Welcome to the

Climate & Resilience (EX) Task Force: *Climate Disclosure Workstream*3

OUR MEETING WILL BEGIN SHORTLY

NAIC Confidential

- ✓ All audio will be muted upon entry
- ✓ Prior to speaking, unmute both **Webex** and your **cell phone**
- ✓ If you have joined by phone, to mute and unmute your line, press*6
- ✓ Enter with video on or off (your choice)
- ✓ Use the "Chat" feature for questions, comments or assistance from moderators
- ✓ For any technical challenges please contact the NAIC Technical Support Team at MeetingTechHelp@naic.org or 866-874-4905
- ✓ The meeting is being recorded
- ✓ Task Force members, please post in Chat that you are present

Date: 5/11/21

Virtual Meeting

CLIMATE AND RESILIENCY (EX) TASK FORCE
CLIMATE RISK DISCLOSURE WORKSTREAM
Wednesday, May 12, 2021
2:00 – 3:15 p.m. ET / 1:00 – 2:15 p.m. CT / 12:00 – 1:15 p.m. MT / 11:00 a.m. – 12:15 p.m. PT

ROLL CALL

Andrew R. Stolfi, Vice Chair	Oregon	Yue (Nina) Chen	New York
Mike Peterson	California	Elizabeth Kelleher Dwyer	Rhode Island
George Bradner	Connecticut	David Combs	Tennessee
Peter Brickwedde	Minnesota	Mike Kreidler	Washington

NAIC Support Staff: Anne Obersteadt/Jennifer Gardner

AGENDA

1. Hear a Presentation from NAIC Consumer Representatives on Climate Disclosures — Attachments A-B
   —*Birny Birnbaum (Center for Economic Justice*—CEJ*)*
   —*David Arkush (Public Citizen)*

2. Discuss Suggestions Received on *Questions to Determine Objectives of NAIC Climate Disclosures* — Attachment C
   —*Commissioner Andrew R. Stolfi (OR)*

3. Discuss Administering the *Questions to Determine Objectives of NAIC Climate Disclosures*
   —*Commissioner Andrew R. Stolfi (OR)*

4. Discuss Any Other Matters—*Commissioner Andrew R. Stolfi (OR)*

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Hear a Presentation from NAIC Consumer Representatives on Climate Disclosures

—Birny Birnbaum (CEJ)
—David Arkush (Public Citizen)

Improving the NAIC's Insurer Climate Risk Disclosure

NAIC Climate Risk and Resiliency Task Force

May 12, 2021

Birny Birnbaum
Center for Economic Justice

The Center for Economic Justice

CEJ is a non-profit consumer advocacy organization dedicated to representing the interests of low-income and minority consumers as a class on economic justice issues. Most of our work is before administrative agencies on insurance, financial services and utility issues.

On the Web: www.cej-online.org

About Birny Birnbaum

Birny Birnbaum is the Director of the Center for Economic Justice, a non-profit organization whose mission is to advocate on behalf of low-income consumers on issues of availability, affordability, accessibility of basic goods and services, such as utilities, credit and insurance.

Birny, an economist and former insurance regulator, has worked on climate-related issues at the NAIC from the first discussions of the Climate Risk Disclosure. Since 1991, he has worked to improve the role of insurance in promoting loss mitigation and resiliency for individuals, businesses and communities.

He has served for many years as a designated Consumer Representative at the National Association of Insurance Commissioners and is a member of the U.S. Department of Treasury's Federal Advisory Committee on Insurance, where he co-chairs the subcommittee on insurance availability. Birny is also a member of the U.S. Federal Reserve Board's Insurance Policy Advisory Committee.

Birny served as Associate Commissioner for Policy and Research and the Chief Economist at the Texas Department of Insurance. Birny was educated at Bowdoin College and the Massachusetts Institute of Technology. He holds Master's Degrees from MIT in Management and in Urban Planning with concentrations is finance and applied economics. He holds the AMCM certification.

Why CEJ Works on Insurance Issues

Insurance Products Are Financial Security Tools Essential for Individual and Community Economic Development:

CEJ works to ensure ***fair access*** and ***fair treatment*** for insurance consumers, particularly for low- and moderate-income consumers.

Insurance is the Primary Institution to Promote Loss Prevention and Mitigation, Resiliency and Sustainability:

CEJ works to ensure insurance institutions maximize their role in efforts to reduce loss of life and property from catastrophic events and to ***promote resiliency and sustainability*** of individuals, businesses and communities.

NAIC Climate Risk Disclosure Focused on Financial Condition

The NAIC Climate Risk Disclosure and other climate risk disclosures, such as the TCFD, focus on the financial implications of climate on the reporting companies and are targeted for use by investors, investment analysts and financial regulators. There is opportunity for improvement and convergence towards a single framework for climate-related financial disclosures. Our colleagues' presentation identifies some of the principles and opportunities for such improvement.

