

118TH CONGRESS  
2D SESSION

# S. 5047

To require carbon scoring by the Congressional Budget Office.

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IN THE SENATE OF THE UNITED STATES

SEPTEMBER 12, 2024

Mr. WHITEHOUSE (for himself, Mr. VAN HOLLEN, Mr. WELCH, Mr. PADILLA, Ms. WARREN, Mr. HEINRICH, Mr. SCHATZ, and Mr. MARKEY) introduced the following bill; which was read twice and referred to the Committee on the Budget

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## A BILL

To require carbon scoring by the Congressional Budget  
Office.

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 “Carbon Scoring Act  
5       of 2024”.

6       **SEC. 2. FINDINGS.**

7       Congress finds the following:

8           (1) The function of the Congressional Budget  
9       Office is to provide the Committee on the Budget of  
10       the Senate and the Committee on the Budget of the

1 House of Representatives with information on budget  
2 authority, outlays, revenues, and changing conditions  
3 that might impact the Federal budget and the legislative activities of Congress.

5 (2) Unforeseen economic shocks, such as the  
6 2008 mortgage crisis and the COVID–19 pandemic,  
7 have contributed greatly to the public debt of the  
8 Federal Government.

9 (3) Climate change poses systemic risks to the  
10 financial system of the United States.

11 (4) The increased severity and frequency of extreme weather events caused by climate change costs  
12 the United States economy an estimated  
13 \$150,000,000,000 every year, and the cost is growing.  
14

16 (5) Predicted economic shocks from climate  
17 change could cost the economy of the United States  
18 \$14,500,000,000,000 over the next 50 years, reduce  
19 the gross domestic product of the United States by  
20 10 percent by the end of the century, and add trillions  
21 of dollars to the public debt of the Federal  
22 Government.

23 (6) Current damages associated with climate  
24 change are straining the Federal budget and strain-

1       ing insurance and home mortgage markets from  
2       California to Florida.

3                 (7) The exacerbation of extreme weather,  
4       drought, and warming is undermining agricultural  
5       yields, the durability of infrastructure, and supply  
6       chain reliability, all of which contribute to rising  
7       consumer prices.

8                 (8) Policies that limit greenhouse gas emissions  
9       could offer long-term savings for the Federal budget.

10 **SEC. 3. GREENHOUSE GAS EMISSIONS MODELING CAPAC-  
11       ITY AND REPORTING.**

12         (a) IN GENERAL.—Section 202 of the Congressional  
13       Budget Act of 1974 (2 U.S.C. 602) is amended by adding  
14       at the end the following:

15                 “(h) GREENHOUSE GAS EMISSIONS MODELING.—

16                 “(1) DEFINITIONS.—In this subsection:

17                         “(A) DIRECTOR.—The term ‘Director’  
18       means the Director of the Congressional Budg-  
19       et Office.

20                         “(B) GREENHOUSE GAS.—The term  
21       ‘greenhouse gas’ has the meaning given that  
22       term in section 211(o)(1) of the Clean Air Act  
23       (42 U.S.C. 7545(o)(1)).

24                 “(2) ESTABLISHING AN EMISSIONS MODELING  
25       CAPACITY.—

1                 “(A) IN GENERAL.—The Director shall  
2                 prepare and maintain economic models that can  
3                 provide estimates of the effect of various poli-  
4                 cies on greenhouse gas emissions—

5                     “(i) for the power sector, by not later  
6                 than 1 year after the date of enactment of

7                     the Carbon Scoring Act of 2024;

8                     “(ii) for transportation, by not later  
9                 than January 1, 2026;

10                     “(iii) for industry, by not later than  
11                 January 1, 2028;

12                     “(iv) for buildings, by not later than  
13                 January 1, 2030; and

14                     “(v) for all other emitting sectors, as  
15                 soon as is practicable.

16                 “(B) ANNUAL REPORTS.—Not later than  
17                 December 31, 2025, and December 31 of each  
18                 year thereafter, the Director shall publish a re-  
19                 port that—

20                     “(i) provides an overview of the green-  
21                 house gas emissions modeling capabilities  
22                 of the Congressional Budget Office;

23                     “(ii) discusses any updates made to  
24                 models related to the greenhouse gas emis-

1                   sions estimating function of the Congressional  
2                   Budget Office; and

3                   “(iii) discusses how any updates made  
4                   to models affect the emissions baseline re-  
5                   quired under paragraph (3).

6                   “(C) ONGOING IMPROVEMENT.—The Di-  
7                   rector shall work to continually improve the ac-  
8                   curacy and granularity of the economic models  
9                   described in subparagraph (A).

10                  “(D) EXISTING FEDERAL RESOURCES.—In  
11                  preparing economic models under this para-  
12                  graph, the Director may, where applicable, con-  
13                  sider using modeling resources developed by the  
14                  Federal Government, such as the National En-  
15                  ergy Modeling System published by the Energy  
16                  Information Administration.

