

116TH CONGRESS
1ST SESSION

S. _____

To require the Board of Governors of the Federal Reserve System, in consultation with the heads of other relevant Federal agencies, to develop financial risk analyses relating to climate change, and for other purposes.

IN THE SENATE OF THE UNITED STATES

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

A BILL

To require the Board of Governors of the Federal Reserve System, in consultation with the heads of other relevant Federal agencies, to develop financial risk analyses 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 Change Finan-
5 cial Risk Act of 2019”.

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

7 It is the sense of Congress that—

1 (1) if current trends continue, average global
2 temperatures are likely to reach 1.5 degrees Celsius
3 above pre-industrial levels between 2030 and 2050;

4 (2) global temperature rise has already resulted
5 in an increased number of heavy rainstorms, coastal
6 flooding events, heat waves, wildfires, and other ex-
7 treme events;

8 (3) since 1980—

9 (A) the number of extreme weather events
10 per year that cost the people of the United
11 States more than \$1,000,000,000 per event, ac-
12 counting for inflation, has increased signifi-
13 cantly; and

14 (B) the total cost of extreme weather
15 events in the United States has exceeded
16 \$1,100,000,000,000;

17 (4) as physical impacts from climate change are
18 manifested across multiple sectors of the economy of
19 the United States—

20 (A) climate-related economic risks will con-
21 tinue to increase;

22 (B) climate-related extreme weather events
23 will disrupt energy and transportation systems
24 in the United States, which will result in more
25 frequent and longer-lasting power outages, fuel

1 shortages, and service disruptions in critical
2 sectors across the economy of the United
3 States;

4 (C) projected increases in extreme heat
5 conditions will lead to decreases in labor pro-
6 ductivity in agriculture, construction, and other
7 critical economic sectors;

8 (D) food and livestock production will be
9 impacted in regions that experience increases in
10 heat and drought and small rural communities
11 will struggle to find the resources needed to
12 adapt to those changes; and

13 (E) sea level rise and more frequent and
14 intense extreme weather events will—

15 (i) increasingly disrupt and damage
16 private property and critical infrastructure;
17 and

18 (ii) drastically increase insured and
19 uninsured losses;

20 (5) advances in energy efficiency and renewable
21 energy technologies, as well as climate policies and
22 shifting societal preferences, will—

23 (A) reduce global demand for fossil fuels;
24 and

1 (B) expose transition risks for fossil fuel
2 companies and investors, which could include
3 trillions of dollars of stranded assets around the
4 world;

5 (6) climate change poses uniquely far-reaching
6 risks to the financial services industry, including
7 with respect to underwriting, credit, and market
8 risks, due to the number of sectors and locations im-
9 pacted and the potentially irreversible scale of dam-
10 age;

11 (7) financial institutions must take a consistent
12 approach to assessing climate-related financial risks
13 and incorporating those risks into existing risk man-
14 agement practices, which should be informed by sce-
15 nario analysis;

16 (8) the Board of Governors conducts annual as-
17 sessments of the capital adequacy and capital plan-
18 ning practices of the largest and most complex bank-
19 ing organizations (referred to in this section as
20 “stress tests”) in order to promote a safe, sound,
21 and efficient banking and financial system;

22 (9) as of the date of enactment of this Act, the
23 stress tests conducted by the Board of Governors are
24 not designed to reflect the physical risks or transi-
25 tion risks posed by climate change; and

1 (10) the Board of Governors—

2 (A) has the authority to take into account
3 the potentially systemic impact of climate-re-
4 lated risks on the financial system; and

5 (B) should develop new analytical tools
6 with longer time horizons to accurately assess
7 and manage the risks described in subpara-
8 graph (A).

9 **SEC. 3. DEFINITIONS.**

10 In this Act:

11 (1) **BANK HOLDING COMPANY.**—The term
12 “bank holding company” has the meaning given the
13 term in section 102(a) of the Financial Stability Act
14 of 2010 (12 U.S.C. 5311(a)).