Current CRD Gap: Consumer-Facing Information

Our comments focus on a major gap in the current NAIC CRD (and other climate risk disclosure frameworks) that is unique to the insurance industry – namely, the lack of disclosures related to insurance company's offerings in the face of a changing climate. This is information to be used by consumers to better assess which insurer they want to do business with because of confidence the insurer will remain the market for the consumer. These types of disclosures are also important and necessary for policymakers to craft public policy as insurers prepare to leave certain markets or dramatically modify product offerings and price.

Added Questions to Assist Consumers and Policymakers

- What models or type of modeling do you utilize for assessing the impact of climate change on the products you are willing to offer and on your business strategy?

- What are the key assumptions regarding the magnitude of climate change you utilize in your climate modeling?

- Over the past five years, what changes affecting the availability and affordability of your products and coverage in the markets you serve – in terms of geography, types of insurance, perils insured and rate change – have you made as a result of climate change impacts?

- Based on your current assessment of climate risk, what impacts do you currently anticipate on the availability and affordability of products and coverage in the markets you serve – in terms of geography, types of insurance, perils insured and rate change – as a result of climate change?

- If (provide metric for climate impact, e.g. 1.5 degree temperature rise), what impacts do you anticipate on the availability and affordability or products and coverage in the market you serve – in terms of geography, types of insurance, perils insured and rate change?

- Based on your current assessment of climate risk, what actions are you taking to be able continue serving the markets you currently serve for the next 10 years?

- Have you developed or are you planning to develop new products to address insurance needs related to climate change?

While some questions and answers must be qualitative, it is important to include quantitative measures of climate impact against which the insurers can describe their response.

We also suggest that identification of specific geographic areas at a state and county level with the associated insured perils and insurer response is needed and we consider those to be quantitative responses.

Another area for quantitative question and response is for anticipated price / rate change. For example, when and where does the insurer anticipate rate changes of 15%, 30%, 50% and 100% due to climate risk?

Who Should Report?

All insurers should report the insurance-specific climate disclosures we suggest for three reasons.

First, active consideration of insurer business response to climate risk is simply good corporate governance.

Second, consideration and disclosure of anticipated responses to climate risk enables policymakers to better work with insurers to craft partnerships for resilience and mitigation to promote availability and affordability.

Third, any insurance consumer should be able to assess their insurer's approach to and planned responses to climate risk. All insurers should report because the impacts of climate change impact every type of peril insured throughout the country.

NAIC CONSUMER ADVOCATE PRESENTATION

David Arkush
5/12/2021

PUBLIC CITIZEN
215 Pennsylvania Avenue, SE • Washington, D.C. 20003 • 202/546-4996 • www.citizen.org

Agenda

- Introduction
- The full costs of climate change
- Insurance & climate change
- Why disclosure?
- Framework for thinking about disclosure
- What to disclose

Climate change is killing people…

- More frequent heat waves
- More destructive hurricanes
- New illnesses
- Severe droughts disrupting agriculture
- Migration, violence and war

Effects of climate change today

Annual deaths in the hundreds of thousands

Property damage in the billions, if not trillions

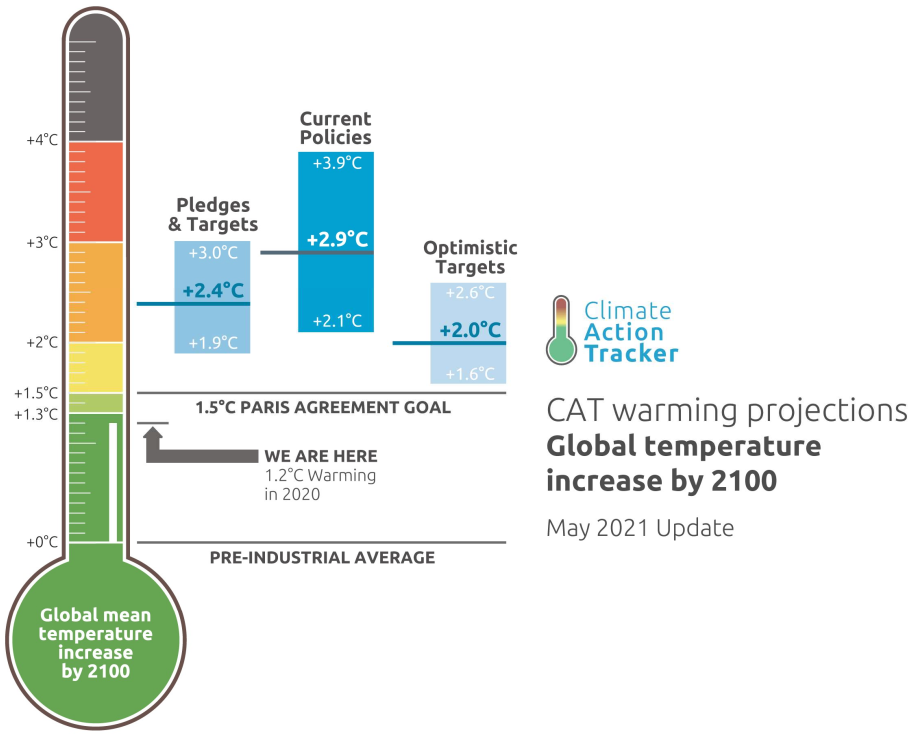
…And it's only going to get worse

We've only experienced 1ºC of warming so far

Staying below 2ºC will require a higher level of government investment than WWII, and the effects may still render the tropics uninhabitable

