

115TH CONGRESS  
2D SESSION

# S. 3481

To amend the Securities Exchange Act of 1934 to require issuers to disclose certain activities relating to climate change, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

SEPTEMBER 24, 2018

Ms. WARREN (for herself, Mr. WHITEHOUSE, Mr. SCHATZ, Mr. MARKEY, Mr. BOOKER, Mr. MERKLEY, Ms. HARRIS, and Mrs. GILLIBRAND) introduced the following bill; which was read twice and referred to the Committee on Banking, Housing, and Urban Affairs

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## A BILL

To amend the Securities Exchange Act of 1934 to require issuers to disclose certain activities relating to climate change, 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 “Climate Risk Disclo-  
5       sure Act of 2018”.

6       **SEC. 2. DEFINITIONS.**

7       In this Act—

8               (1) the term “appropriate climate principals”  
9       means—

1 (A) the Administrator of the Environ-  
2 mental Protection Agency;

3 (B) the Secretary of Energy;

4 (C) the Administrator of the National Oce-  
5 anic and Atmospheric Administration;

6 (D) the Director of the Office of Manage-  
7 ment and Budget; and

8 (E) the head of any other Federal agency  
9 determined appropriate by the Commission;

10 (2) the term “appropriate congressional com-  
11 mittees” means—

12 (A) the Committee on Banking, Housing,  
13 and Urban Affairs of the Senate; and

14 (B) the Committee on Financial Services  
15 of the House of Representatives;

16 (3) the term “climate change” means a change  
17 of climate that is—

18 (A) attributed directly or indirectly to  
19 human activity that alters the composition of  
20 the global atmosphere; and

21 (B) in addition to natural climate varia-  
22 bility observed over comparable time periods;

23 (4) the term “Commission” means the Securi-  
24 ties and Exchange Commission; and

1           (5) the term “covered issuer” has the meaning  
2           given the term in subsection (s)(1) of section 13 of  
3           the Securities Exchange Act of 1934 (15 U.S.C.  
4           78m), as added by section 4(a).

5 **SEC. 3. SENSE OF CONGRESS.**

6           It is the sense of Congress that—

7           (1) continued inaction in addressing climate  
8           change poses a significant threat to the growth and  
9           stability of the economy of the United States;

10          (2) many sectors of the economy of the United  
11          States are exposed to multiple channels of climate-  
12          related risk, which may include exposure to—

13                (A) the physical impacts of climate change,  
14                including the rise of the average global tem-  
15                perature, sea-level rise, desertification, ocean  
16                acidification, flooding, drought, and wildfires;

17                (B) the economic disruptions and security  
18                threats that result from the physical impacts  
19                described in subparagraph (A); and

20                (C) the transition impacts that result as  
21                the global economy transitions to a clean en-  
22                ergy, low-emissions economy, including financial  
23                impacts as fossil fuel assets become stranded as  
24                the global community acts to prevent the worst  
25                impacts of climate change by keeping the aver-

1           age rise in global temperature well below 2 de-  
2           grees Celsius above pre-industrial levels;

3           (3) assessing the potential impact of climate-re-  
4           lated risks on national and international financial  
5           systems is an urgent concern;

6           (4) companies have a duty to disclose financial  
7           risks that climate change presents;

8           (5) the Commission has a duty to promote a  
9           risk-informed securities market that is worthy of the  
10          trust of the public as families invest for their fu-  
11          tures;

12          (6) including standardized climate change risk  
13          disclosure that is useful for decision makers in an-  
14          nual reports to the Commission will increase trans-  
15          parency with respect to risk accumulation and expo-  
16          sure in financial markets;

17          (7) requiring companies to disclose climate-re-  
18          lated risk exposure and risk management strategies  
19          will encourage a smooth transition to a clean energy,  
20          low-emissions economy and guide capital allocation  
21          to mitigate, and adapt to, the effects of climate  
22          change; and

23          (8) a critical component in fighting climate  
24          change is a transparent accounting of the risks that

1 climate change presents and the implications of con-  
2 tinued inaction with respect to climate change.