17                  “(3) EMISSIONS BASELINE.—Not later than  
18                  February 15, 2025, and February 15 of each year  
19                  thereafter, the Director shall develop and publish a  
20                  detailed estimate of greenhouse gas emissions in the  
21                  United States during the year during which the re-  
22                  port is issued and each fiscal year thereafter  
23                  through the last fiscal year covered by the most re-  
24                  cent baseline prepared in accordance with section  
25                  257, based on laws enacted through the date of the

1 report and taking into account projected economic  
2 factors.

3 “(4) PRIORITIZATION OF GREENHOUSE GAS-  
4 SES.—For purposes of economic models, emissions  
5 baselines, and greenhouse gas emissions estimates  
6 under paragraphs (2) and (3) of this subsection and  
7 section 402A, the Director—

8       “(A) shall make best efforts to consider all  
9           greenhouse gas emissions for any economic  
10          model, emissions baseline, or greenhouse gas  
11          emissions estimate prepared on or after the  
12          date of enactment of the Carbon Scoring Act of  
13          2024; and

14       “(B) shall consider—

15           “(i) carbon dioxide for any economic  
16          model, emissions baseline, or greenhouse  
17          gas emissions estimate prepared on or  
18          after the date of enactment of the Carbon  
19          Scoring Act of 2024;

20           “(ii) methane for any economic model,  
21          emissions baseline, or greenhouse gas emis-  
22          sions estimate prepared on or after Janu-  
23          ary 1, 2027; and

24           “(iii) all greenhouse gas emissions for  
25          any economic model, emissions baseline, or

1                   greenhouse gas emissions estimate pre-  
2                   pared on or after January 1, 2030.”.

3                 (b) EMISSIONS ESTIMATES BY CONGRESSIONAL  
4 BUDGET OFFICE.—

5                 (1) IN GENERAL.—Title IV of the Congres-  
6 sional Budget Act of 1974 (2 U.S.C. 651 et seq.) is  
7 amended by inserting after section 402 the fol-  
8 lowing:

9                 **“SEC. 402A. EMISSIONS ESTIMATES BY CONGRESSIONAL  
10 BUDGET OFFICE.**

11                 “(a) DEFINITIONS.—In this section:

12                 “(1) DIRECTOR.—The term ‘Director’ means  
13 the Director of the Congressional Budget Office.

14                 “(2) EMISSIONS BASELINE.—The term ‘emis-  
15 sions baseline’ means an estimate of greenhouse gas  
16 emissions prepared under section 202(h)(3).

17                 “(3) GREENHOUSE GAS.—The term ‘greenhouse  
18 gas’ has the meaning given that term in section  
19 211(o)(1) of the Clean Air Act (42 U.S.C.  
20 7545(o)(1)).

21                 “(4) GREENHOUSE GAS-RELATED PROVISION.—  
22 The term ‘greenhouse gas-related provision’ means a  
23 provision that meets any of the following conditions:

24                 “(A) Creates, raises, or lowers a tax or tax  
25 credit on any aspect of fuel production or

1           usage, power production or usage, the emission  
2           or capture of a greenhouse gas, or a technology  
3           or a direct alternative to a technology that uses  
4           fuel.

5           “(B) Otherwise assigns a dollar value to  
6           the emission of a greenhouse gas or to the sale  
7           or use of a product whose combustion or leak-  
8           age leads to an emission of a greenhouse gas.

9           “(C) Sets a performance standard or cap  
10          based on—

11           “(i) the emission of a greenhouse gas;  
12          or

13           “(ii) the use of a product—

14           “(I) that directly emits green-  
15          house gases; or

16           “(II) whose combustion, leakage,  
17          or degradation leads to an emission of  
18          a greenhouse gas.

19           “(5) RELEVANT COMMITTEES.—The term ‘re-  
20          levant committees’ means the Committee on the  
21          Budget of the Senate, the Committee on the Budget  
22          of the House of Representatives, the committee of  
23          the Senate with jurisdiction of the relevant bill or  
24          joint resolution, and the committee of the House of

1 Representatives with primary jurisdiction of the rel-  
2 evant bill or joint resolution.

3       “(6) SIGNIFICANT BUDGETARY EFFECT.—The  
4 term ‘significant budgetary effect’, with respect to a  
5 bill or joint resolution, means that the Director esti-  
6 mates the bill or joint resolution will increase or de-  
7 crease annual outlays or revenues by not less than  
8 \$500,000,000 in any fiscal year covered by the most  
9 recent baseline under section 257.

