

117TH CONGRESS 1ST SESSION

S. 1876

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

IN THE SENATE OF THE UNITED STATES

May 27, 2021

Mr. Schatz (for himself, Mr. Whitehouse, Mr. Booker, Mr. Merkley, Mr. Van Hollen, Mrs. Feinstein, Ms. Warren, Mrs. Murray, Mr. Padilla, Mr. Bennet, and Ms. Klobuchar) introduced the following bill; which was read twice and referred to the Committee on Banking, Housing, and Urban Affairs

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 and conduct 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 2021".

1 SEC. 2. SENSE OF CONGRESS.

2	It is the sense of Congress that—
3	(1) if current trends continue, average global
4	temperatures are likely to reach 1.5 degrees Celsius
5	above pre-industrial levels between 2030 and 2050;
6	(2) global temperature rise has already resulted
7	in an increased number of heavy rainstorms, coastal
8	flooding events, heat waves, wildfires, and other ex-
9	treme events;
10	(3) since 1980—
11	(A) the number of extreme weather events
12	per year that cost the people of the United
13	States more than \$1,000,000,000 per event, ac-
14	counting for inflation, has increased signifi-
15	cantly; and
16	(B) the total cost of extreme weather
17	events in the United States has exceeded
18	\$1,875,000,000,000;
19	(4) as physical impacts from climate change are
20	manifested across multiple sectors of the economy of
21	the United States—
22	(A) climate-related economic risks will con-
23	tinue to increase;
24	(B) climate-related extreme weather events
25	will disrupt energy and transportation systems
26	in the United States, which will result in more

1	frequent and longer-lasting power outages, fuel
2	shortages, and service disruptions in critical
3	sectors across the economy of the United
4	States;
5	(C) projected increases in extreme heat
6	conditions will lead to decreases in labor pro-
7	ductivity in agriculture, construction, and other
8	critical economic sectors;
9	(D) food and livestock production will be
10	impacted in regions that experience increases in
11	heat and drought and small rural communities
12	will struggle to find the resources needed to
13	adapt to those changes; and
14	(E) sea level rise and more frequent and
15	intense extreme weather events will—
16	(i) increasingly disrupt and damage
17	private property and critical infrastructure
18	and
19	(ii) drastically increase insured and
20	uninsured losses;
21	(5) advances in energy efficiency and renewable
22	energy technologies, as well as climate policies and
23	shifting societal preferences, will—
24	(A) reduce global demand for fossil fuels
25	and

- 1 (B) expose transition risks for fossil fuel 2 companies and investors, and for companies 3 and investors in other energy-intensive indus-4 tries, which could include trillions of dollars of 5 stranded assets around the world;
 - (6) climate change poses uniquely far-reaching risks to the financial services industry, including with respect to credit, counterparty, and market risks, due to the number of sectors and locations impacted and the potentially irreversible scale of damage;
 - (7) financial institutions must take a consistent approach to assessing climate-related financial risks and incorporating those risks into existing risk management practices, which should be informed by scenario analysis;
 - (8) the Board of Governors conducts annual assessments of the capital adequacy and capital planning practices of the largest and most complex banking organizations (referred to in this section as "stress tests") in order to promote a safe, sound, and efficient banking and financial system;
 - (9) as of the date of enactment of this Act, the stress tests conducted by the Board of Governors are

1	not designed to reflect the physical risks or transi-
2	tion risks posed by climate change;
3	(10) the Board of Governors—
4	(A) has the authority to take into account
5	the potentially systemic impact of climate-re-
6	lated risks on the financial system; and
7	(B) should develop new analytical tools
8	with longer time horizons to accurately assess
9	and manage the risks described in subpara-
10	graph (A); and
11	(11) the Climate-Related Market Risk Sub-
12	committee of the Commodity Futures Trading Com-
13	mission has identified the importance of researching
14	"climate-related 'sub-systemic' shocks to financial
15	markets and institutions in particular sectors and
16	regions of the United States".
17	SEC. 3. DEFINITIONS.
18	In this Act:
19	(1) Bank holding company.—The term
20	"bank holding company" has the meaning given the
21	term in section 102(a) of the Financial Stability Act
22	of 2010 (12 U.S.C. 5311(a)).
23	(2) Board of Governors.—The term "Board
24	of Governors" means the Board of Governors of the
25	Federal Reserve System.