3 **SEC. 4. DISCLOSURE.**

4 (a) IN GENERAL.—Section 13 of the Securities Ex-  
5 change Act of 1934 (15 U.S.C. 78m) is amended by add-  
6 ing at the end the following:

7 “(s) DISCLOSURES RELATING TO CLIMATE  
8 CHANGE.—

9 “(1) DEFINITIONS.—In this subsection—

10 “(A) the term ‘2 degrees or lower scenario’  
11 means a widely recognized, publicly available  
12 analysis scenario in which human interventions  
13 to combat global climate change are likely to  
14 prevent the global average temperature from  
15 reaching 2 degrees Celsius above pre-industrial  
16 levels;

17 “(B) the terms ‘appropriate climate prin-  
18 cipals’ and ‘climate change’ have the meanings  
19 given those terms in section 2 of the Climate  
20 Risk Disclosure Act of 2018;

21 “(C) the term ‘baseline scenario’ means a  
22 widely recognized analysis scenario in which lev-  
23 els of greenhouse gas emissions, as of the date  
24 on which the analysis is performed, continue to  
25 grow, resulting in—

1           “(i) an increase in the global average  
2           temperature of 2 degrees Celsius or more  
3           above pre-industrial levels; and

4           “(ii) the realization of physical risks  
5           relating to global climate change;

6           “(D) the term ‘carbon dioxide equivalent’  
7           means the quantity of a greenhouse gas that  
8           has a global warming potential equivalent to 1  
9           metric ton of carbon dioxide, as determined  
10          under table A–1 of subpart A of part 98 of title  
11          40, Code of Federal Regulations, as in effect on  
12          the date of enactment of this subsection;

13          “(E) the term ‘commercial development of  
14          fossil fuels’ includes—

15                 “(i) exploration, extraction, proc-  
16                 essing, exporting, transporting, and any  
17                 other significant action with respect to oil,  
18                 natural gas, or coal; and

19                 “(ii) acquiring a license for any activ-  
20                 ity described in clause (i);

21          “(F) the term ‘covered issuer’ means an  
22          issuer that is required to file an annual report  
23          under subsection (a) or section 15(d);

1           “(G) the term ‘direct and indirect green-  
2 house gas emissions’ includes, with respect to a  
3 covered issuer—

4           “(i) all direct greenhouse gas emis-  
5 sions released by the covered issuer;

6           “(ii) all indirect greenhouse gas emis-  
7 sions with respect to electricity, heat, or  
8 steam purchased by the covered issuer;

9           “(iii) significant indirect emissions,  
10 other than the emissions described in  
11 clause (ii), that occur in the value chain of  
12 the covered issuer; and

13           “(iv) all indirect greenhouse gas emis-  
14 sions that are attributable to assets owned  
15 or managed, including assets that are par-  
16 tially owned or managed, by the covered  
17 issuer;

18           “(H) the term ‘fossil fuel reserves’ means  
19 all producing assets, proved reserves, unproved  
20 resources, and any other ownership stake in  
21 sources of fossil fuels;

22           “(I) the term ‘greenhouse gas’—

23           “(i) means carbon dioxide, hydroflu-  
24 rocarbons, methane, nitrous oxide, perflu-  
25 rocarbons, and sulfur hexafluoride; and

1           “(ii) includes any other anthropogeni-  
2           cally emitted gas or particulate that the  
3           Administrator of the Environmental Pro-  
4           tection Agency determines, after notice and  
5           comment, to contribute to global warming;

6           “(J) the term ‘greenhouse gas emissions’  
7           means the emissions of greenhouse gas, ex-  
8           pressed in terms of metric tons of carbon diox-  
9           ide equivalent;

10           “(K) the term ‘physical risks’ means finan-  
11           cial risks to long-lived fixed assets, locations,  
12           operations, or value chains that result from ex-  
13           posure to physical climate-related effects, in-  
14           cluding—

15           “(i) increased average global tempera-  
16           tures;

