

117TH CONGRESS
1ST SESSION

S. _____

To amend the Securities Exchange Act of 1934 to require certain disclosures 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 certain disclosures 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 2021”.

6 **SEC. 2. SENSE OF CONGRESS.**

7 It is the sense of Congress that—

8 (1) climate change poses a significant and in-
9 creasing threat to the growth and stability of the
10 economy of the United States;

1 (2) many sectors of the economy of the United
2 States, and many businesses in the United States,
3 are exposed to climate-related risk, which may in-
4 clude exposure to—

5 (A) the physical impacts of climate change,
6 including the rise of the average global tem-
7 perature, accelerating sea-level rise,
8 desertification, ocean acidification, intensifica-
9 tion of storms, increase in heavy precipitation,
10 more frequent and intense temperature ex-
11 tremes, more severe droughts, and longer wild-
12 fire seasons;

13 (B) the economic disruptions and security
14 threats that result from the physical impacts
15 described in subparagraph (A), including con-
16 flicts over scarce resources, conditions condu-
17 cive to violent extremism, the spread of infec-
18 tious diseases, and forced migration;

19 (C) the transition impacts that result as
20 the global economy transitions to a clean and
21 renewable energy, low-emissions economy, in-
22 cluding financial impacts as climate change
23 causes fossil fuel assets to become stranded and
24 it becomes uneconomic for companies to develop
25 fossil fuel assets as policymakers act to limit

1 the worst impacts of climate change by keeping
2 the rise in average global temperature to 1.5
3 degrees Celsius above pre-industrial levels; and

4 (D) actions by Federal, State, Tribal, and
5 local governments to limit the worst effects of
6 climate change by enacting policies that keep
7 the global average surface temperature rise to
8 1.5 degrees Celsius above pre-industrial levels;

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

12 (4) companies have a duty to disclose financial
13 risks that climate change presents to their investors,
14 lenders, and insurers;

15 (5) the Securities and Exchange Commission
16 (referred to in this Act as the “Commission”) has a
17 duty to promote a risk-informed securities market
18 that is worthy of the trust of the public as families
19 invest for their futures;

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

23 (7) including standardized, material climate
24 change risk and opportunity disclosure that is useful
25 for decision makers in annual reports to the Com-

1 mission will increase transparency with respect to
2 risk accumulation and exposure in financial markets;

3 (8) requiring companies to disclose climate-re-
4 lated risk exposure and risk management strategies
5 will encourage a smoother transition to a clean and
6 renewable energy, low-emissions economy and guide
7 capital allocation to mitigate, and adapt to, the ef-
8 fects of climate change and limit damages associated
9 with climate-related events and disasters; and

10 (9) a critical component in fighting climate
11 change is a transparent accounting of the risks that
12 climate change presents and the implications of con-
13 tinued inaction with respect to climate change.

14 **SEC. 3. DISCLOSURES RELATING TO CLIMATE CHANGE.**

15 Section 13 of the Securities Exchange Act of 1934
16 (15 U.S.C. 78m) is amended by adding at the end the
17 following:

18 “(s) DISCLOSURES RELATING TO CLIMATE
19 CHANGE.—

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

21 “(A) 1.5 DEGREE SCENARIO.—The term
22 ‘1.5 degree scenario’ means a scenario that
23 aligns with greenhouse gas emissions pathways
24 that aim for limiting global warming to 1.5 de-
25 grees Celsius above pre-industrial levels.

1 “(B) APPROPRIATE CLIMATE PRIN-
2 CIPALS.—The term ‘appropriate climate prin-
3 cipals’ means—

4 “(i) the Administrator of the Environ-
5 mental Protection Agency;

6 “(ii) the Administrator of the Na-
7 tional Oceanic and Atmospheric Adminis-
8 tration;

9 “(iii) the Director of the Office of
10 Management and Budget;

11 “(iv) the Secretary of the Interior;

12 “(v) the Secretary of Energy; and

13 “(vi) the head of any other Federal
14 agency, as determined appropriate by the
15 Commission.