15 (2) **BOARD OF GOVERNORS.**—The term “Board
16 of Governors” means the Board of Governors of the
17 Federal Reserve System.

18 (3) **CLIMATE SCIENCE LEADS.**—The term “cli-
19 mate science leads” means—

20 (A) the Administrator of the National Oce-
21 anic and Atmospheric Administration;

22 (B) the Administrator of the Environ-
23 mental Protection Agency;

24 (C) the Secretary of Energy;

1 (D) the Administrator of the National Aer-
2 nautics and Space Administration;

3 (E) the Director of the United States Geo-
4 logical Survey;

5 (F) the Secretary of the Interior; and

6 (G) the head of any other Federal agency
7 that the Board of Governors determines to be
8 appropriate.

9 (4) COVERED ENTITY.—The term “covered en-
10 tity” means—

11 (A) a nonbank financial company or bank
12 holding company that has not less than
13 \$250,000,000,000 in total consolidated assets;
14 and

15 (B) a nonbank financial company or bank
16 holding company—

17 (i) that has not less than
18 \$100,000,000,000 in total consolidated as-
19 sets; and

20 (ii) with respect to which the Board of
21 Governors determines the application of
22 subparagraph (C) of section 165(i)(1) of
23 the Financial Stability Act of 2010 (12
24 U.S.C. 5365(i)(1)), as added by section 6
25 of this Act, is appropriate—

- 1 (I) to—
- 2 (aa) prevent or mitigate
- 3 risks to the financial stability of
- 4 the United States; or
- 5 (bb) promote the safety and
- 6 soundness of the company; and
- 7 (II) after taking into consider-
- 8 ation—
- 9 (aa) the capital structure,
- 10 riskiness, complexity, financial
- 11 activities, and size of the com-
- 12 pany, including the financial ac-
- 13 tivities of any subsidiary of the
- 14 company; and
- 15 (bb) any other risk-related
- 16 factor that the Board of Gov-
- 17 ernors determines to be appro-
- 18 priate.

19 (5) NONBANK FINANCIAL COMPANY.—The term

20 “nonbank financial company” has the meaning given

21 the term in section 102(a)(4)(C) of the Financial

22 Stability Act of 2010 (12 U.S.C. 5311(a)(4)(C)).

23 (6) PHYSICAL RISKS.—The term “physical

24 risks” means financial risks to assets, locations, op-

1 erations, or value chains that result from exposure
2 to physical climate-related effects, including—

3 (A) increased average global temperatures;

4 (B) increased severity and frequency of ex-
5 treme weather events;

6 (C) increased flooding;

7 (D) sea level rise;

8 (E) ocean acidification;

9 (F) increased severity and frequency of
10 heat waves;

11 (G) increased frequency of wildfires;

12 (H) decreased arability of farmland; and

13 (I) decreased availability of fresh water.

14 (7) TECHNICAL DEVELOPMENT GROUP.—The
15 term “Technical Development Group” means the
16 Climate Risk Scenario Technical Development Group
17 established under section 4.

18 (8) TRANSITION RISKS.—The term “transition
19 risks” means financial risks that are attributable to
20 climate change mitigation and adaptation, including
21 efforts to reduce greenhouse gas emissions and
22 strengthen resilience to the impacts of climate
23 change, including—

24 (A) costs relating to—

1 (i) international treaties and agree-
2 ments;

3 (ii) Federal, State, and local policies;

4 (iii) new technologies;

5 (iv) changing markets;

6 (v) reputational impacts relevant to
7 changing consumer behavior; and

8 (vi) litigation; and

9 (B) a loss in the value, or the stranding,
10 of assets due to any of the costs described in
11 clauses (i) through (vi) of subparagraph (A).

12 (9) VALUE CHAIN.—The term “value chain”—

13 (A) means the total lifecycle of a product
14 or service, both before and after production of
15 the product or service, as applicable; and

16 (B) may include the sourcing of materials,
17 production, and disposal with respect to the
18 product or service described in subparagraph

19 (A).