17           “(ii) increased severity and frequency  
18           of extreme weather events;

19           “(iii) increased flooding;

20           “(iv) sea level rise;

21           “(v) ocean acidification;

22           “(vi) increased frequency of wildfires;

23           “(vii) decreased arability of farmland;

24           and



1                   “(viii) decreased availability of fresh  
2                   water;

3                   “(L) the term ‘social cost of carbon’ means  
4                   the monetized present value, discounted at a 3  
5                   percent or lower discount rate, in dollars, per  
6                   metric ton of carbon dioxide (or carbon dioxide  
7                   equivalent), of the net global costs over 300  
8                   years caused by the emission of carbon dioxide  
9                   (or carbon dioxide equivalent, as applicable)  
10                  that result from—

11                   “(i) changes in net agricultural pro-  
12                   ductivity;

13                   “(ii) decreases in capital and labor  
14                   productivity;

15                   “(iii) effects on human health;

16                   “(iv) property damage from increased  
17                   sea level rise, flooding, wildfires, and fre-  
18                   quency and severity of extreme weather  
19                   events;

20                   “(v) the value of ecosystem services;  
21                   and

22                   “(vi) any other type of economic, so-  
23                   cial, political, or natural disruption;

24                   “(M) the term ‘transition risks’ means fi-  
25                   nancial risks that are attributable to climate

1 change mitigation and adaptation, including ef-  
2 forts to reduce greenhouse gas emissions and  
3 strengthen resilience to the impacts of climate  
4 change, including—

5 “(i) costs relating to—

6 “(I) international treaties and  
7 agreements;

8 “(II) Federal, State, and local  
9 policy;

10 “(III) new technologies;

11 “(IV) changing markets;

12 “(V) reputational impacts rel-  
13 evant to changing consumer behavior;  
14 and

15 “(VI) litigation; and

16 “(ii) assets that may lose value or be-  
17 come stranded due to any of the costs de-  
18 scribed in subclauses (I) through (VI) of  
19 clause (i); and

20 “(N) the term ‘value chain’—

21 “(i) means the total lifecycle of a  
22 product or service, both before and after  
23 production of the product or service, as ap-  
24 plicable; and

1           “(ii) may include the sourcing of ma-  
2           terials, production, and disposal with re-  
3           spect to the product or service described in  
4           clause (i).

5           “(2) FINDINGS.—Congress finds that—

6           “(A) long-term financial and economic  
7           risks and opportunities relating to climate  
8           change, and the national and global reduction  
9           of greenhouse gas emissions, constitute infor-  
10          mation that issuers—

11           “(i) may reasonably expect to affect  
12           shareholder decisionmaking; and

13           “(ii) should regularly identify, evalu-  
14           ate, and disclose; and

15           “(B) the disclosure of information de-  
16           scribed in subparagraph (A) should—

17           “(i) identify, and evaluate the poten-  
18           tial financial impact of, physical risks and  
19           transition risks posed by climate change;

20           “(ii) allow for intra- and cross-indus-  
21           try comparison, to the extent practicable,  
22           of climate-related risk exposure through  
23           the inclusion of standardized industry-spe-  
24           cific and sector-specific disclosure metrics,  
25           as identified by the Commission, in con-

1 sultation with the appropriate climate prin-  
2 cipals;

3 “(iii) allow for tracking of perform-  
4 ance over time with respect to mitigating  
5 climate risk exposure; and

6 “(iv) incorporate a price on green-  
7 house gas emissions in financial analyses  
8 that reflects, at minimum, the social cost  
9 of carbon that is attributable to issuers.

10 “(3) DISCLOSURE.—Each covered issuer, in any  
11 annual report filed by the covered issuer under sub-  
12 section (a) or section 15(d), shall, in accordance  
13 with the requirements established under paragraphs  
14 (4) and (5), include in each such report information  
15 regarding—

16 “(A) the identification of, the evaluation of  
17 potential financial impacts of, and any risk-  
18 management strategies relating to—

19 “(i) physical risks posed to the cov-  
20 ered issuer by climate change; and

21 “(ii) transition risks posed to the cov-  
22 ered issuer by climate change; and

23 “(B) a description of any established cor-  
24 porate governance processes and structures to

1 identify, assess, and manage climate-related  
2 risks.

