

116TH CONGRESS
1ST SESSION

S. _____

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

IN THE SENATE OF THE UNITED STATES

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

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 Dislo-
5 sure Act of 2019”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act—

8 (1) the terms “appropriate climate principals”,
9 “climate change”, “covered issuer”, “physical risks”,
10 and “transition risks” have the meanings given

1 those terms in subsection (s) of section 13 of the Se-
2 curities Exchange Act of 1934 (15 U.S.C. 78m), as
3 added by section 5;

4 (2) the term “appropriate congressional com-
5 mittees” means—

6 (A) the Committee on Banking, Housing,
7 and Urban Affairs of the Senate; and

8 (B) the Committee on Financial Services
9 of the House of Representatives;

10 (3) the term “baseline scenario” means a wide-
11 ly-recognized analysis scenario in which levels of
12 greenhouse gas emissions, as of the date on which
13 the analysis is performed, continue to grow, result-
14 ing in—

15 (A) an increase in the global average tem-
16 perature of 1.5 degrees Celsius or more above
17 pre-industrial levels; and

18 (B) the realization of physical risks relat-
19 ing to global climate change;

20 (4) the term “carbon dioxide equivalent” means
21 the number of metric tons of carbon dioxide emis-
22 sions with the same global warming potential as 1
23 metric ton of another greenhouse gas, as determined
24 under table A–1 of subpart A of part 98 of title 40,

1 Code of Federal Regulations, as in effect on the date
2 of enactment of this Act;

3 (5) the term “commercial development of fossil
4 fuels” includes—

5 (A) exploration, extraction, processing, ex-
6 porting, transporting, and any other significant
7 action with respect to oil, natural gas, coal, or
8 any byproduct thereof; and

9 (B) acquiring a license for any activity de-
10 scribed in subparagraph (A);

11 (6) the term “Commission” means the Securi-
12 ties and Exchange Commission;

13 (7) the term “direct and indirect greenhouse
14 gas emissions” includes, with respect to a covered
15 issuer—

16 (A) all direct greenhouse gas emissions re-
17 leased by the covered issuer;

18 (B) all indirect greenhouse gas emissions
19 with respect to electricity, heat, or steam pur-
20 chased by the covered issuer;

21 (C) significant indirect emissions, other
22 than the emissions described in subparagraph
23 (B), that occur in the value chain of the covered
24 issuer; and

1 (D) all indirect greenhouse gas emissions
2 that are attributable to assets owned or man-
3 aged, including assets that are partially owned
4 or managed, by the covered issuer;

5 (8) the term “fossil fuel reserves” means all
6 producing assets, proved reserves, unproved re-
7 sources, and any other ownership stake in sources of
8 fossil fuels;

9 (9) the term “greenhouse gas”—

10 (A) means carbon dioxide,
11 hydrofluorocarbons, methane, nitrous oxide,
12 perfluorocarbons, sulfur hexafluoride, nitrogen
13 trifluoride, and chlorofluorocarbons; and

14 (B) includes any other anthropogenically-
15 emitted gas or particulate that the Adminis-
16 trator of the Environmental Protection Agency
17 determines, after notice and comment, to con-
18 tribute to climate change;

19 (10) the term “greenhouse gas emissions”
20 means the emissions of greenhouse gas, expressed in
21 terms of metric tons of carbon dioxide equivalent;

22 (11) the term “social cost of carbon” means the
23 monetized present value, discounted at a 3 percent
24 or lower discount rate, in dollars, per metric ton of
25 carbon dioxide (or carbon dioxide equivalent), of the

1 net global costs over 300 years caused by the emis-
2 sion of carbon dioxide (or carbon dioxide equivalent,
3 as applicable) that result from—

4 (A) changes in net agricultural produc-
5 tivity;

6 (B) decreases in capital and labor produc-
7 tivity;

8 (C) effects on human health;

9 (D) property damage from increased sea
10 level rise, flooding, wildfires, and frequency and
11 severity of extreme weather events;

12 (E) the value of ecosystem services; and

13 (F) any other type of economic, social, po-
14 litical, or natural disruption;

15 (12) the term “value chain”—

16 (A) means the total lifecycle of a product
17 or service, both before and after production of
18 the product or service, as applicable; and

19 (B) may include the sourcing of materials,
20 production, and disposal with respect to the
21 product or service described in subparagraph

22 (A);

23 (13) the term “well below 1.5 degrees scenario”
24 means a widely-recognized, publicly-available anal-
25 ysis scenario in which human interventions to com-

1 bat global climate change are likely to prevent the
2 global average temperature from reaching 1.5 de-
3 grees Celsius above pre-industrial levels; and

4 (14) the term “1.5 degree scenario” means a
5 widely recognized, publicly available analysis sce-
6 nario in which human interventions to combat global
7 climate change are likely to prevent the global aver-
8 age temperature from reaching 1.5 degrees Celsius
9 above pre-industrial levels.