16 “(C) BASELINE SCENARIO.—The term
17 ‘baseline scenario’ means a widely-recognized
18 analysis scenario in which levels of greenhouse
19 gas emissions, as of the date on which the anal-
20 ysis is performed, continue to grow, resulting in
21 an increase in the global average temperature
22 of 1.5 degrees Celsius or more above pre-indus-
23 trial levels.

24 “(D) CARBON DIOXIDE EQUIVALENT.—
25 The term ‘carbon dioxide equivalent’ means the

1 number of metric tons of carbon dioxide emis-
2 sions with the same global warming potential as
3 1 metric ton of another greenhouse gas, as de-
4 termined under table A–1 of subpart A of part
5 98 of title 40, Code of Federal Regulations, as
6 in effect on the date of enactment of this sub-
7 section.

8 “(E) CLIMATE CHANGE.—The term ‘cli-
9 mate change’ means a change of climate that
10 is—

11 “(i) attributed directly or indirectly to
12 human activity that alters the composition
13 of the global atmosphere; and

14 “(ii) in addition to natural climate
15 variability observed over comparable time
16 periods.

17 “(F) COMMERCIAL DEVELOPMENT OF FOS-
18 SIL FUELS.—The term ‘commercial develop-
19 ment of fossil fuels’ includes—

20 “(i) exploration, extraction, proc-
21 essing, exporting, transporting, refining,
22 and any other significant action with re-
23 spect to oil, natural gas, or coal, any by-
24 product thereof, or any other solid or liq-

1 uid hydrocarbons that are commercially
2 produced; or

3 “(ii) acquiring a license for any activ-
4 ity described in clause (i).

5 “(G) COVERED ISSUER.—The term ‘cov-
6 ered issuer’ means an issuer that is required to
7 file an annual report under subsection (a) or
8 section 15(d).

9 “(H) DIRECT AND INDIRECT GREENHOUSE
10 GAS EMISSIONS.—The term ‘direct and indirect
11 greenhouse gas emissions’ includes, with respect
12 to a covered issuer—

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

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

18 “(iii) significant indirect emissions,
19 other than the emissions described in
20 clause (ii), emitted in the value chain of
21 the covered issuer; and

22 “(iv) all indirect greenhouse gas emis-
23 sions that are attributable to assets owned
24 or managed, including assets that are par-

1 tially owned or managed, by the covered
2 issuer.

3 “(I) FOSSIL FUEL RESERVE.—The term
4 ‘fossil fuel reserve’ has the meaning given the
5 term ‘reserves’ under the final rule of the Com-
6 mission titled ‘Modernization of Oil and Gas
7 Reporting’ (74 Fed. Reg. 2158; published Jan-
8 uary 14, 2009).

9 “(J) GREENHOUSE GAS.—The term
10 ‘greenhouse gas’—

11 “(i) means carbon dioxide,
12 hydrofluorocarbons, methane, nitrous
13 oxide, perfluorocarbons, sulfur
14 hexafluoride, nitrogen trifluoride, and
15 chlorofluorocarbons;

16 “(ii) includes any other
17 anthropogenically-emitted gas that the Ad-
18 ministrator of the Environmental Protec-
19 tion Agency determines, after notice and
20 comment, to contribute to climate change;
21 and

22 “(iii) includes any other
23 anthropogenically-emitted gas that the
24 Intergovernmental Panel on Climate

1 Change determines to contribute to climate
2 change.

3 “(K) GREENHOUSE GAS EMISSIONS.—The
4 term ‘greenhouse gas emissions’ means the
5 emissions of greenhouse gas, expressed in terms
6 of metric tons of carbon dioxide equivalent.

7 “(L) PHYSICAL RISKS.—The term ‘phys-
8 ical risks’ means financial risks to long-lived
9 fixed assets, locations, operations, or value
10 chains that result from exposure to physical cli-
11 mate-related effects, including—

12 “(i) financial risks to long-lived fixed
13 assets, locations, operations, or value
14 chains resulting from—

15 “(I) increased average global
16 temperatures and increased frequency
17 of temperature extremes;

18 “(II) increased severity and fre-
19 quency of extreme weather events;

20 “(III) increased flooding;

21 “(IV) sea level rise;

22 “(V) ocean acidification;

23 “(VI) increased frequency of
24 wildfires;

1 “(VII) decreased arability of
2 farmland; and

3 “(VIII) decreased availability of
4 fresh water; and

5 “(ii) any other financial risks to long-
6 lived fixed assets, locations, operations, or
7 value chains determined appropriate by the
8 Commission, in consultation with the ap-
9 propriate climate principals.