1	(3) CLIMATE SCIENCE LEADS.—The term "cli-
2	mate science leads" means—
3	(A) the Administrator of the National Oce-
4	anic and Atmospheric Administration;
5	(B) the Administrator of the Environ-
6	mental Protection Agency;
7	(C) the Secretary of Energy;
8	(D) the Administrator of the National Aer-
9	onautics and Space Administration;
10	(E) the Director of the United States Geo-
11	logical Survey;
12	(F) the Secretary of the Interior; and
13	(G) the head of any other Federal agency
14	that the Board of Governors determines to be
15	appropriate.
16	(4) COVERED ENTITY.—The term "covered en-
17	tity'' means—
18	(A) a nonbank financial company or bank
19	holding company that has not less than
20	\$250,000,000,000 in total consolidated assets;
21	and
22	(B) a nonbank financial company or bank
23	holding company—

1	(i) that has not less than
2	\$100,000,000,000 in total consolidated as-
3	sets; and
4	(ii) with respect to which the Board of
5	Governors determines the application of
6	subparagraph (C) of section 165(i)(1) of
7	the Financial Stability Act of 2010 (12
8	U.S.C. $5365(i)(1)$, as added by section 6
9	of this Act, is appropriate—
10	(I) to—
11	(aa) prevent or mitigate
12	risks to the financial stability of
13	the United States; or
14	(bb) promote the safety and
15	soundness of the company; and
16	(II) after taking into consider-
17	ation—
18	(aa) the capital structure,
19	riskiness, complexity, financial
20	activities, and size of the com-
21	pany, including the financial ac-
22	tivities of any subsidiary of the
23	company; and
24	(bb) any other risk-related
25	factor that the Board of Gov-

1	ernors determines to be appro-
2	priate.
3	(5) Nonbank financial company.—The term
4	"nonbank financial company" has the meaning given
5	the term in section 102(a)(4)(C) of the Financial
6	Stability Act of 2010 (12 U.S.C. $5311(a)(4)(C)$).
7	(6) Physical risks.—The term "physical
8	risks" means financial risks to assets, locations, op-
9	erations, or value chains that result from exposure
10	to physical climate-related effects, including—
11	(A) increased average global temperatures;
12	(B) increased severity and frequency of ex-
13	treme weather events;
14	(C) increased flooding;
15	(D) sea level rise;
16	(E) ocean acidification;
17	(F) increased severity and frequency of
18	heat waves;
19	(G) increased frequency of wildfires;
20	(H) decreased arability of farmland; and
21	(I) decreased availability of fresh water.
22	(7) Surveyed entity.—The term "surveyed
23	entity" means a nonbank financial company super-
24	vised by the Board of Governors, or a bank holding
25	company, that—

1	(A) has total consolidated assets of not less
2	than \$10,000,000,000; and
3	(B) is not a covered entity.
4	(8) TECHNICAL DEVELOPMENT GROUP.—The
5	term "Technical Development Group" means the
6	Climate Risk Scenario Technical Development Group
7	established under section 4.
8	(9) Transition risks.—The term "transition
9	risks" means financial risks that are attributable to
10	climate change mitigation and adaptation, including
11	efforts to reduce greenhouse gas emissions and
12	strengthen resilience to the impacts of climate
13	change, including—
14	(A) costs relating to—
15	(i) international treaties and agree-
16	ments;
17	(ii) Federal, State, and local policies;
18	(iii) new technologies;
19	(iv) changing markets;
20	(v) reputational impacts relevant to
21	changing consumer behavior; and
22	(vi) litigation; and
23	(B) a loss in the value, or the stranding,
24	of assets due to any of the costs described in
25	clauses (i) through (vi) of subparagraph (A).

1	(10) Value Chain.—The term "value chain"—
2	(A) means the total lifecycle of a product
3	or service, both before and after production of
4	the product or service, as applicable; and
5	(B) may include the sourcing of materials,
6	production, and disposal with respect to the
7	product or service described in subparagraph
8	(A).
9	SEC. 4. CLIMATE RISK SCENARIO TECHNICAL DEVELOP-
10	MENT GROUP.
11	(a) Establishment.—The Board of Governors shall
12	establish a technical advisory group to be known as the
13	Climate Risk Scenario Technical Development Group.
14	(b) Membership.—
15	(1) Composition.—The Technical Develop-
16	ment Group shall be composed of 10 members—
17	(A) 5 of whom shall be climate scientists;
18	and
19	(B) 5 of whom shall be economists, with
20	expertise in either the United States financial
21	system or the risks posed by climate change.
22	(2) Selection.—The Board of Governors shall
23	select the members of the Technical Development
24	Group after consultation with the climate science
25	leads.