20 **SEC. 4. CLIMATE RISK SCENARIO TECHNICAL DEVELOP-**
21 **MENT GROUP.**

22 (a) ESTABLISHMENT.—The Board of Governors shall
23 establish a technical advisory group to be known as the
24 Climate Risk Scenario Technical Development Group.

25 (b) MEMBERSHIP.—

1 (1) COMPOSITION.—The Technical Develop-
2 ment Group shall be composed of 10 members—

3 (A) 5 of whom shall be climate scientists;
4 and

5 (B) 5 of whom shall be economists, with
6 expertise in either the United States financial
7 system or the risks posed by climate change.

8 (2) SELECTION.—The Board of Governors shall
9 select the members of the Technical Development
10 Group after consultation with the climate science
11 leads.

12 (c) DUTIES.—The Technical Development Group
13 shall—

14 (1) provide recommendations to the Board of
15 Governors regarding the development of, and up-
16 dates to, the climate change risk scenarios under
17 section 5;

18 (2) after the establishment of the climate
19 change risk scenarios under section 5, determine the
20 financial and economic risks resulting from those
21 scenarios;

22 (3) make any final work product and any data
23 sets or other inputs used in the development of the
24 final work product, publicly available; and

1 (4) provide technical assistance to covered enti-
2 ties in assessing physical risks or transition risks.

3 (d) INAPPLICABILITY OF FEDERAL ADVISORY COM-
4 MITTEE ACT.—The Federal Advisory Committee Act (5
5 U.S.C. App.) shall not apply with respect to the Technical
6 Development Group.

7 **SEC. 5. DEVELOPMENT AND UPDATING OF CLIMATE**
8 **CHANGE RISK SCENARIOS.**

9 (a) IN GENERAL.—

10 (1) INITIAL DEVELOPMENT.—Not later than 1
11 year after the date of enactment of this Act, the
12 Board of Governors, in coordination with the climate
13 science leads, and taking into consideration the rec-
14 ommendations of the Technical Development Group,
15 shall develop 3 separate climate change risk sce-
16 narios as follows:

17 (A) One scenario that assumes an average
18 increase in global temperatures of 1.5 degrees
19 Celsius above pre-industrial levels.

20 (B) One scenario that assumes an average
21 increase in global temperatures of 2 degrees
22 Celsius above pre-industrial levels.

23 (C) One scenario that—

24 (i) assumes the likely and very likely
25 average increase in global temperatures

1 that can be expected, taking into consider-
2 ation the extent to which national policies
3 and actions relating to climate change have
4 been implemented, as of the date on which
5 the scenario is developed, or on which the
6 scenario is updated under paragraph (2),
7 as applicable; and

8 (ii) does not take into consideration
9 commitments for policies and actions relat-
10 ing to climate change that, as of the appli-
11 cable date described in clause (i), have not
12 been implemented.

13 (2) UPDATES.—After the initial development of
14 the climate change risk scenarios under paragraph
15 (1), the Board of Governors, in coordination with
16 the climate science leads, and taking into consider-
17 ation the recommendations of the Technical Devel-
18 opment Group, shall update those scenarios once
19 every 3 years.

20 (3) INTERNATIONAL COORDINATION.—In devel-
21 oping and updating the 3 scenarios required under
22 this subsection, the Board of Governors shall take
23 into consideration analytic tools and best practices
24 developed by international banking supervisors relat-
25 ing to climate risks and scenario analysis in an ef-

1 fort to develop consistent and comparable data-driv-
2 en scenarios.

3 (4) RECOMMENDATIONS.—If the Technical De-
4 velopment Group determines that the average in-
5 crease in global temperatures described in subpara-
6 graph (A) or (B) of paragraph (1) is no longer sci-
7 entifically valid, the Technical Development Group
8 may recommend that the Board of Governors, in co-
9 ordination with the climate science leads, update the
10 average increase in global temperatures described in
11 the applicable subparagraph to reflect the most cur-
12 rent assessment of climate change science.