10 “(M) SOCIAL COST OF CARBON.—The term
11 ‘social cost of carbon’ means the social cost of
12 carbon, as described in the technical support
13 document entitled ‘Technical Support Docu-
14 ment: Technical Update of the Social Cost of
15 Carbon for Regulatory Impact Analysis Under
16 Executive Order 12866’, published by the Inter-
17 agency Working Group on Social Cost of Green-
18 house Gases, United States Government, in Au-
19 gust 2016 or any successor or substantially re-
20 lated estimate of the monetized damages associ-
21 ated with an incremental increase in carbon di-
22 oxide emissions in a given year.

23 “(N) TRANSITION RISKS.—The term ‘tran-
24 sition risks’ means financial risks that are at-
25 tributable to climate change mitigation and ad-

1 aptation, including efforts to reduce greenhouse
2 gas emissions and strengthen resilience to the
3 impacts of climate change, including—

4 “(i) costs relating to—

5 “(I) international treaties and
6 agreements;

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

9 “(III) new technologies;

10 “(IV) changing markets;

11 “(V) reputational impacts rel-
12 evant to changing consumer behavior;

13 and

14 “(VI) litigation; and

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

19 “(O) VALUE CHAIN.—The term ‘value
20 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, transportation, and dis-
3 posal with respect to the product or service
4 described in clause (i).

5 “(2) FINDINGS.—Congress finds that—

6 “(A) short-, medium-, and long-term finan-
7 cial and economic risks and opportunities relat-
8 ing to climate change, and the national and
9 global reduction of greenhouse gas emissions,
10 constitute information that issuers—

11 “(i) may reasonably expect to affect
12 shareholder decision making; 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—

18 “(I) material physical and transi-
19 tion risks posed by climate change;
20 and

21 “(II) the potential financial im-
22 pact of the risks described in sub-
23 clause (I);

1 “(ii) detail any implications that the
2 risks described in clause (i)(I) have on cor-
3 porate strategy;

4 “(iii) detail any board-level oversight
5 of material climate-related risks and oppor-
6 tunities;

7 “(iv) allow for intra- and cross-indus-
8 try comparison, to the extent practicable,
9 of climate-related risk exposure through
10 the inclusion of standardized industry-spe-
11 cific and sector-specific disclosure metrics,
12 as identified by the Commission, in con-
13 sultation with the appropriate climate prin-
14 cipals;

15 “(v) allow for tracking of performance
16 over time with respect to mitigating cli-
17 mate risk exposure; and

18 “(vi) incorporate a price on green-
19 house gas emissions in financial analyses
20 that reflects, at minimum, the social cost
21 of carbon that is attributable to issuers.

22 “(3) DISCLOSURE.—Each covered issuer, in any
23 annual report filed by the covered issuer under sub-
24 section (a) or section 15(d), shall, in accordance
25 with any rules issued by the Commission under this

1 subsection, include in each such report information
2 regarding—

3 “(A) the identification of, the evaluation of
4 potential financial impacts of, and any risk-
5 management strategies relating to—

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

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

10 “(B) a description of any established cor-
11 porate governance processes and structures to
12 identify, assess, and manage climate-related
13 risks;

14 “(C) a description of specific actions that
15 the covered issuer is taking to mitigate identi-
16 fied risks;

17 “(D) a description of the resilience of any
18 strategy the covered issuer has for addressing
19 climate risks when differing climate scenarios
20 are taken into consideration; and

21 “(E) a description of how climate risk is
22 incorporated into the overall risk management
23 strategy of the covered issuer.

24 “(4) RULE OF CONSTRUCTION.—Nothing in
25 paragraph (3) may be construed as precluding a cov-

1 ered issuer from including, in an annual report sub-
2 mitted under subsection (a) or section 15(d), any in-
3 formation not explicitly referenced in such para-
4 graph.