1	(c) Duties.—The Technical Development Group
2	shall—
3	(1) provide recommendations to the Board of
4	Governors regarding the development of, and up-
5	dates to, the climate change risk scenarios under
6	section 5;
7	(2) after the establishment of the climate
8	change risk scenarios under section 5, determine the
9	financial and economic risks resulting from those
10	scenarios;
11	(3) make any final work product and any data
12	sets or other inputs used in the development of the
13	final work product, publicly available; and
14	(4) provide technical assistance to covered enti-
15	ties in assessing physical risks or transition risks.
16	(d) Inapplicability of Federal Advisory Com-
17	MITTEE ACT.—The Federal Advisory Committee Act (5
18	U.S.C. App.) shall not apply with respect to the Technical
19	Development Group.
20	SEC. 5. DEVELOPMENT AND UPDATING OF CLIMATE
21	CHANGE RISK SCENARIOS.
22	(a) In General.—
23	(1) Initial Development.—Not later than 1
24	year after the date of enactment of this Act, the
25	Board of Governors, in coordination with the climate

1	science leads, and taking into consideration the rec-
2	ommendations of the Technical Development Group,
3	shall develop 3 separate climate change risk sce-
4	narios as follows:
5	(A) One scenario that assumes an average
6	increase in global temperatures of 1.5 degrees
7	Celsius above pre-industrial levels.
8	(B) One scenario that assumes an average
9	increase in global temperatures of 2 degrees
10	Celsius above pre-industrial levels.
11	(C) One scenario that—
12	(i) assumes the likely and very likely
13	average increase in global temperatures
14	that can be expected, taking into consider-
15	ation the extent to which national policies
16	and actions relating to climate change have
17	been implemented, as of the date on which
18	the scenario is developed, or on which the
19	scenario is updated under paragraph (2),
20	as applicable; and
21	(ii) does not take into consideration
22	commitments for policies and actions relat-
23	ing to climate change that, as of the appli-
24	cable date described in clause (i), have not
25	been implemented.

- (2) UPDATES.—After the initial development of the climate change risk scenarios under paragraph (1), the Board of Governors, in coordination with the climate science leads, and taking into consideration the recommendations of the Technical Development Group, shall update those scenarios once every 3 years.
 - (3) International coordination.—In developing and updating the 3 scenarios required under this subsection, the Board of Governors shall take into consideration analytic tools and best practices developed by international banking supervisors relating to climate risks and scenario analysis in an effort to develop consistent and comparable data-driven scenarios.
 - (4) RECOMMENDATIONS.—If the Technical Development Group determines that the average increase in global temperatures described in subparagraph (A) or (B) of paragraph (1) is no longer scientifically valid, the Technical Development Group may recommend that the Board of Governors, in coordination with the climate science leads, update the average increase in global temperatures described in the applicable subparagraph to reflect the most current assessment of climate change science.

1	(b) Considerations.—In developing and updating
2	each of the 3 scenarios required under subsection (a), the
3	Board of Governors, in coordination with the climate
4	science leads, shall account for physical risks and transi-
5	tion risks that may disrupt business operations across the
6	global economy, including through—
7	(1) disruptions with respect to—
8	(A) the sourcing of materials;
9	(B) production; and
10	(C) the disposal of products and services;
11	(2) changes in the availability and prices of raw
12	materials and other inputs;
13	(3) changes in agricultural production and with
14	respect to food security;
15	(4) direct damages to fixed assets;
16	(5) increases in costs associated with insured or
17	uninsured losses;
18	(6) changes in asset values;
19	(7) impacts on—
20	(A) aggregate demand for products and
21	services;
22	(B) labor productivity;
23	(C) asset liquidity; and
24	(D) credit availability;

1	(8) mass migration and increases in disease and
2	mortality rates;
3	(9) international conflict, as such conflict re-
4	lates to global economic activity and output; and
5	(10) changes in any other microeconomic or
6	macroeconomic condition that the Board of Gov-
7	ernors, in coordination with the climate science
8	leads, determines to be relevant.
9	SEC. 6. CLIMATE-RELATED ENHANCED SUPERVISION FOR
10	CERTAIN NONBANK FINANCIAL COMPANIES
11	AND BANK HOLDING COMPANIES.
12	Section 165(i)(1) of the Financial Stability Act of
13	2010 (12 U.S.C. 5365(i)(1)) is amended—
14	(1) in subparagraph (B)(i), by inserting "except
15	as provided in subparagraph (C)(ii)(I)," before
16	"shall provide"; and
17	(2) by adding at the end the following:
18	"(C) BIENNIAL TESTS REQUIRED.—
19	"(i) Definitions.—In this subpara-
20	graph —
21	"(I) the term 'capital distribu-
22	tion' has the meaning given the term
23	in section $225.8(d)(4)$ of title 12 ,
24	Code of Federal Regulations, as in ef-