13 (b) CONSIDERATIONS.—In developing and updating
14 each of the 3 scenarios required under subsection (a), the
15 Board of Governors, in coordination with the climate
16 science leads, shall account for physical risks and transi-
17 tion risks that may disrupt business operations across the
18 global economy, including through—

19 (1) disruptions with respect to—

20 (A) the sourcing of materials;

21 (B) production; and

22 (C) the disposal of products and services;

23 (2) changes in the availability and prices of raw
24 materials and other inputs;

- 1 (3) changes in agricultural production and with
2 respect to food security;
- 3 (4) direct damages to fixed assets;
- 4 (5) increases in costs associated with insured or
5 uninsured losses;
- 6 (6) changes in asset values;
- 7 (7) impacts on—
- 8 (A) aggregate demand for products and
9 services;
- 10 (B) labor productivity;
- 11 (C) asset liquidity; and
- 12 (D) credit availability;
- 13 (8) mass migration and increases in disease and
14 mortality rates;
- 15 (9) international conflict, as such conflict re-
16 lates to global economic activity and output; and
- 17 (10) changes in any other microeconomic or
18 macroeconomic condition that the Board of Gov-
19 ernors, in coordination with the climate science
20 leads, determines to be relevant.

21 **SEC. 6. CLIMATE-RELATED ENHANCED SUPERVISION FOR**
22 **CERTAIN NONBANK FINANCIAL COMPANIES**
23 **AND BANK HOLDING COMPANIES.**

24 Section 165(i)(1) of the Financial Stability Act of
25 2010 (12 U.S.C. 5365(i)(1)) is amended—

1 (1) in subparagraph (B)(i), by inserting “except
2 as provided in subparagraph (C)(ii)(I),” before
3 “shall provide”; and

4 (2) by adding at the end the following:

5 “(C) BIENNIAL TESTS REQUIRED.—

6 “(i) DEFINITIONS.—In this subpara-
7 graph—

8 “(I) the term ‘capital distribu-
9 tion’ has the meaning given the term
10 in section 225.8 of title 12, Code of
11 Federal Regulations, as in effect on
12 the date of enactment of this subpara-
13 graph;

14 “(II) the term ‘capital policy’ has
15 the meaning given the term in section
16 225.8(d)(8) of title 12, Code of Fed-
17 eral Regulations, as in effect on the
18 date of enactment of this subpara-
19 graph; and

20 “(III) the terms ‘climate science
21 leads’ and ‘covered entity’ have the
22 meanings given those terms in section
23 3 of the Climate Change Financial
24 Risk Act of 2019.

25 “(ii) TESTS.—

1 “(I) IN GENERAL.—Subject to
2 the other requirements of this clause,
3 the Board of Governors, in coordina-
4 tion with the appropriate primary fi-
5 nancial regulatory agencies and the
6 climate science leads, shall conduct bi-
7 ennial analyses in which each covered
8 entity is subject to evaluation, under
9 an adverse set of conditions, of wheth-
10 er that covered entity has the capital,
11 on a total consolidated basis, nec-
12 essary to absorb financial losses that
13 would arise under each climate change
14 risk scenario developed under section
15 5 of the Climate Change Financial
16 Risk Act of 2019.

17 “(II) INITIAL TESTS.—With re-
18 spect to each of the first 3 analyses
19 conducted under subclause (I)—

20 “(aa) the covered entity to
21 which such an analysis applies
22 shall not be subject to any ad-
23 verse consequences as a result of
24 the analysis; and

1 “(bb) the Board of Gov-
2 ernors shall—

3 “(AA) not later than 60
4 days after the date on which
5 the Board of Governors
6 completes each such anal-
7 ysis, make a summary of the
8 analysis publicly available;
9 and

10 “(BB) submit a copy of
11 the results of the analysis to
12 the Committee on Banking,
13 Housing, and Urban Affairs
14 of the Senate and the Com-
15 mittee on Financial Services
16 of the House of Representa-
17 tives.