10 **SEC. 3. SENSE OF CONGRESS.**

11 It is the sense of Congress that—

12 (1) climate change poses a significant and in-
13 creasing threat to the growth and stability of the
14 economy of the United States;

15 (2) many sectors of the economy of the United
16 States and many businesses in the United States are
17 exposed to multiple channels of climate-related risk,
18 which may include exposure to—

19 (A) the physical impacts of climate change,
20 including the rise of the average global tem-
21 perature, accelerating sea-level rise,
22 desertification, ocean acidification, intensifica-
23 tion of storms, increase in heavy precipitation,
24 more frequent and intense temperature ex-

1 tremes, more severe droughts, and longer wild-
2 fire seasons;

3 (B) the economic disruptions and security
4 threats that result from the physical impacts
5 described in subparagraph (A), including con-
6 flicts over scarce resources, conditions condu-
7 cive to violent extremism, the spread of infec-
8 tious diseases, and forced migration; and

9 (C) the transition impacts that result as
10 the global economy transitions to a clean and
11 renewable energy, low-emissions economy, in-
12 cluding financial impacts as fossil fuel assets
13 risk becoming stranded and it becomes uneco-
14 nomic for companies to develop fossil fuel assets
15 as policymakers act to limit the worst impacts
16 of climate change by keeping the rise in average
17 global temperature to 1.5 degrees Celsius above
18 pre-industrial levels;

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

22 (4) companies have a duty to disclose financial
23 risks that climate change presents to their investors,
24 lenders, and insurers;

1 (5) the Commission has a duty to promote a
2 risk-informed securities market that is worthy of the
3 trust of the public as families invest for their fu-
4 tures;

5 (6) investors, lenders, and insurers are increas-
6 ingly demanding climate risk information that is
7 consistent, comparable, reliable, and clear;

8 (7) including standardized, material climate
9 change risk and opportunity disclosure that is useful
10 for decision makers in annual reports to the Com-
11 mission will increase transparency with respect to
12 risk accumulation and exposure in financial markets;

13 (8) requiring companies to disclose climate-re-
14 lated risk exposure and risk management strategies
15 will encourage a smoother transition to a clean and
16 renewable energy, low-emissions economy and guide
17 capital allocation to mitigate, and adapt to, the ef-
18 fects of climate change and limit damages associated
19 with climate-related events and disasters; and

20 (9) a critical component in fighting climate
21 change is a transparent accounting of the risks that
22 climate change presents and the implications of con-
23 tinued inaction with respect to climate change.

24 **SEC. 4. FINDINGS.**

25 Congress finds that—

1 (1) short-, medium-, and long-term financial
2 and economic risks and opportunities relating to cli-
3 mate change, and the national and global reduction
4 of greenhouse gas emissions, constitute information
5 that issuers—

6 (A) may reasonably expect to affect share-
7 holder decision making; and

8 (B) should regularly identify, evaluate, and
9 disclose; and

10 (2) the disclosure of information described in
11 paragraph (1) should—

12 (A) identify, and evaluate—

13 (i) material physical and transition
14 risks posed by climate change; and

15 (ii) the potential financial impact of
16 risks described in clause (i);

17 (B) detail any implications that the risks
18 described in subparagraph (A)(i) have on cor-
19 porate strategy;

20 (C) detail any board-level oversight of ma-
21 terial climate-related risks and opportunities;

22 (D) allow for intra- and cross-industry
23 comparison, to the extent practicable, of cli-
24 mate-related risk exposure through the inclu-
25 sion of standardized industry-specific and sec-

1 tor-specific disclosure metrics, as identified by
2 the Commission, in consultation with the appro-
3 priate climate principals;

4 (E) allow for tracking of performance over
5 time with respect to mitigating climate risk ex-
6 posure; and

7 (F) incorporate a price on greenhouse gas
8 emissions in financial analyses that reflects, at
9 minimum, the social cost of carbon that is at-
10 tributable to issuers.