3 “(4) REQUIREMENTS.—

4 “(A) IN GENERAL.—The Commission, in  
5 consultation with the appropriate climate prin-  
6 cipals, and consistent with subparagraph (B),  
7 shall issue final rules with respect to the infor-  
8 mation that a covered issuer is required to dis-  
9 close under paragraph (3).

10 “(B) CONTENTS.—In issuing the final  
11 rules required under subparagraph (A), the  
12 Commission shall—

13 “(i) establish, in consultation with the  
14 appropriate climate principals, climate-re-  
15 lated risk disclosure metrics and guidance,  
16 which shall—

17 “(I) be, to the extent practicable,  
18 specialized for industries within spe-  
19 cific sectors of the economy, which  
20 shall include—

21 “(aa) the sectors of finance,  
22 insurance, transportation, electric  
23 power, and non-renewable energy;  
24 and

1 “(bb) any other sector deter-  
2 mined appropriate by the Com-  
3 mission, in consultation with the  
4 appropriate climate principals;

5 “(II) include reporting standards  
6 for estimating and disclosing direct  
7 and indirect greenhouse gas emissions  
8 by a covered issuer, and any affiliates  
9 of the covered issuer, which shall—

10 “(aa) separate, to the extent  
11 practicable, total emissions of  
12 each specified greenhouse gas by  
13 the covered issuer; and

14 “(bb) include greenhouse  
15 gas emissions by the covered  
16 issuer during the period covered  
17 by the disclosure;

18 “(III) include reporting stand-  
19 ards and metrics for disclosing, with  
20 respect to a covered issuer—

21 “(aa) the total amount of  
22 fossil fuel-related assets owned or  
23 managed by the covered issuer;  
24 and

1           “(bb) the percentage of fos-  
2           sil fuel-related assets as a per-  
3           centage of total assets owned or  
4           managed by the covered issuer;

5           “(IV) establish a minimum social  
6           cost of carbon, which—

7                   “(aa) shall be considered a  
8                   minimum price with respect to  
9                   costs associated with carbon  
10                  emissions; and

11                  “(bb) a covered issuer shall  
12                  use in preparing climate-related  
13                  disclosure statements;

14           “(V) not preclude a covered  
15           issuer from using and disclosing, as  
16           compared with the price established  
17           under subclause (IV)(aa), a higher  
18           price of greenhouse gas emissions;

19           “(VI) specify requirements for,  
20           and the disclosure of, input param-  
21           eters, assumptions, and analytical  
22           choices to be used in climate scenario  
23           analyses required under clause (ii)(I),  
24           including—

1                   “(aa) present value discount  
2 rates;

3                   “(bb) time frames to con-  
4 sider, which shall be not shorter  
5 than 30 years; and

6                   “(cc) minimum pricing of  
7 greenhouse gas emissions, as es-  
8 tablished under subclause  
9 (IV)(aa) and subject to subclause  
10 (V); and

11                   “(VII) include, after consultation  
12 with the Secretary of Energy, the Sec-  
13 retary of the Interior, and the Sec-  
14 retary of Transportation, documenta-  
15 tion standards and guidance with re-  
16 spect to the information required  
17 under clause (ii)(III);

18                   “(ii) require that a covered issuer,  
19 with respect to the disclosure required  
20 under paragraph (3)—

21                   “(I) incorporate into the disclo-  
22 sure—

23                   “(aa) quantitative analysis  
24 to support any qualitative state-  
25 ment made by the covered issuer;



1 “(bb) the metrics and guid-  
2 ance established under clause (i);

3 “(cc) industry-specific met-  
4 rics that comply with the require-  
5 ments under clause (i)(I);