3ºC of warming by 2100 is so catastrophic, it could end civilization as we know it

There's a 1 in 6 chance that warming reaches or exceeds **4ºC, a level that most humans may not survive**



One clear message for insurers: stop contributing to climate change!

Insurers will leave governments and consumers holding the bag

Current plan is to manage climate risk by raising prices or withdrawing coverage

Some discussing federal bailouts or backstops for climate-related damage

A recipe for managed retreat, not long-term success

California wildfires and National Flood Insurance program show the future

"The idea that insurance companies will take premiums to protect you and then invest them in the very things that are causing those ills is really beyond comprehension"

-- Daniel Schreiber, CEO of Lemonade

The only solution is to stop contribution to the problem by insuring and investing in fossil fuels

PUBLICCITIZEN

Disclosure is the first step to meet consumer needs on climate

Moving fast shows that regulators take climate change seriously

Gives consumers a chance to choose insurers based on climate policies, not just climate PR

Gives fiduciaries, regulators and consumer representatives the information they need to accurately price assets and allocate capital

Good disclosure framework shows climate exposure and how an insurer manages the risk

Standardized	• Requires disclosure of specific information • Based on well-defined methodology • Allows meaningful comparison across insurers
Comprehensive	• Requires disclosure of all relevant information about climate impacts • At minimum, includes management approach to climate risk, GHG emissions for all scopes, projected future emissions and forward looking financial metrics
Transparent	• Data and methods used are publicly available • Provided in machine readable format

What should be disclosed?

Fossil fuel investments

All investments in fossil fuel related entities

- High risk of becoming stranded assets in a low-carbon transition and threatening insurer solvency
- Transparency about risk
- Supports consumer choice

Fossil fuel underwriting

All fossil fuel related entities that the insurer underwrites or otherwise insures and total premium from those projects

- Rising litigation risk, reputational risk and potential for massive liabilities, threatening solvency
- Supports consumer choice

Key takeaways

- Stopping climate contribution by insurers would be better than just disclosing it
- But disclosure still matters, and it can be done quickly
- Disclosure should be
  - Standardized
  - Comprehensive
  - Transparent
- Disclosure should include
  - Information relevant to supervision, like risk-management processes
  - Emissions of all scopes
  - Projected future emissions vs. science based targets
  - Exposure to transition and physical risks across a set of standardized scenario
  - Fossil fuel cover and investments

ABOUT PUBLIC CITIZEN

Public Citizen is a national non-profit organization with more than 500,000 members and supporters. We represent consumer interests through lobbying, litigation, administrative advocacy, research, and public education on a broad range of issues including consumer rights in the marketplace, product safety, financial regulation, worker safety, safe and affordable health care, campaign finance reform and government ethics, fair trade, climate change, and corporate and government accountability.

Contact Public Citizen

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For more information, please visit www.citizen.org.

Q&A

Discuss Implemention of Revision Suggestions Received on *Questions to Determine Objectives of NAIC Climate Disclosures*

—Commissioner Andrew R. Stolfi (OR)

Revision Suggestions Received on Questions to Determine Objectives of the NAIC Climate Disclosures

Question	Revision Suggested	Submitter	Response	Resolution
1) Who is the audience and what do they wish to glean from the results? **a) What qualitative and quantitative metrics do they need?**	Does the purpose of the Climate Disclosure differ from those of other existing mandatory disclosures such as, but not limited to: a. Financial exams, b. ORSA, c. Corporate Governance Annual Disclosure (CGAD), d. Enterprise Risk Reports, e. RBC Reports, f. Operational Risk, g. Other reg. disclosures required for publicly traded companies	NAMIC	a. Fin. exams are only every 5 years and shared at state level; b. Not all are subject to ORSA and it's not public; c. CGAD is confidential and not specific to climate risks; d. Format, length, and detail addressing risks vary substantially; e. NAIC RBC is confidential and is focused on solvency surveillance; f. Operational Risk is not a specific report; g. Not all insurers are publicly traded	No revision to questions recommended.
	Add to establish what regulatory purpose the survey serves: Who is the audience and what do they with to glean from the results? a. Solvency Regulation?; b. Risk Evaluation?; c. Both? or d. Other?	NAMIC	Propose incorporating into the existing question	Add the red? 1) Who is the audience and what do they wish to glean from the results (solvency regulation, risk evaluation, etc.)?
	For those companies already providing robust responses to the NAIC survey, what information not already being provided would be useful?	AAA	Propose adding this revised	Add the red? 1c) What information not already being provided in the survey would be useful?
	What can be done to make responses from the disclosures more useful for analysis by regulators and others, and more likely to provide information on best practices to other companies?	AAA	Covered by 1b	No revision to questions recommended.