5 “(5) RULEMAKING.—The Commission, in con-
6 sultation with the appropriate climate principals,
7 shall, not later than 2 years after the date of enact-
8 ment of this subsection, issue rules with respect to
9 the information that a covered issuer is required to
10 disclose pursuant to this subsection and such rules
11 shall—

12 “(A) establish climate-related risk dislo-
13 sure rules, which shall—

14 “(i) be, to the extent practicable, spe-
15 cialized for industries within specific sec-
16 tors of the economy, which shall include—

17 “(I) the sectors of finance, insur-
18 ance, transportation, electric power,
19 mining, and non-renewable energy;
20 and

21 “(II) any other sector determined
22 appropriate by the Commission, in
23 consultation with the appropriate cli-
24 mate principals;

1 “(ii) include reporting standards for
2 estimating and disclosing direct and indi-
3 rect greenhouse gas emissions by a covered
4 issuer, and any affiliates of the covered
5 issuer, which shall—

6 “(I) disaggregate, to the extent
7 practicable, total emissions of each
8 specified greenhouse gas by the cov-
9 ered issuer; and

10 “(II) include greenhouse gas
11 emissions by the covered issuer during
12 the period covered by the disclosure;

13 “(iii) include reporting standards for
14 disclosing, with respect to a covered
15 issuer—

16 “(I) the total amount of fossil
17 fuel-related assets owned or managed
18 by the covered issuer; and

19 “(II) the percentage of fossil
20 fuel-related assets as a percentage of
21 total assets owned or managed by the
22 covered issuer;

23 “(iv) specify requirements for, and the
24 disclosure of, input parameters, assump-
25 tions, and analytical choices to be used in

1 climate scenario analyses required under
2 subparagraph (B)(ii), including—

3 “(I) present value discount rates;

4 and

5 “(II) time frames to consider, in-

6 cluding 5-, 10-, and 20-year time

7 frames; and

8 “(v) include reporting standards and

9 guidance with respect to the information

10 required under subparagraph (B)(iii);

11 “(B) require that a covered issuer, with re-

12 spect to a disclosure required under this sub-

13 section—

14 “(i) incorporate into such disclosure—

15 “(I) quantitative analysis to sup-

16 port any qualitative statement made

17 by the covered issuer;

18 “(II) the rules established under

19 subparagraph (A);

20 “(III) industry-specific metrics

21 that comply with the requirements

22 under subparagraph (A)(i);

23 “(IV) specific risk management

24 actions that the covered issuer is tak-

25 ing to address identified risks;

1 “(V) a discussion of the short-,
2 medium-, and long-term resilience of
3 any risk management strategy, and
4 the evolution of applicable risk
5 metrics, of the covered issuer under
6 each scenario described in clause (ii);
7 and

8 “(VI) the total cost attributable
9 to the direct and indirect greenhouse
10 gas emissions of the covered issuer,
11 using, at minimum, the social cost of
12 carbon;

13 “(ii) consider, when preparing any
14 qualitative or quantitative risk analysis
15 statement contained in the disclosure—

16 “(I) a baseline scenario that in-
17 cludes physical risks with respect to
18 climate change;

19 “(II) a 1.5 degree scenario; and

20 “(III) any additional climate
21 analysis scenario considered appro-
22 priate by the Commission, in consulta-
23 tion with the appropriate climate prin-
24 cipals;

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

4 “(I) an estimate of the total and
5 a disaggregated amount of direct and
6 indirect greenhouse gas emissions of
7 the covered issuer that are attrib-
8 utable to—

9 “(aa) combustion;

10 “(bb) flared hydrocarbons;

11 “(cc) process emissions;

12 “(dd) directly vented emis-
13 sions;

14 “(ee) fugitive emissions or
15 leaks; and

16 “(ff) land use changes;

17 “(II) a description of—

18 “(aa) the sensitivity of fossil
19 fuel reserve levels to future price
20 projection scenarios that incor-
21 porate the social cost of carbon;

22 “(bb) the percentage of the
23 reserves of the covered issuer
24 that will be developed under the
25 scenarios established in clause

1 (ii), as well as a forecast for the
2 development prospects of each re-
3 serve under those scenarios;

4 “(cc) the potential amount
5 of direct and indirect greenhouse
6 gas emissions that are embedded
7 in proved and probable reserves,
8 with each such calculation pre-
9 sented as a total and in sub-
10 divided categories by the type of
11 reserve;