11 **SEC. 5. DISCLOSURES RELATING TO CLIMATE CHANGE.**

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

15 “(s) DISCLOSURES RELATING TO CLIMATE
16 CHANGE.—

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

18 “(A) the term ‘appropriate climate prin-
19 cipals’ means—

20 “(i) the Administrator of the Environ-
21 mental Protection Agency;

22 “(ii) the Secretary of Energy;

23 “(iii) the Administrator of the Na-
24 tional Oceanic and Atmospheric Adminis-
25 tration;

1 “(iv) the Director of the Office of
2 Management and Budget; and

3 “(v) the head of any other Federal
4 agency determined appropriate by the
5 Commission;

6 “(B) the term ‘climate change’ means a
7 change of climate that is—

8 “(i) attributed directly or indirectly to
9 human activity that alters the composition
10 of the global atmosphere; and

11 “(ii) in addition to natural climate
12 variability observed over comparable time
13 periods;

14 “(C) the term ‘covered issuer’ means an
15 issuer that is required to file an annual report
16 under subsection (a) or section 15(d);

17 “(D) the term ‘physical risks’ means finan-
18 cial risks to long-lived fixed assets, locations,
19 operations, or value chains that result from ex-
20 posure to physical climate-related effects, in-
21 cluding—

22 “(i) increased average global tempera-
23 tures and increased frequency of tempera-
24 ture extremes;

1 “(ii) increased severity and frequency
2 of extreme weather events;

3 “(iii) increased flooding;

4 “(iv) sea level rise;

5 “(v) ocean acidification;

6 “(vi) increased frequency of wildfires;

7 “(vii) decreased arability of farmland;

8 “(viii) decreased availability of fresh
9 water; and

10 “(ix) any other financial risks to long-
11 lived fixed assets, locations, operations, or
12 value chains determined appropriate by the
13 Commission, in consultation with appro-
14 priate climate principals;

15 “(E) the term ‘transition risks’ means fi-
16 nancial risks that are attributable to climate
17 change mitigation and adaptation, including ef-
18 forts to reduce greenhouse gas emissions and
19 strengthen resilience to the impacts of climate
20 change, including—

21 “(i) costs relating to—

22 “(I) international treaties and
23 agreements;

24 “(II) Federal, State, and local
25 policy;

1 “(III) new technologies;
2 “(IV) changing markets;
3 “(V) reputational impacts rel-
4 evant to changing consumer behavior;
5 and

6 “(VI) litigation; and

7 “(ii) assets that may lose value or be-
8 come stranded due to any of the costs de-
9 scribed in subclauses (I) through (VI) of
10 clause (i);

11 “(2) DISCLOSURE.—Each covered issuer, in any
12 annual report filed by the covered issuer under sub-
13 section (a) or section 15(d), shall, in accordance
14 with any rules issued by the Commission pursuant
15 to the Climate Risk Disclosure Act of 2019, include
16 in each such report information regarding—

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

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

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

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

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

3 “(C) a description of specific actions that
4 the covered issuer is taking to mitigate identi-
5 fied risks;

6 “(D) a description of the resilience of the
7 strategy of the covered issuer for addressing cli-
8 mate risks, taking into account different cli-
9 mate scenarios; and

10 “(E) a description of how climate risk is
11 incorporated into the overall risk management
12 strategy of the covered issuer.

13 “(3) **RULE OF CONSTRUCTION.**—Nothing in
14 paragraph (2) may be construed as precluding a cov-
15 ered issuer from including, in an annual report sub-
16 mitted under subsection (a) or section 15(d), any in-
17 formation not explicitly referenced in that para-
18 graph.”.

19 **SEC. 6. RULEMAKING.**

20 (a) **CLIMATE RISK DISCLOSURE RULES.**—Not later
21 than 2 years after the date of enactment of this Act, the
22 Commission, in consultation with the appropriate climate
23 principals, shall issue rules with respect to the information
24 that a covered issuer is required to disclose pursuant to
25 subsection (s) of section 13 of the Securities Exchange

1 Act of 1934 (15 U.S.C. 78m), as added by section 5,
2 which shall—

3 (1) establish, in consultation with the appro-
4 priate climate principals, climate-related risk disclo-
5 sure guidance, which shall—

6 (A) be, to the extent practicable, special-
7 ized for industries within specific sectors of the
8 economy, which shall include—

9 (i) the sectors of finance, insurance,
10 transportation, electric power, mining, and
11 non-renewable energy; and

12 (ii) any other sector determined ap-
13 propriate by the Commission, in consulta-
14 tion with the appropriate climate prin-
15 cipals;

16 (B) include reporting standards for esti-
17 mating and disclosing direct and indirect green-
18 house gas emissions by a covered issuer, and
19 any affiliates of the covered issuer, which
20 shall—

21 (i) separate, to the extent practicable,
22 the total emissions of each specified green-
23 house gas by the covered issuer; and

1 (ii) include greenhouse gas emissions
2 by the covered issuer during the period
3 covered by the disclosure;