Revision Suggestions Received on Questions to Determine Objectives of the NAIC Climate Disclosures

Question	Revision Suggested	Submitter	Response	Resolution
b) How should the information in the survey be formatted to be useful?	1) What do U.S. insurance regulators want and need for solvency regulation? What other objectives are state regulators seeking to advance? 2) Are there multiple audiences? 3) If non-insurance regulatory audiences are intended, what information do regulators want to provide to them? 4) Do the audiences (regulator v. others) need the same or different information? 5) Are there existing regulatory tools that can provide the necessary information for some or all of the intended purposes and audiences?	RAA	Mostly already covered in the existing questions or have been addressed within the above response to NAMIC. Could consider revisions to make clear there could be more than one audience.	Add the red? 1) Who is(are) the audience(s) and what do they wish to glean from the results?
	Are the disclosures and the processes supporting them helpful to the companies in making decisions that are relevant and material to their businesses?	APCIA	This is a question best posed to the companies filling out the survey. May also be addressed as a response to 1a indicating companies are an audience and that filling out the survey can drive change or invoke thought regarding risk management processes.	No revision to questions recommended.
2) Who should report? a) What is the threshold? b) Should it be compulsory? c) What states are participating?	Who within a company is responsible for filling out the disclosure (or specific questions), and how does that affect the nature of the information supplied?	AAA	Consider adding that to the survey itself. Objective Question two is meant to address what legal entity level should report. Propose 2c be deleted to reduce confusion as 2, 2a and 2b are sufficient to determine this.	Delete the red? ~~c) What states are participating?~~

Revision Suggestions Received on Questions to Determine Objectives of the NAIC Climate Disclosures

Question	Revision Suggested	Submitter	Response	Resolution
3) What report framework should be used? a) TCFD? b) NAIC Climate Disclosure Survey? c) Another framework (such as CDP)? d) Some combination?	1) Should reporting frameworks required by international group supervisors be accepted? 2) Should the recommendations provide for flexibility as reporting formats change? 3) To what extent can existing regulatory tools, including ORSA, address and collect some or all of the disclosure sought?	RAA	The concepts of 1 and 2 are already included in the current question and, as worded, appear to be better suited as a response to the existing questions. Three has been addressed in earlier responses.	No revision to questions recommended.
	Is there a demonstrated regulatory need to make any changes to the current survey and option to report using the TCFD framework?	APCIA	Several entities have analyzed the results of the survey and determined that company responses often fall short of providing useful information. As the TCFD becomes more widely used, it is pertinent for state insurance regulators to revisit their disclosures for needed improvements.	No revision to questions recommended.
4) How should the questions be designed? a) Multiple choice? b) Open-ended?	What motivates a company to take actions to mitigate climate risk and how can this be better understood via the survey questions or disclosure prompts?	AAA	Consider adding to the survey itself and/or make part of any supporting guidance material.	No revision to questions recommended.
	1) "b. Open-ended?" If not a narrative response, should be a separate question. 2) Assuming that a choice is made to have readily comparable survey questions, will there be a narrative component? 3) If there is a narrative component, should insurers be able to respond by referencing an attached or linked disclosure? (like TCFD is accepted now.)	RAA	One is N/A as it is a *response* to the question. Two is a question that will be determined based on the responses to the questions, but not approriate to be asked as a question in this context. Consider adding three slightly revised.	Add the red? 4d) Should insurers be able to respond to narrative responses by referencing an attachment or linked disclousre (such as TCFD)?

Revision Suggestions Received on Questions to Determine Objectives of the NAIC Climate Disclosures