10     “(7) SOCIAL COST OF A GREENHOUSE GAS.—  
11 The term ‘social cost of a greenhouse gas’ means the  
12 monetary value of the net harm to society from  
13 emitting a metric ton of a greenhouse gas into the  
14 atmosphere in a given year, as determined by the  
15 Director based on the best and most recent science  
16 that, for carbon dioxide, methane, and nitrous oxide,  
17 is not less than the amounts listed for those gases  
18 using a near-term Ramsey discount rate of 2 percent  
19 in the report of the Environmental Protection Agen-  
20 cy entitled ‘Report on the Social Cost of Greenhouse  
21 Gases: Estimates Incorporating Recent Scientific  
22 Advances’, dated November 2023.

23     “(b) ESTIMATES.—

24       “(1) IN GENERAL.—To the extent practicable,  
25 the Director shall prepare and submit to the rel-

1 evant committees a greenhouse gas emissions esti-  
2 mate with respect to any bill or joint resolution or-  
3 dered reported by a committee of the Senate or the  
4 House of Representatives—

5 “(A) that—

6           “(i) would have a significant budg-  
7 etary effect; and

8           “(ii) contains 1 or more greenhouse  
9 gas-related provisions; or

10          “(B) for which the Director previously esti-  
11 mated the effects of the greenhouse gas-related  
12 provisions of the bill or joint resolution.

13          “(2) CONTENTS.—A greenhouse gas emissions  
14 estimate under paragraph (1) with respect to a bill  
15 or joint resolution shall—

16           “(A) provide an estimate of the effects of  
17 each greenhouse gas-related provision in the bill  
18 or joint resolution on greenhouse gas emissions  
19 with respect to the year during which the green-  
20 house gas-related provision takes effect and  
21 each fiscal year covered by the most recent  
22 emissions baseline, including an estimate of the  
23 change in greenhouse gas emissions relative to  
24 the most recent emissions baseline;

1                 “(B) provide an estimate of the climate-re-  
2                 lated costs or savings of each greenhouse gas-  
3                 related provision in the bill or joint resolution,  
4                 which shall be calculated as the sum of the  
5                 products obtained by multiplying the change in  
6                 the emission of each greenhouse gas relative to  
7                 the most recent emissions baseline, as described  
8                 in subparagraph (A), by the social cost of the  
9                 greenhouse gas during the year of the change;

10                 “(C) include commentary on the expected  
11                 effects of the greenhouse gas-related provisions  
12                 on greenhouse gas emissions after the end of  
13                 the period described in subparagraph (A); and

14                 “(D) include commentary, to the extent  
15                 practicable, on the effects of the greenhouse  
16                 gas-related provisions on global greenhouse gas  
17                 emissions.

18                 “(3) INCLUSION IN REPORT.—If the Director  
19                 timely submits to a committee of the Senate or the  
20                 House of Representatives estimates and commentary  
21                 under this subsection with respect to a bill or joint  
22                 resolution containing 1 or more greenhouse gas-re-  
23                 lated provisions, the committee shall include the esti-  
24                 mates and commentary in the report accompanying

1       the bill or joint resolution, if the committee submits  
2       such a report.

3           “(4) ESTIMATES REGARDING OTHER LEGISLA-  
4       TIVE PROVISIONS.—To the extent practicable, upon  
5       a request by the Chairman of the Committee on the  
6       Budget of the Senate or the Committee on the  
7       Budget of the House of Representatives, the Direc-  
8       tor shall publish a greenhouse gas emissions esti-  
9       mate in accordance with this subsection with respect  
10      to any legislative provision.

11          “(5) ESTIMATES WHILE DEVELOPING MOD-  
12       ELS.—If the Director determines that a reported bill  
13       or joint resolution for which a report is required  
14       under paragraph (1) contains 1 or more greenhouse  
15       gas-related provisions that primarily affect the  
16       greenhouse gas emissions of a sector for which the  
17       Director has not yet developed an economic model  
18       under section 202(h)(2), the Director shall—

19           “(A) omit those greenhouse gas-related  
20       provisions from the greenhouse gas emissions  
21       estimate of the Director;

22           “(B) indicate in the greenhouse gas emis-  
23       sions estimate that the Director made that de-  
24       termination; and

1               “(C) include in the greenhouse gas emis-  
2               sions estimate the reasons for that determina-  
3               tion.

4               “(c) MANDATORY APPROPRIATION.—In addition to  
5               amounts otherwise made available to the Director, there  
6               are appropriated for each of fiscal years 2025 through  
7               2034 to the Director, out of any money in the Treasury  
8               not otherwise appropriated, \$20,000,000 to carry out this  
9               section and section 202(h). Amounts appropriated under  
10              this subsection shall remain available until expended.”.

11              (2) CONFORMING AMENDMENT.—The table of  
12              contents in section 1(b) of the Congressional Budget  
13              and Impoundment Control Act of 1974 is amended  
14              by inserting after the item relating to section 402  
15              the following:

“See. 402A. Emissions estimates by Congressional Budget Office.”.