4 (C) include reporting standards for dis-
5 closing, with respect to a covered issuer—

6 (i) the total amount of fossil fuel-re-
7 lated assets owned or managed by the cov-
8 ered issuer; and

9 (ii) the percentage of fossil fuel-re-
10 lated assets as a percentage of total assets
11 owned or managed by the covered issuer;

12 (D) establish a minimum social cost of car-
13 bon, which—

14 (i) shall be considered a minimum
15 price with respect to costs associated with
16 carbon emissions;

17 (ii) a covered issuer shall use in pre-
18 paring climate-related disclosure state-
19 ments; and

20 (iii) the Commission shall make pub-
21 licly available, including all assumptions
22 and methods used in the calculations;

23 (E) not preclude a covered issuer from
24 using and disclosing, as compared with the

1 price established under subparagraph (D), a
2 higher price of greenhouse gas emissions;

3 (F) specify requirements for, and the dis-
4 closure of, input parameters, assumptions, and
5 analytical choices to be used in climate scenario
6 analyses required under paragraph (2)(A), in-
7 cluding—

8 (i) present value discount rates;

9 (ii) time frames to consider, including
10 5, 10, and 20-year time frames; and

11 (iii) the minimum pricing of green-
12 house gas emissions, as established under
13 subparagraph (D) and subject to subpara-
14 graph (E); and

15 (G) include, after consultation with the
16 Administrator of the Environmental Protection
17 Agency, the Secretary of Energy, the Secretary
18 of the Interior, the Secretary of Agriculture, the
19 Secretary of Transportation, the Chair of the
20 Council on Environmental Quality, and the Di-
21 rector of the Office of Science and Technology
22 Policy documentation standards and guidance
23 with respect to the information required under
24 paragraph (2)(C);

1 (2) require that a covered issuer, with respect
2 to a disclosure required under subsection (s) of sec-
3 tion 13 of the Securities Exchange Act of 1934 (15
4 U.S.C. 78m), as added by section 5—

5 (A) incorporate into the disclosure—

6 (i) quantitative analysis to support
7 any qualitative statement made by the cov-
8 ered issuer;

9 (ii) the guidance established under
10 paragraph (1);

11 (iii) industry-specific metrics that
12 comply with the requirements under para-
13 graph (1)(A);

14 (iv) specific risk management actions
15 that the covered issuer is taking to address
16 identified risks;

17 (v) a discussion of the short-, me-
18 dium-, and long-term resilience of any risk
19 management strategy, and the evolution of
20 applicable risk metrics, of the covered
21 issuer under each scenario described in
22 paragraph (1)(B);

23 (vi) the total cost of carbon attrib-
24 utable to the direct and indirect green-
25 house gas emissions of the covered issuer,

1 using, at minimum, the social cost of car-
2 bon; and

3 (vii) any other information, or use any
4 climate-related or greenhouse gas emis-
5 sions metric, that the Commission, in con-
6 sultation with the appropriate climate prin-
7 cipals, determines is—

8 (viii) necessary;

9 (ix) appropriate to safeguard the pub-
10 lic interest; or

11 (x) directed at ensuring that investors
12 are informed in accordance with the find-
13 ings described in section 4;

14 (B) consider, when preparing any quali-
15 tative or quantitative risk analysis statement
16 contained in the disclosure—

17 (i) a baseline scenario that includes
18 physical impacts of climate change;

19 (ii) a well below 1.5 degrees scenario;

20 and

21 (iii) any additional climate analysis
22 scenario considered appropriate by the
23 Commission, in consultation with the ap-
24 propriate climate principals; and

1 (C) if the covered issuer engages in the
2 commercial development of fossil fuels, include
3 in the disclosure—

4 (i) an estimate of the total and a
5 disaggregated amount of direct and indi-
6 rect greenhouse gas emissions of the cov-
7 ered issuer that are attributable to—

8 (I) combustion;

9 (II) flared hydrocarbons;

10 (III) process emissions;

11 (IV) directly vented emissions;

12 (V) fugitive emissions or leaks;

13 and

14 (VI) land use changes;

15 (ii) a description of—

16 (I) the sensitivity of fossil fuel re-
17 serves levels to future price projection
18 scenarios that incorporate the social
19 cost of carbon into hydrocarbon pric-
20 ing;

21 (II) the percentage of the re-
22 serves of the covered issuer that will
23 be developed under the scenarios es-
24 tablished in subparagraph (B), as well
25 as a forecast for the development

1 prospects of each reserve under the
2 scenarios established in subparagraph
3 (B);