Question	Revision Suggested	Submitter	Response	Resolution
c) Close-ended (rating scale, dropdown, ranking, etc.)?	In view of existing voluntary and mandatory reporting is there a regulatory need for more or different reporting? If there is a regulatory need, what is it and what is the most effective and least burdensome way to obtain information that reflects different sizes and business models?	APCIA	Regulatory need is covered by question 1) Who is the audience and what do they wish to glean from the results? Consider revisions to address obtaining info in least burdensome way.	Add the red? 4e) Should questions be tailored to size of company or logic added to meet companies where they are?
	How will the principle of proportionality be implemented with regard to new disclosures?	APCIA	The proposed addition of 4e addresses this.	
5) When should the information be reported and what is the effective date of the changes?	1) Given decade of NAIC Disclosure Survey, reframe to: Given the experience with the Insurer Climate Risk Disclosure Survey, what would be the best content and format for climate disclosures going forward, and how shall a transition from the current survey to that successor be managed? 2) What transitional arrangements would maximize responsiveness and minimize disruption for participating companies?	AAA	Content and format from one is covered in 1a) What qualitative and quantitative metrics do they need?; 1b) How should the information in the survey be formatted to be useful?; 3) What report framework should be used? and 4) How should the questions be designed? Consider revising existing question to incorporate transition point.	Consider revising to: 5) How should a transition from the current survey to a successor be managed?
	What are reasonable timeframes for reporting and how long should companies have from the point where a question is decided to be included and the deadline for reporting on it?	APCIA	Consider adding two sub-set questions to specifically address effective date of changes and timing.	Add red? 5a) What should be the effective date of the changes? 5b) What should be the timing of information reported?

Revision Suggestions Received on Questions to Determine Objectives of the NAIC Climate Disclosures

Question	Revision Suggested	Submitter	Response	Resolution
6) Where should climate disclosures be reported? a) Continue to make it available through California's website? b) Build an NAIC repository? c) Directed to the domestic state?	1) With the regulator of the ultimate insurance entity in the holding company? Groupwide supervisor? 2) Can and should existing regulatory tools and filings be utilized?	RAA	One is covered in 6c. Two has been addressed in previous responses.	No revision to questions recommended.
7) How should the results be made available? a) Only to regulators? b) Publicly available (as it is today)?	c) With the regulator of the ultimate insurance entity in the holding company? Groupwide supervisor? d) Can and should existing regulatory tools and filings be utilized?	RAA	C is covered in 6c. D has been addressed in previous responses.	No revision to questions recommended.
	c) Should some information be confidential or capable of being declared confidential? If so, what are the options for separating the disclosure information? d) Are there existing regulatory tools that be used in conjunction with or in lieu of certain climate disclosure questions?	RAA	D has been addressed in previous responses. Consider adding c.	Add red? c) Combination of public and regulator-only? If so, how should the disclosure information be separated?
	How will confidentiality of any additional mandatory disclosures be maintained?	APCIA	Current question and above revision suggestion already addresses this.	No revision to questions recommended.

Revision Suggestions Received on Questions to Determine Objectives of the NAIC Climate Disclosures

Question	Revision Suggested	Submitter	Response	Resolution
8) New Question Proposed	What might be done to encourage small and mid-size companies in all P/C and life lines of business, and health insurance companies of all sizes, to participate and to participate robustly in whatever disclosure regime is established? What can be done to encourage companies providing minimal responses to the current survey to provide more robust responses?	AAA	Propose adding these slightly revised. Question 9 addresses encouraging particpation through additional supports (like documentation).	Consider adding: 8. What can be done to help companies recognize climate-related risks and how they should be disclosed.
9) New Question Proposed	How can the NAIC best assist companies who are beginning their journey with regard to considering and reporting on longer term climate risk issues, such as transition risks?	APCIA	Propose adding this slightly revised.	Consider adding: 9. What support is necessary to assist companies in filling out the survey?

Discuss Administering the *Questions to Determine Objectives of NAIC Climate Disclosures*

—Commissioner Andrew R. Stolfi (OR)

Any Other Matters

—Commissioner Andrew R. Stolfi (OR)

AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 2570

OFFERED BY MR. CASTEN OF ILLINOIS

[Amendment to the Climate Risk Disclosure Act of 2021]

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Climate Risk Disclosure Act of 2021".

SEC. 2. SENSE OF CONGRESS.

It is the sense of Congress that—

(1) climate change poses a significant and increasing threat to the growth and stability of the economy of the United States;

(2) many sectors of the economy of the United States and many American businesses are exposed to climate-related risk, which may include exposure to—

(A) the physical impacts of climate change, including the rise of the average global temperature, accelerating sea-level rise, desertification, ocean acidification, intensification of storms, increase in heavy precipitation, more frequent and intense temperature extremes, more severe droughts, and longer wildfire seasons;

(B) the economic disruptions and security threats that result from the physical impacts described in subparagraph (A) including conflicts over scarce resources, conditions conducive to violent extremism, the spread of infectious diseases, and forced migration;

(C) the transition impacts that result as the global economy transitions to a clean and renewable energy, low-emissions economy, including financial impacts as climate change fossil fuel assets becoming stranded and it becomes uneconomic for companies to develop fossil fuel assets as policymakers act to limit the worst impacts of climate change by keeping the rise in average global temperature to 1.5 degrees Celsius above pre-industrial levels; and

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

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

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

(5) the Securities and Exchange Commission has a duty to promote a risk-informed securities market that is worthy of the trust of the public as families invest for their futures;

(6) investors, lenders, and insurers are increasingly demanding climate risk information that is consistent, comparable, reliable, and clear;

(7) including standardized, material climate change risk and opportunity disclosure that is useful for decision makers in annual reports to the Commission will increase transparency with respect to risk accumulation and exposure in financial markets;

(8) requiring companies to disclose climate-related risk exposure and risk management strategies will encourage a smoother transition to a clean and renewable energy, low-emissions economy and guide capital allocation to mitigate, and adapt to, the effects of climate change and limit damages associated with climate-related events and disasters; and

(9) a critical component in fighting climate change is a transparent accounting of the risks that climate change presents and the implications of continued inaction with respect to climate change.