6 “(dd) a discussion of the  
7 short-, medium-, and long-term  
8 resilience of any risk manage-  
9 ment strategy, and the evolution  
10 of applicable risk metrics, of the  
11 covered issuer under each sce-  
12 nario described in subclause (II);  
13 and

14 “(ee) the total social cost of  
15 carbon emissions that are attrib-  
16 utable to the direct and indirect  
17 greenhouse gas emissions of the  
18 covered issuer;

19 “(II) consider, when preparing  
20 any qualitative or quantitative risk  
21 analysis statement contained in the  
22 disclosure—

23 “(aa) a baseline scenario  
24 that includes physical impacts of  
25 climate change;

1 “(bb) a 2 degrees or lower  
2 scenario; and

3 “(cc) any additional climate  
4 analysis scenario considered ap-  
5 propriate by the Commission, in  
6 consultation with the appropriate  
7 climate principals;

8 “(III) if the covered issuer en-  
9 gages in the commercial development  
10 of fossil fuels, include in the disclo-  
11 sure—

12 “(aa) an estimate of the  
13 amount of direct and indirect  
14 greenhouse gas emissions of the  
15 covered issuer that are attrib-  
16 utable to—

17 “(AA) combustion;

18 “(BB) flared hydro-  
19 carbons;

20 “(CC) process emis-  
21 sions;

22 “(DD) directly vented  
23 emissions;

24 “(EE) fugitive emis-  
25 sions or leaks; and

1                   “(FF) land use  
2 changes;

3                   “(bb) a description of—

4                   “(AA) the sensitivity of  
5 fossil fuel reserve levels to  
6 future price projection sce-  
7 narios that incorporate the  
8 social cost of carbon into hy-  
9 drocarbon pricing;

10                   “(BB) the percentage  
11 of the reserves of the cov-  
12 ered issuer that will be de-  
13 veloped under a 2 degrees or  
14 lower scenario, as well as a  
15 forecast for the development  
16 prospects of each reserve  
17 under a 2 degrees or lower  
18 scenario;

19                   “(CC) the potential  
20 amount of direct and indi-  
21 rect greenhouse gas emis-  
22 sions that are embedded in  
23 proved and probable hydro-  
24 carbon reserves, with each  
25 such calculation presented

1 as a total and in subdivided  
2 categories by the type of re-  
3 serve;

4 “(DD) the methodology  
5 of the covered issuer for de-  
6 tecting and mitigating fugi-  
7 tive methane emissions,  
8 which shall include the fre-  
9 quency with which applicable  
10 assets of the covered issuer  
11 are observed for methane  
12 leaks, the processes and  
13 technology that the covered  
14 issuer uses to detect meth-  
15 ane leaks, the percentage of  
16 assets of the covered issuer  
17 that the covered issuer in-  
18 spects under that method-  
19 ology, and quantitative and  
20 time-bound reduction goals  
21 of the issuer with respect to  
22 methane leaks;

23 “(EE) the amount of  
24 water that the covered issuer  
25 withdraws from freshwater

1 sources for use in operations  
2 of the covered issuer; and  
3 “(FF) the percentage  
4 of the water described in  
5 subitem (EE) that comes  
6 from regions of water stress  
7 or that face wastewater  
8 management challenges; and  
9 “(cc) any other information  
10 that the Commission, in consulta-  
11 tion with the appropriate climate  
12 principals and the Secretary of  
13 Energy, the Secretary of the In-  
14 terior, and the Secretary of  
15 Transportation, determines is—  
16 “(AA) necessary;  
17 “(BB) appropriate to  
18 safeguard the public inter-  
19 est; or  
20 “(CC) directed at en-  
21 suring that investors are in-  
22 formed in accordance with  
23 the findings described in  
24 paragraph (2)(B); and

1           “(iii) with respect to the disclosure re-  
2           quired under paragraph (3), require that  
3           the covered issuer include in the disclosure  
4           any other information, or use any climate-  
5           related or greenhouse gas emissions metric,  
6           that the Commission, in consultation with  
7           the appropriate climate principals, deter-  
8           mines is—

9                     “(I) necessary;

10                    “(II) appropriate to safeguard  
11                   the public interest; or

12                    “(III) directed at ensuring that  
13                   investors are informed in accordance  
14                   with the findings described in para-  
15                   graph (2)(B).