12 “(dd) the methodology of
13 the covered issuer for detecting
14 and mitigating fugitive methane
15 emissions, which shall include the
16 frequency with which applicable
17 assets of the covered issuer are
18 observed for methane leaks, the
19 processes and technology that the
20 covered issuer uses to detect
21 methane leaks, the percentage of
22 assets of the covered issuer that
23 the covered issuer inspects under
24 that methodology, and quan-
25 titative and time-bound reduction

1 goals of the issuer with respect to
2 methane leaks;

3 “(ee) the amount of water
4 that the covered issuer withdraws
5 from freshwater sources for use
6 and consumption in operations of
7 the covered issuer; and

8 “(ff) the percentage of the
9 water described in item (ee) that
10 comes from regions of water
11 stress or that face wastewater
12 management challenges; and

13 “(III) any other information that
14 the Commission determines is—

15 “(aa) necessary;

16 “(bb) appropriate to safe-
17 guard the public interest; or

18 “(cc) directed at ensuring
19 that investors are informed in ac-
20 cordance with the findings de-
21 scribed in paragraph (2);

22 “(C) require that a covered issuer include
23 in such a disclosure any other information, or
24 use any climate-related or greenhouse gas emis-
25 sions metric, that the Commission, in consulta-

1 tion with the appropriate climate principals, de-
2 termines is—

3 “(i) necessary;

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

6 “(iii) directed at ensuring that inves-
7 tors are informed in accordance with the
8 findings described in paragraph (2); and

9 “(D) establish how and where the required
10 disclosures shall be addressed in the annual fi-
11 nancial filing of the covered issuer.

12 “(6) **FORMATTING.**—The Commission shall re-
13 quire covered issuers to disclose information under
14 this subsection in an interactive data format and
15 shall develop standards for such format, which shall
16 include electronic tags for information that the Com-
17 mission determines is—

18 “(A) necessary;

19 “(B) appropriate to safeguard the public
20 interest; or

21 “(C) directed at ensuring that investors
22 are informed in accordance with the findings
23 described in paragraph (2).

1 “(7) PERIODIC UPDATE OF RULES.—The Com-
2 mission shall periodically update the rules issued
3 under this subsection.

4 “(8) COMPILATION OF INFORMATION DIS-
5 CLOSED.—The Commission shall, to the maximum
6 extent practicable, make a compilation of the infor-
7 mation disclosed by covered issuers under this sub-
8 section publicly available on the website of the Com-
9 mission and update such compilation at least once
10 each year.

11 “(9) REPORTS.—

12 “(A) REPORT TO CONGRESS.—The Com-
13 mission shall—

14 “(i) conduct an annual assessment re-
15 garding the compliance of covered issuers
16 with the requirements of this subsection;

17 “(ii) submit to the appropriate con-
18 gressional committees a report that con-
19 tains the results of each assessment con-
20 ducted under clause (i); and

21 “(iii) make each report submitted
22 under clause (ii) accessible to the public.

23 “(B) GAO REPORT.—The Comptroller
24 General of the United States shall periodically
25 evaluate, and report to the appropriate congres-

1 sional committees on, the effectiveness of the
2 Commission in carrying out and enforcing this
3 subsection.”.

4 **SEC. 4. BACKSTOP.**

5 If, 2 years after the date of enactment of this Act,
6 the Commission has not issued the rules required under
7 subsection (s) of section 13 of the Securities Exchange
8 Act of 1934 (15 U.S.C. 78m), as added by section 3 of
9 this Act, and until the date on which the Commission
10 issues those rules, a covered issuer (as defined in such sub-
11 section (s)) shall be deemed to be in compliance with such
12 subsection (s) if disclosures set forth in the annual report
13 of that covered issuer satisfy the recommendations of the
14 Task Force on Climate-related Financial Disclosures of
15 the Financial Stability Board, as reported in June 2017,
16 or any successor report, and as supplemented or adjusted
17 by such rules, guidance, or other comments from the Com-
18 mission.

19 **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

20 There are authorized to be appropriated to the Com-
21 mission such sums as may be necessary to carry out this
22 Act and the amendments made by this Act.