SEC. 3. DISCLOSURES RELATING TO CLIMATE CHANGE.

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

"(s) DISCLOSURES RELATING TO CLIMATE CHANGE.—

"(1) DEFINITIONS.—In this subsection:

"(A) 1.5 DEGREE SCENARIO.—The term '1.5 degree scenario' means a scenario that aligns with greenhouse gas emissions pathways that aim to limit global warming to 1.5 degrees Celsius above pre-industrial levels.

"(B) APPROPRIATE CLIMATE PRINCIPALS.—The term 'appropriate climate principals' means—

"(i) the Administrator of the Environmental Protection Agency;

"(ii) the Administrator of the National Oceanic and Atmospheric Administration;

"(iii) the Director of the Office of Management and Budget;

"(iv) the Secretary of the Interior;

"(v) the Secretary of Energy; and

"(vi) the head of any other Federal agency, as determined appropriate by the Commission.

"(C) BASELINE SCENARIO.—The term 'baseline scenario' means a widely-recognized analysis scenario in which levels of greenhouse gas emissions, as of the date on which the analysis is performed, continue to grow, resulting in an increase in the global average temperature of 1.5 degrees Celsius or more above pre-industrial levels.

"(D) CARBON DIOXIDE EQUIVALENT.—The term 'carbon dioxide equivalent' means the number of metric tons of carbon dioxide emissions with the same global warming potential as one metric ton of another greenhouse gas, as determined under table A–1 of subpart A of part 98 of title 40, Code of Federal Regulations, as in effect on the date of enactment of this subsection.

"(E) CLIMATE CHANGE.—The term 'climate change' means a change of climate that is—

"(i) attributed directly or indirectly to human activity that alters the composition of the global atmosphere; and

"(ii) in addition to natural climate variability observed over comparable time periods.

"(F) COMMERCIAL DEVELOPMENT OF FOSSIL FUELS.—The term 'commercial development of fossil fuels' includes—

"(i) exploration, extraction, processing, exporting, transporting, refining, and any other significant action with respect to oil, natural gas, coal, or any byproduct thereof or any other solid or liquid hydrocarbons that are commercially produced; and

"(ii) acquiring a license for any activity described in clause (i).

"(G) COVERED ISSUER.—The term 'covered issuer' means an issuer that is required to file an annual report under subsection (a) or section 15(d).

"(H) DIRECT AND INDIRECT GREENHOUSE GAS EMISSIONS.—The term 'direct and indirect greenhouse gas emissions' includes, with respect to a covered issuer—

"(i) all direct greenhouse gas emissions released by the covered issuer;

"(ii) all indirect greenhouse gas emissions with respect to electricity, heat, or steam purchased by the covered issuer;

"(iii) significant indirect emissions, other than the emissions described in clause (ii), emitted in the value chain of the covered issuer; and

"(iv) all indirect greenhouse gas emissions that are attributable to assets owned or managed, including assets that are partially owned or managed, by the covered issuer.

"(I) FOSSIL FUEL RESERVES.—The term 'fossil fuel reserves' has the meaning given the term 'reserves' under the final rule of the Commission titled 'Modernization of Oil and Gas Reporting' (74 Fed. Reg. 2158; published January 14, 2009).

"(J) GREENHOUSE GAS.—The term 'greenhouse gas'—

"(i) means carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, sulfur hexafluoride, nitrogen triflouride, and chlorofluorocarbons;

"(ii) includes any other anthropogenically-emitted gas that the Administrator of the Environmental Protection Agency determines, after notice and comment, to contribute to climate change; and

"(iii) includes any other anthropogenically-emitted gas that the Intergovernmental Panel on Climate Change determines to contribute to climate change.

"(K) GREENHOUSE GAS EMISSIONS.—The term 'greenhouse gas emissions' means the emissions of greenhouse gas, expressed in terms of metric tons of carbon dioxide equivalent.