1	fect on the date of enactment of this
2	subparagraph;
3	"(II) the term 'capital policy' has
4	the meaning given the term in section
5	225.8(d)(7) of title 12, Code of Fed-
6	eral Regulations, as in effect on the
7	date of enactment of this subpara-
8	graph; and
9	"(III) the terms 'climate science
10	leads' and 'covered entity' have the
11	meanings given those terms in section
12	3 of the Climate Change Financial
13	Risk Act of 2021.
14	"(ii) Tests.—
15	"(I) In general.—Subject to
16	the other requirements of this clause,
17	the Board of Governors, in coordina-
18	tion with the appropriate primary fi-
19	nancial regulatory agencies and the
20	climate science leads, shall conduct bi-
21	ennial analyses in which each covered
22	entity is subject to evaluation, under
23	an adverse set of conditions, of wheth-
24	er that covered entity has the capital,
25	on a total consolidated basis, nec-

essary to absorb financial losses that
would arise under each climate change
risk scenario developed under section
5 of the Climate Change Financial
Risk Act of 2021.
"(II) Initial tests.—With re-
spect to each of the first 3 analyses
conducted under subclause (I)—
"(aa) the covered entity to
which such an analysis applies
shall not be subject to any ad-
verse consequences as a result of
the analysis; and
"(bb) the Board of Gov-
ernors shall—
"(AA) not later than 60
days after the date on which
the Board of Governors
completes each such anal-
ysis, make a summary of the
analysis publicly available;
and
"(BB) submit a copy of
the results of the analysis to
the Committee on Banking,

1	Housing, and Urban Affairs
2	of the Senate and the Com-
3	mittee on Financial Services
4	of the House of Representa-
5	tives.
6	"(III) CLIMATE RISK REMEDI-
7	ATION PLAN.—
8	"(aa) In general.—Except
9	with respect to the first analysis
10	conducted under subclause (I),
11	each covered entity shall, before
12	being subject to an analysis
13	under that subclause, submit to
14	the Board of Governors a remedi-
15	ation plan with respect to climate
16	risk planning (referred to in this
17	subclause as a 'climate risk reme-
18	diation plan'), which shall be
19	based on the results of the most
20	recently conducted analysis of the
21	covered entity under that sub-
22	clause.
23	"(bb) Contents.—Each cli-
24	mate risk remediation plan re-

1	quired under item (aa) shall in-
2	clude
3	"(AA) a capital policy
4	with respect to climate risk
5	planning; and
6	"(BB) qualitative and
7	quantitative targets for bal-
8	ance sheet and off-balance
9	sheet exposures, and other
10	business operations, that
11	remedy vulnerabilities identi-
12	fied in the most recently
13	conducted analysis of the
14	applicable covered entity
15	under subclause (I).
16	"(cc) Rejection.—Except
17	as provided in subclause (II)(aa),
18	the Board of Governors may ob-
19	ject to a climate risk remediation
20	plan submitted by a covered enti-
21	ty under item (aa) if the Board
22	of Governors determines that—
23	"(AA) the covered enti-
24	ty has not demonstrated a
25	reasonable plan to maintain

1	capital above each minimum
2	regulatory capital ratio on a
3	pro forma basis under the
4	adverse set of conditions de-
5	scribed in subclause (I);
6	"(BB) the climate risk
7	remediation plan is other-
8	wise not reasonable or ap-
9	propriate;
10	"(CC) the assumptions
11	and analysis underlying the
12	climate risk remediation
13	plan, or the methodologies
14	and practices that support
15	the climate risk remediation
16	plan, are not reasonable or
17	appropriate; or
18	"(DD) the climate risk
19	remediation plan otherwise
20	constitutes an unsafe or un-
21	sound practice.
22	"(dd) General distribu-
23 TIC	ON LIMITATION.—If the Board
24 of	Governors, under item (cc),
25 obj	ects to a climate risk remedi-

1 ation plan submitted by a cov-2 ered entity under item (aa), the 3 covered entity may not make any 4 capital distribution, other than a capital distribution arising from 6 the issuance of a regulatory cap-7 ital instrument eligible for inclu-8 sion in the numerator of a min-9 imum regulatory capital ratio.".

