON METHANE EMISSIONS.**

12 (a) ESTIMATE OF METHANE EMISSIONS.—Not later
13 than December 31, 2022, the Secretary, in consultation
14 with the Administrator of the Environmental Protection
15 Agency and the Administrator of the National Oceanic
16 and Atmospheric Administration, shall establish and im-
17 plement a program to estimate, based on empirically de-
18 termined, peer-reviewed methane emission rates, annual
19 methane emissions, and methane emission rates (ex-
20 pressed in percentage of natural gas production), from
21 each oil and natural gas producing basin.

22 (b) FEE.—

23 (1) IN GENERAL.—For calendar year 2023 and
24 each calendar year thereafter, the Secretary shall
25 levy a fee on methane emissions on each company

1 that produces, gathers, processes, or transmits oil or
2 natural gas.

3 (2) AMOUNT.—

4 (A) IN GENERAL.—The fee under para-
5 graph (1) shall be calculated in accordance with
6 subparagraph (B) or (C), as applicable.

7 (B) PROPORTIONAL FEE CALCULATION.—

8 (i) IN GENERAL.—Subject to subpara-
9 graph (C), the fee under paragraph (1) for
10 a basin in which a company produces,
11 gathers, processes, or transmits oil or nat-
12 ural gas for a calendar year shall be the
13 sum obtained by adding—

14 (I) the product obtained by mul-
15 tipling—

16 (aa) the difference be-
17 tween—

18 (AA) the percentage of
19 volume lost to the atmos-
20 phere in the basin during
21 the calendar year; and

22 (BB) 0.2 percent;

23 (bb) the total quantity of
24 natural gas produced or released
25 and lost to the atmosphere dur-

1 ing oil or natural gas production
2 by the company in the basin dur-
3 ing the calendar year; and

4 (cc) the methane fee factor
5 for the applicable calendar year;
6 and

7 (II) the product obtained by mul-
8 tipling—

9 (aa) the difference be-
10 tween—

11 (AA) the percentage of
12 volume lost to the atmos-
13 phere in the basin during
14 the calendar year; and

15 (BB) 0.1 percent;

16 (bb) the total quantity of
17 natural gas gathered, processed,
18 or transmitted by the company in
19 the basin during the calendar
20 year; and

21 (cc) the methane fee factor
22 for the applicable calendar year.

23 (ii) REQUIREMENT.—The fee cal-
24 culated under clause (i) for a company
25 shall be determined on a basin-by-basin

1 basis for each basin in which the company
2 produces, gathers, processes, or transmits
3 oil or natural gas.

4 (C) ALTERNATIVE FEE CALCULATION.—

5 (i) OPT OUT.—A company may opt
6 out of the fee calculated under subpara-
7 graph (B) if—

8 (I) the company submits to the
9 Secretary a peer-reviewed protocol for
10 empirically determining, on a basin-
11 by-basin basis for all basins, the total
12 amount of methane emissions that re-
13 sult from oil and natural gas facili-
14 ties—

15 (aa) that the company oper-
16 ates; or

17 (bb) in which the company
18 has an ownership interest; and

19 (II) the Secretary validates the
20 protocol in accordance with clause (ii).

21 (ii) VALIDATION.—

22 (I) IN GENERAL.—The Secretary
23 may validate a protocol submitted
24 under clause (i)(I) if—

1 (aa) the Secretary deter-
2 mines that the protocol is an ac-
3 curate and comprehensive empir-
4 ical method for calculating the
5 methane emissions of the com-
6 pany submitting the protocol;

7 (bb) the protocol—

8 (AA) is peer-reviewed
9 by independent scientists;

10 (BB) is available to the
11 public in its entirety; and

12 (CC) requires the reg-
13 ular collection of data;

14 (cc) all underlying data col-
15 lected under the protocol are
16 available to the public; and

17 (dd) the Secretary deter-
18 mines that—

19 (AA) to the maximum
20 extent practicable, the com-
21 pany has installed state-of-
22 the-art technologies to detect
23 and eliminate methane leaks
24 from all oil and natural gas

1 facilities the company owns
2 or operates; and

3 (BB) subject to sub-
4 clause (III), the company
5 has prohibited the venting
6 and flaring of methane, ex-
7 cept in emergency cir-
8 cumstances.