18 “(III) CLIMATE RISK CAPITAL
19 POLICY.—

20 “(aa) IN GENERAL.—Except
21 with respect to the first analysis
22 conducted under subclause (I),
23 each covered entity shall, before
24 being subject to an analysis
25 under that subclause, submit to

1 the Board of Governors a capital
2 policy with respect to climate risk
3 planning (referred to in this sub-
4 clause as a ‘climate risk capital
5 policy’), which shall be based on
6 the results of the most recently
7 conducted analysis of the covered
8 entity under that subclause.

9 “(bb) REJECTION.—Except
10 as provided in subclause (II)(aa),
11 the Board of Governors may ob-
12 ject to a climate risk capital pol-
13 icy submitted by a covered entity
14 under item (aa) if the Board of
15 Governors determines that—

16 “(AA) the covered enti-
17 ty has not demonstrated a
18 reasonable plan to maintain
19 capital above each minimum
20 regulatory capital ratio on a
21 pro forma basis under the
22 adverse set of conditions de-
23 scribed in subclause (I);

24 “(BB) the climate risk
25 capital policy is otherwise

1 not reasonable or appro-
2 priate;

3 “(CC) the assumptions
4 and analysis underlying the
5 climate risk capital policy, or
6 the methodologies and prac-
7 tices that support the cli-
8 mate risk capital policy, are
9 not reasonable or appro-
10 priate; or

11 “(DD) the climate risk
12 capital policy otherwise con-
13 stitutes an unsafe or un-
14 sound practice.

15 “(cc) GENERAL DISTRIBU-
16 TION LIMITATION.—If the Board
17 of Governors, under item (bb),
18 objects to a climate risk capital
19 policy submitted by a covered en-
20 tity under item (aa), the covered
21 entity may not make any capital
22 distribution, other than a capital
23 distribution arising from the
24 issuance of a regulatory capital
25 instrument eligible for inclusion

1 in the numerator of a minimum
2 regulatory capital ratio.”.

3 **SEC. 7. FINANCIAL STABILITY OVERSIGHT COUNCIL.**

4 (a) IN GENERAL.—The Financial Stability Oversight
5 Council shall establish a subcommittee of the Council that
6 shall support the Council in identifying risks to, and in
7 responding to emerging threats to, the stability of the
8 United States financial system as a result of climate
9 change.

10 (b) RESPONSIBILITIES.—

11 (1) SUBCOMMITTEE.—The subcommittee estab-
12 lished under subsection (a) shall, not later than 1
13 year after the completion of the first analysis re-
14 quired under subparagraph (C) of section 165(i)(1)
15 of the Financial Stability Act of 2010 (12 U.S.C.
16 5365(i)(1)), as added by section 6 of this Act, and
17 in consultation with the Office of Financial Re-
18 search, submit to Congress an assessment of the risk
19 posed by climate change to the efficiency, competi-
20 tiveness, and stability of the United States financial
21 system as a whole.

22 (2) COUNCIL.—For each year after the year in
23 which the assessment required under paragraph (1)
24 is submitted, the Financial Stability Oversight Coun-
25 cil shall include in the annual report required under

1 section 112(a)(2)(N) of the Financial Stability Act
2 of 2010 (12 U.S.C. 5322(a)(2)(N)) an update to
3 that assessment.

4 (c) COMPOSITION.—The subcommittee established
5 under subsection (a) shall be composed of—

6 (1) the Chairman of the Board of Governors of
7 the Federal Reserve System;

8 (2) the Secretary of the Treasury;

9 (3) the Comptroller of the Currency;

10 (4) the Chairperson of the Board of Directors
11 of the Federal Deposit Insurance Corporation;

12 (5) the Chairman of the Securities and Ex-
13 change Commission;

14 (6) the Chairperson of the Commodity Futures
15 Trading Commission; and

16 (7) any other voting or nonvoting members that
17 the Financial Stability Oversight Council determines
18 to be appropriate.