"(L) PHYSICAL RISKS.—The term 'physical risks' means financial risks to long-lived fixed assets, locations, operations, or value chains that result from exposure to physical climate-related effects, including—

"(i) increased average global temperatures and increased frequency of temperature extremes;

"(ii) increased severity and frequency of extreme weather events;

"(iii) increased flooding;

"(iv) sea level rise;

"(v) ocean acidification;

"(vi) increased frequency of wildfires;

"(vii) decreased arability of farmland;

"(viii) decreased availability of fresh water; and

"(ix) any other financial risks to long-lived fixed assets, locations, operations, or value chains determined appropriate by the Commission, in consultation with appropriate climate principals.

"(M) SOCIAL COST OF CARBON.—The term 'social cost of carbon' means the social cost of carbon, as described in the technical support document entitled 'Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under

Executive Order 12866', published by the Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, in August 2016 or any successor or substantially related estimate of the monetized damages associated with an incremental increase in carbon dioxide emissions in a given year.

"(N) TRANSITION RISKS.—The term 'transition risks' means financial risks that are attributable to climate change mitigation and adaptation, including efforts to reduce greenhouse gas emissions and strengthen resilience to the impacts of climate change, including—

"(i) costs relating to—

"(I) international treaties and agreements;

"(II) Federal, State, and local policy;

"(III) new technologies;

"(IV) changing markets;

"(V) reputational impacts relevant to changing consumer behavior; and

"(VI) litigation; and

"(ii) assets that may lose value or become stranded due to any of the costs described in subclauses (I) through (VI) of clause (i).

"(O) VALUE CHAIN.—The term 'value chain'—

"(i) means the total lifecycle of a product or service, both before and after production of the product or service, as applicable; and

"(ii) may include the sourcing of materials, production, transportation, and disposal with respect to the product or service described in clause (i).

"(2) FINDINGS.—Congress finds that—

"(A) short-, medium-, and long-term financial and economic risks and opportunities relating to climate change, and the national and global reduction of greenhouse gas emissions, constitute information that issuers—

"(i) may reasonably expect to affect shareholder decision making; and

"(ii) should regularly identify, evaluate, and disclose; and

''(B) the disclosure of information described in subparagraph (A) should—

''(i) identify, and evaluate—

''(I) material physical and transition risks posed by climate change; and

''(II) the potential financial impact of such risks;

''(ii) detail any implications such risks have on corporate strategy;

''(iii) detail any board-level oversight of material climate related risks and opportunities;

''(iv) allow for intra- and cross-industry comparison, to the extent practicable, of climate-related risk exposure through the inclusion of standardized industry-specific and sector-specific disclosure metrics, as identified by the Commission, in consultation with the appropriate climate principals;

''(v) allow for tracking of performance over time with respect to mitigating climate risk exposure; and "(vi) incorporate a price on greenhouse gas emissions in financial analyses that reflects, at minimum, the social cost of carbon that is attributable to issuers.

"(3) DISCLOSURE.—Each covered issuer, in any annual report filed by the covered issuer under subsection (a) or section 15(d), shall, in accordance with any rules issued by the Commission pursuant to this subsection, include in each such report information regarding—

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

"(i) physical risks posed to the covered issuer by climate change; and

"(ii) transition risks posed to the covered issuer by climate change;

"(B) a description of any established corporate governance processes and structures to identify, assess, and manage climate-related risks;

"(C) a description of specific actions that the covered issuer is taking to mitigate identified risks;

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

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

“(4) RULE OF CONSTRUCTION.—Nothing in paragraph (3) may be construed as precluding a covered issuer from including, in an annual report submitted under subsection (a) or section 15(d), any information not explicitly referenced in such paragraph.

“(5) RULEMAKING.—The Commission, in consultation with the appropriate climate principals, shall, not later than 2 years after the date of the enactment of this subsection, issue rules with respect to the information that a covered issuer is required to disclose pursuant to this subsection and such rules shall—

“(A) establish climate-related risk disclosure rules, which shall—

“(i) be, to the extent practicable, specialized for industries within specific sectors of the economy, which shall include—

"(I) the sectors of finance, insurance, transportation, electric power, mining, and non-renewable energy; and

"(II) any other sector determined appropriate by the Commission, in consultation with the appropriate climate principals;

"(ii) include reporting standards for estimating and disclosing direct and indirect greenhouse gas emissions by a covered issuer, and any affiliates of the covered issuer, which shall—

"(I) disaggregate, to the extent practicable, total emissions of each specified greenhouse gas by the covered issuer; and

"(II) include greenhouse gas emissions by the covered issuer during the period covered by the disclosure;

"(iii) include reporting standards for disclosing, with respect to a covered issuer—

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

"(II) the percentage of fossil fuel-related assets as a percentage of total assets owned or managed by the covered issuer;

"(iv) specify requirements for, and the disclosure of, input parameters, assumptions, and analytical choices to be used in climate scenario analyses required under subparagraph (B)(i), including—

"(I) present value discount rates; and

"(II) time frames to consider, including 5, 10, and 20 year time frames; and

"(v) include reporting standards and guidance with respect to the information required under subparagraph (B)(iii);