10 SEC. 7. SUB-SYSTEMIC EXPLORATORY SURVEY.

- 11 (a) DEVELOPMENT OF SURVEY.—The Board of Gov12 ernors, in consultation with the Comptroller of the Cur13 rency and the Board of Directors of the Federal Deposit
 14 Insurance Corporation, shall develop an exploratory survey
 15 to assess—
 - (1) the ability of surveyed entities, including agricultural banks, community banks, and other financial institutions with a significant concentration of business activities in certain geographical areas or industries, to withstand each climate risk scenario developed under section 5; and
 - (2) how surveyed entities plan to make adaptations to the business models and capital planning of those entities in response to the risks presented in

16

17

18

19

20

21

22

23

1	each climate change risk scenario developed under
2	section 5.
3	(b) Administration of Survey.—
4	(1) Initial administration.—
5	(A) IN GENERAL.—Not later than 1 year
6	after the completion of the first analysis under
7	subparagraph (C) of section 165(i)(1) of the Fi-
8	nancial Stability Act of 2010 (12 U.S.C.
9	5365(i)(1)), as added by section 6 of this Act,
10	the Board of Governors shall administer the
11	survey developed under subsection (a) to each
12	surveyed entity.
13	(B) Assessment and report.—Not later
14	than 18 months after the date on which the
15	Board of Governors completes the administra-
16	tion of the survey under subparagraph (A), the
17	Board of Governors shall—
18	(i) assess the responses to the survey;
19	and
20	(ii) publicly release a report that sum-
21	marizes the results of the survey, which
22	shall include the analysis of the Board of
23	Governors regarding whether the planned
24	actions of the surveyed entities to which

1	the survey was administered, in the aggre-
2	gate—
3	(I) are plausible; and
4	(II) would be effective.
5	(2) Subsequent administration.—
6	(A) IN GENERAL.—After the release of the
7	report required under paragraph (1)(B)(ii), the
8	Board of Governors shall, on a biennial basis,
9	administer to each surveyed entity the survey
10	developed under subsection (a).
11	(B) Subsequent report.—Not later
12	than 180 days after the date on which each sur-
13	vey administered under subparagraph (A) is
14	completed, the Board of Governors shall pub-
15	licly release a report that summarizes the re-
16	sults of the survey, which shall include the anal-
17	ysis described in paragraph (1)(B)(ii).
18	(c) Effect of Survey Participation.—
19	(1) In general.—With respect to a surveyed
20	entity to which any survey under this section is ad-
21	ministered—
22	(A) subject to paragraph (2), the entity
23	shall not be subject to any adverse consequence
24	on the basis of a response provided by the enti-
25	ty to the survey; and

- 1 (B) in any report released with respect to 2 the survey, the Board of Governors may not 3 identify any individual response submitted by 4 the entity to the survey.
- 5 (2) RULE OF CONSTRUCTION.—Nothing in 6 paragraph (1)(A) may be construed to preclude the 7 Board of Governors from pursuing an enforcement 8 action against a surveyed entity because of a viola-9 tion discovered by the Board of Governors during an 10 examination of the surveyed entity that is inde-11 pendent of a survey administered under this section.

12 SEC. 8. FINANCIAL STABILITY OVERSIGHT COUNCIL.

13 (a) In General.—The Financial Stability Oversight
14 Council shall establish a committee of the Council that
15 shall support the Council in identifying risks to, and in
16 responding to emerging threats to, the stability of the
17 United States financial system as a result of climate
18 change.

(b) Responsibilities.—

20 (1) COMMITTEE.—The committee established 21 under subsection (a) shall, not later than 1 year 22 after the completion of the first analysis required 23 under subparagraph (C) of section 165(i)(1) of the 24 Financial Stability Act of 2010 (12 U.S.C. 25 5365(i)(1)), as added by section 6 of this Act, and

1	in consultation with the Office of Financial Re-
2	search, submit to Congress an assessment of the risk
3	posed by climate change to the efficiency, competi-
4	tiveness, and stability of the United States financial
5	system as a whole.
6	(2) COUNCIL.—For each year after the year in
7	which the assessment required under paragraph (1)
8	is submitted, the Financial Stability Oversight Coun-
9	cil shall include in the annual report required under
10	section 112(a)(2)(N) of the Financial Stability Act
11	of 2010 (12 U.S.C. 5322(a)(2)(N)) an update to
12	that assessment.
13	(c) Composition.—The committee established under
14	subsection (a) shall be composed of—
15	(1) the Chairman of the Board of Governors;
16	(2) the Secretary of the Treasury;
17	(3) the Comptroller of the Currency;
18	(4) the Chairperson of the Board of Directors
19	of the Federal Deposit Insurance Corporation;
20	(5) the Chairman of the Securities and Ex-
21	change Commission;
22	(6) the Chairperson of the Commodity Futures
23	Trading Commission; and

1	(7) any other voting or nonvoting members that
2	the Financial Stability Oversight Council determines
3	to be appropriate.

 \bigcirc