9 (II) TIMELINE.—A protocol de-
10 scribed in clause (i)(I) shall be sub-
11 mitted to the Secretary for validation
12 under subclause (I) not later than
13 June 30 of the calendar year before
14 the calendar year for which the com-
15 pany is seeking to opt out of the fee
16 calculated under subparagraph (B).

17 (III) EMERGENCY CIR-
18 CUMSTANCES.—An emergency cir-
19 cumstance for which the venting or
20 flaring of methane is authorized under
21 subclause (I)(dd)(BB) does not in-
22 clude—

23 (aa) venting or flaring of
24 methane from oil wells because
25 the company has failed to develop

1 the infrastructure necessary to
2 capture, process, and transmit
3 methane associated with oil pro-
4 duction; or

5 (bb) any claim of economic
6 necessity.

7 (iii) CALCULATION.—For a company
8 that has opted out of the fee calculated
9 under subparagraph (B) in accordance
10 with clause (i), the fee under paragraph
11 (1) for a basin in which the company pro-
12 duces, gathers, processes, or transmits oil
13 or natural gas for a calendar year shall be
14 the sum obtained by adding—

15 (I) the product obtained by mul-
16 tiplying—

17 (aa) the difference be-
18 tween—

19 (AA) the percentage of
20 volume lost to the atmos-
21 phere in the basin during
22 the calendar year; and

23 (BB) 0.2 percent;

24 (bb) the total quantity of
25 natural gas produced or released

1 and lost to the atmosphere dur-
2 ing oil or natural gas production
3 by the company in the basin dur-
4 ing the calendar year; and

5 (cc) the methane fee factor
6 for the applicable calendar year;
7 and

8 (II) the product obtained by mul-
9 tipling—

10 (aa) the difference be-
11 tween—

12 (AA) the percentage of
13 volume lost to the atmos-
14 phere in the basin during
15 the calendar year; and

16 (BB) 0.1 percent;

17 (bb) the total quantity of
18 natural gas gathered, processed,
19 or transmitted by the company in
20 the basin during the calendar
21 year; and

22 (cc) the methane fee factor
23 for the applicable calendar year.

24 (iv) REQUIREMENT.—The fee cal-
25 culated under clause (iii) for a company

1 that opted out of a fee calculated under
2 subparagraph (B) shall be determined on a
3 basin-by-basin basis for each basin in
4 which the company produces, gathers,
5 processes, or transmits oil or natural gas.

6 (D) METHANE FEE FACTOR.—

7 (i) INITIAL COST.—For calendar year
8 2023, the methane fee factor shall be
9 \$1,800 per ton.

10 (ii) ANNUAL ADJUSTMENT.—For each
11 calendar year after 2023, the methane fee
12 factor shall be adjusted to an amount that
13 is equal to the product obtained by multi-
14 plying—

15 (I) the methane fee factor for the
16 preceding calendar year; and

17 (II) the percentage obtained by
18 adding—

19 (aa) 102 percent; and

20 (bb) the percentage by which
21 the Consumer Price Index for the
22 calendar year exceeds the Con-
23 sumer Price Index for the pre-
24 ceding calendar year.

1 (3) TIMING.—Not later than July 1 of each
2 year, the Secretary shall calculate and levy the fee
3 under paragraph (1) for the preceding calendar year.

4 (4) NATIONAL COASTAL RESILIENCE FUND.—
5 Notwithstanding section 10(b)(2) of the National
6 Fish and Wildlife Foundation Establishment Act (16
7 U.S.C. 3709(b)(2)), the Secretary shall, on an an-
8 nual basis, transfer an amount equal to the amounts
9 collected under the fee under paragraph (1) to the
10 National Fish and Wildlife Foundation to provide
11 grants through the National Coastal Resilience
12 Fund of the National Fish and Wildlife Foundation
13 (or a successor program).

14 **SEC. 5. SAVINGS.**

15 Nothing in this Act—

16 (1) affects the ability to regulate methane emis-
17 sions under any other provision of law; or

18 (2) preempts a State from regulating or assess-
19 ing a fee on methane emissions from oil and gas fa-
20 cilities.