"(B) require that a covered issuer, with respect to a disclosure required under this subsection—

"(i) incorporate into such disclosure—

“(I) quantitative analysis to support any qualitative statement made by the covered issuer;

“(II) the rules established under subparagraph (A);

“(III) industry-specific metrics that comply with the requirements under subparagraph (A)(i);

“(IV) specific risk management actions that the covered issuer is taking to address identified risks;

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

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

"(ii) consider, when preparing any qualitative or quantitative risk analysis statement contained in the disclosure—

"(I) a baseline scenario that includes physical impacts of climate change;

"(II) a 1.5 degrees scenario; and

"(III) any additional climate analysis scenario considered appropriate by the Commission, in consultation with the appropriate climate principals;

"(iii) if the covered issuer engages in the commercial development of fossil fuels, include in the disclosure—

"(I) an estimate of the total and a disaggregated amount of direct and indirect greenhouse gas emissions of the covered issuer that are attributable to—

"(aa) combustion;

"(bb) flared hydrocarbons;

"(cc) process emissions;

"(dd) directly vented emissions;

"(ee) fugitive emissions or leaks; and

"(ff) land use changes;

"(II) a description of—

"(aa) the sensitivity of fossil fuel reserve levels to future price projection scenarios that incorporate the social cost of carbon;

"(bb) the percentage of the reserves of the covered issuer that will be developed under the scenarios established in clause (ii), as well as a forecast for the development prospects of each reserve under the scenarios established in clause (ii);

"(cc) the potential amount of direct and indirect greenhouse gas emissions that are embedded in proved and probable reserves, with each such calculation presented as a total and in subdivided categories by the type of reserve;

"(dd) the methodology of the covered issuer for detecting and mitigating fugitive methane emissions, which shall include the frequency with which applicable assets of the covered issuer are observed for methane leaks, the processes and technology that the covered issuer uses to detect methane leaks, the percentage of assets of the covered issuer that the covered issuer inspects under that methodology, and quantitative and time-bound reduction goals of the issuer with respect to methane leaks;

"(ee) the amount of water that the covered issuer withdraws from freshwater sources for use and consumption in operations of the covered issuer; and

"(ff) the percentage of the water described in item (ee) that comes from regions of water stress or that face wastewater management challenges; and

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

“(aa) necessary;

“(bb) appropriate to safeguard the public interest; or

“(cc) directed at ensuring that investors are informed in accordance with the findings described in paragraph (2);

“(C) with respect to a disclosure required under section 13(s) of the Securities Exchange Act of 1934, require that a covered issuer include in such disclosure any other information, or use any climate-related or greenhouse gas emissions metric, that the Commission, in consultation with the appropriate climate principals, determines is—

“(i) necessary;

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

“(iii) directed at ensuring that investors are informed in accordance with the findings described in paragraph (2); and

"(D) with respect to a disclosure required under section 13(s) of the Securities Exchange Act of 1934, establish how and where the required disclosures shall be addressed in the covered issuer's annual financial filing.

"(6) FORMATTING.—The Commission shall require issuers to disclose information in an interactive data format and shall develop standards for such format, which shall include electronic tags for information that the Commission determines is—

"(A) necessary;

"(B) appropriate to safeguard the public interest; or

"(C) directed at ensuring that investors are informed in accordance with the findings described in paragraph (2).

"(7) PERIODIC UPDATE OF RULES.—The Commission shall periodically update the rules issued under this subsection.

"(8) COMPILATION OF INFORMATION DISCLOSED.—The Commission shall, to the maximum extent practicable make a compilation of the information disclosed by issuers under this subsection publicly available on the website of the Commission and update such compilation at least once each year.

"(9) REPORTS.—

"(A) REPORT TO CONGRESS.—The Commission shall—

"(i) conduct an annual assessment regarding the compliance of covered issuers with the requirements of this subsection;

"(ii) submit to the appropriate congressional committees a report that contains the results of each assessment conducted under clause (i); and

"(iii) make each report submitted under clause (ii) accessible to the public.

"(B) GAO REPORT.—The Comptroller General of the United States shall periodically evaluate, and report to the appropriate congressional committees on, the effectiveness of the Commission in carrying out and enforcing this subsection.".

SEC. 4. BACKSTOP.

If, 2 years after the date of the enactment of this Act, the Securities and Exchange Commission has not issued the rules required under section 13(s) of the Securities Exchange Act of 1934, and until such rules are issued, a covered issuer (as defined in such section 13(s)) shall be deemed in compliance with such section 13(s) if disclosures set forth in the annual report of such issuer satisfy the recommendations of the Task Force on Climate-related Financial Disclosures of the Financial Stability Board as reported in June, 2017, or any successor report, and as supplemented or adjusted by such rules, guidance, or other comments from the Commission.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Securities and Exchange Commission such sums as may be necessary to carry out this Act and the amendments made by this Act.