16           “(5) **FORMATTING.**—

17                    “(A) **IN GENERAL.**—Any information in-  
18                   cluded pursuant to the requirements of this  
19                   subsection by a covered issuer in an annual re-  
20                   port submitted under subsection (a) or section  
21                   15(d) shall be submitted in an interactive data  
22                   format.

23                    “(B) **ESTABLISHMENT BY COMMISSION.**—

24                   The Commission shall develop standards for the  
25                   interactive data format described in subpara-

1 graph (A), which shall include electronic tags  
2 for information that the Commission determines  
3 is—

4 “(i) necessary;

5 “(ii) appropriate to safeguard the  
6 public interest; or

7 “(iii) directed at ensuring that inves-  
8 tors are informed in accordance with the  
9 findings described in paragraph (2)(B).

10 “(6) PUBLIC AVAILABILITY.—The Commission  
11 shall, to the maximum extent practicable, make a  
12 compilation of the information submitted by covered  
13 issuers under this subsection publicly available on  
14 the website of the Commission.

15 “(7) RULE OF CONSTRUCTION.—Nothing in  
16 paragraph (3) or (4) may be construed as precluding  
17 a covered issuer from including, in an annual report  
18 submitted under subsection (a) or section 15(d), any  
19 information not explicitly referenced in those para-  
20 graphs.”.

21 (b) REGULATIONS.—

22 (1) IN GENERAL.—Not later than 1 year after  
23 the date of enactment of this Act, the Commission,  
24 in consultation with the appropriate climate prin-  
25 cipals, shall issue final rules to establish appropriate

1 documentation standards, metrics for calculations  
2 required, and guidance with respect to the disclosure  
3 requirements under subsection (s) of section 13 of  
4 the Securities Exchange Act of 1934 (15 U.S.C.  
5 78m), as added by subsection (a) of this section.

6 (2) PERIODIC UPDATES.—The Commission  
7 shall periodically update the rules issued under para-  
8 graph (1) to ensure that those rules further the pur-  
9 poses described in subsection (s)(2)(B) of section 13  
10 of the Securities Exchange Act of 1934 (15 U.S.C.  
11 78m), as added by subsection (a) of this section.

12 **SEC. 5. REPORTS.**

13 (a) SECURITIES AND EXCHANGE COMMISSION.—The  
14 Commission shall—

15 (1) conduct an annual assessment regarding the  
16 compliance of covered issuers with the requirements  
17 of subsection (s) of section 13 of the Securities Ex-  
18 change Act of 1934 (15 U.S.C. 78m), as added by  
19 section 4(a);

20 (2) submit to the appropriate congressional  
21 committees a report that contains the results of each  
22 assessment conducted under paragraph (1); and

23 (3) make each report submitted under para-  
24 graph (2) accessible to the public.



1 (b) GOVERNMENT ACCOUNTABILITY OFFICE.—The  
2 Comptroller General of the United States shall periodically  
3 evaluate, and report to the appropriate congressional com-  
4 mittees on, the effectiveness of the Commission in carrying  
5 out and enforcing subsection (s) of section 13 of the Secu-  
6 rities Exchange Act of 1934 (15 U.S.C. 78m), as added  
7 by section 4(a).

8 **SEC. 6. SEVERABILITY.**

9 If any provision of this Act, an amendment made by  
10 this Act, or the application of this Act (or an amendment  
11 made by this Act) to any person or circumstance is held  
12 to be invalid, that holding shall have no effect with respect  
13 to—

14 (1) the remainder of this Act; and

15 (2) the application of the provision or amend-  
16 ment, as applicable, to any other person or cir-  
17 cumstance.

18 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

19 There are authorized to be appropriated to the Com-  
20 mission such sums as may be necessary to carry out this  
21 Act.

○