4 (III) the potential amount of di-
5 rect and indirect greenhouse gas emis-
6 sions that are embedded in proved
7 and probable hydrocarbon reserves,
8 with each such calculation presented
9 as a total and in subdivided categories
10 by the type of reserve;

11 (IV) the methodology of the cov-
12 ered issuer for detecting and miti-
13 gating fugitive methane emissions,
14 which shall include—

15 (aa) the frequency with
16 which applicable assets of the
17 covered issuer are observed for
18 methane leaks;

19 (bb) the processes and tech-
20 nology that the covered issuer
21 uses to detect methane leaks;

22 (cc) the percentage of assets
23 of the covered issuer that the
24 covered issuer inspects under
25 that methodology; and

1 (dd) quantitative and time-
2 bound reduction goals of the cov-
3 ered issuer with respect to meth-
4 ane leaks;

5 (V) the amount of water that the
6 covered issuer withdraws from fresh-
7 water sources for use and consump-
8 tion in operations of the covered
9 issuer; and

10 (VI) the percentage of the water
11 described in subclause (V) that comes
12 from regions of water stress or that
13 face wastewater management chal-
14 lenges; and

15 (iii) any other information that the
16 Commission, in consultation with the ap-
17 propriate climate principals and the Ad-
18 ministrator of the Environmental Protec-
19 tion Agency, the Secretary of Energy, the
20 Secretary of the Interior, and the Sec-
21 retary of Agriculture determines is—

22 (I) necessary;

23 (II) appropriate to safeguard the
24 public interest; or

1 (III) directed at ensuring that in-
2 vestors are informed in accordance
3 with the findings described in section
4 4; and

5 (3) establish how and where the required disclo-
6 sures shall be addressed in the annual financial fil-
7 ing of a covered issuer.

8 (b) **FORMATTING.**—The Commission shall—

9 (1) require covered issuers to disclose informa-
10 tion in an interactive data format; and

11 (2) develop standards for the format described
12 in paragraph (1), which shall include electronic tags
13 for information that the Commission determines is—

14 (A) necessary;

15 (B) appropriate to safeguard the public in-
16 terest; or

17 (C) directed at ensuring that investors are
18 informed in accordance with the findings de-
19 scribed in section 4.

20 (c) **PERIODIC UPDATE OF RULES.**—The Commission
21 shall periodically update the rules issued under this sec-
22 tion to ensure that the rules further the findings described
23 in section 4(2).

1 **SEC. 7. COMPILATION OF INFORMATION DISCLOSED.**

2 The Commission shall, to the maximum extent prac-
3 ticable—

4 (1) make a compilation of the information dis-
5 closed by issuers pursuant to subsection (s) of sec-
6 tion 13 of the Securities Exchange Act of 1934 (15
7 U.S.C. 78m), as added by section 5, publicly avail-
8 able on the website of the Commission; and

9 (2) update the compilation described in para-
10 graph (1) not less frequently than once each year.

11 **SEC. 8. BACKSTOP.**

12 If, 2 years after the date of enactment of this Act,
13 the Commission has not issued rules pursuant to section
14 6, and until those rules are issued, a covered issuer shall
15 be deemed in compliance with subsection (s) of section 13
16 of the Securities Exchange Act of 1934 (15 U.S.C. 78m),
17 as added by section 5, if disclosures set forth in the annual
18 report of the covered issuer satisfy the recommendations
19 of the Task Force on Climate-related Financial Disclo-
20 sures of the Financial Stability Board as reported in June
21 2017, or any successor report, and as supplemented or ad-
22 justed by such rules, guidance, or other comments from
23 the Commission.

24 **SEC. 9. REPORTS.**

25 (a) SECURITIES AND EXCHANGE COMMISSION.—The
26 Commission shall—

1 (1) conduct an annual assessment regarding the
2 compliance of covered issuers with the requirements
3 of subsection (s) of section 13 of the Securities Ex-
4 change Act of 1934 (15 U.S.C. 78m), as added by
5 section 5;

6 (2) submit to the appropriate congressional
7 committees a report that contains the results of each
8 assessment conducted under paragraph (1); and

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

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

18 **SEC. 10. SEVERABILITY.**

19 If any provision of this Act, an amendment made by
20 this Act, or the application of this Act (or an amendment
21 made by this Act) to any person or circumstance is held
22 to be invalid, that holding shall have no effect with respect
23 to—

24 (1) the remainder of this Act; and

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

4 **SEC. 11. AUTHORIZATION OF APPROPRIATIONS.**

5 There are authorized to be appropriated to the Com-
6 mission such sums as may be necessary to carry out this
7 Act.