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**SENATE COMMITTEE ON ENVIRONMENTAL QUALITY**

**Senator Allen, Chair**

**2021 - 2022 Regular**

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**Bill No:** SB 449  
**Author:** Stern  
**Version:** 4/22/2021  
**Urgency:** No  
**Consultant:** Eric Walters

**Hearing Date:** 4/29/2021  
**Fiscal:** Yes

**SUBJECT:** Climate-related financial risk

**DIGEST:** Requires covered entities, as defined, to report annually on their climate-related financial risk, as defined, to the Secretary of State. Requires the Climate-Related Risk Disclosure Advisory Group to review and analyze those reports, and to regularly convene representatives from participating sectors to offer input on best practices.

**ANALYSIS:**

Existing law:

- 1) Establishes the Governor’s Office of Planning and Research (OPR) as the State of California’s comprehensive planning agency, and tasks it with studying future research and planning needs, fostering goal-driven collaboration, and delivering guidance to state partners and local communities, with a focus on land use and community development, climate risk and resilience, and high road economic development.
- 2) Provides processes and requirements related to forming business entities, such as corporations, partnerships, and limited liability companies, and requires that specified documents and instruments related to business entities be filed with the Secretary of State. (Corporations Code § 100 et seq)
- 3) Under SB 964 (Allen, Chapter 731, Statutes of 2017), requires California Public Employees’ Retirement System (CalPERS) and California State Teachers’ Retirement System (CalSTRS) to issue financial disclosures utilizing the TCFD recommendations

This bill:

- 1) Defines “climate-related financial risk” as material risk of harm to immediate and long-term financial outcomes due to climate change, including, but not limited to, risks to corporate operations, provision of goods and services, real

estate, supply chains, employee health and safety, capital and financial investments, institutional investments, financial standing of loan recipients and borrowers, shareholder value, insured assets, consumer demand, and financial markets and economic health.

- 2) Defines “covered entity” as any corporation, partnership, limited liability company, or other business entity incorporated, formed, or issued a license to operate or certificate of authority under the laws of the State of California, that had revenues of at least \$500 million in the prior calendar year.
- 3) By December 31, 2022, and annually thereafter, requires a covered entity to prepare a climate-related financial risk report disclosing the following:
  - a) Its climate-related financial risk, in accordance with the recommendations contained in the Final Report of Recommendations of the Task Force of Climate-Related Financial Disclosures.
  - b) Its measures to reduce and adapt to climate-related financial risk.
- 4) Requires a covered entity to submit its climate-related financial risk report to the Secretary of State and make the report available on the covered entity’s website. Requires the covered entity to submit to the Secretary of State a statement affirming, not under penalty of perjury, that the report discloses climate-related financial risk in accordance with the recommendations contained in the Final Report of Recommendations of the Task Force on Climate-Related Financial Disclosures.
- 5) Requires the advisory group established pursuant to Executive Order N-19-19 to collect and review the reports and annually prepare a public report that includes analysis of the reports and policy recommendations aimed to mitigate climate-related financial risk. Provides that the Governor’s Office of Planning and Research shall serve as the administrative staff of the advisory group.
- 6) Makes findings and declarations related to the threat of climate change, the role of companies in emitting greenhouse gases, and the risk posed to the economy and investors if climate-related financial risk is ignored.

## Background

- 1) *Financial risks & disclosures.* When investing money into a given asset, an investor lends money with the expectation of earning an additional return sometime in the future. Typically, the expected rate of return is a function of the risk associated with the investment; low-risk investments yield low returns,

and greater risk brings greater potential returns. Managing portfolios of assets to yield predictable returns requires an accurate assessment of the risk associated with those assets and appropriate pricing of them. Especially when the scale of assets is so large (for example, BlackRock, the world's largest asset management company, has roughly \$8.67 trillion in assets under management; nearly 10% of the gross world product), accurate risk management is essential. If companies and investors do not have access to sufficient information, they may misprice climate-related assets and create financial instability.

- 2) *Task Force on Climate-Related Financial Disclosures (TCFD)*. In 2015, after the G20 summit concluded there was insufficient information for the financial sector surrounding climate risk, the Financial Stability Board (FSB) established the Task Force on Climate-related Financial Disclosures (TCFD). The TCFD sought to develop recommendations for voluntary climate-related financial disclosures that were consistent, comparable, reliable, clear, efficient, and provide decision-useful information. This report was published in 2017 in order to enable investors and other stakeholders to accurately assess companies' climate-related financial risk.

The disclosure recommendations are structured around four pillars of how organizations operate: governance, strategy, risk management, and metrics and targets. The recommendations of the report are summarized below.

*Governance:* Disclose the firm's governance around climate-related risks and opportunities.

- Describe the organization's governance around climate-related risks and opportunities.
- Describe management's role in assessing and managing climate-related risks and opportunities.

*Strategy:* Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.

- Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.
- Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

- Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

*Risk Management:* Disclose how the organization identifies, assesses, and manages climate-related risks.

- Describe the organization's processes for identifying and assessing climate-related risks.
- Describe the organization's processes for managing climate-related risks.
- Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

*Metrics and Targets:* Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

- Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions and the related risks.
- Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

One notable aspect of the TCFD framework is the scenario analysis or stress testing. Under the strategy category, companies are asked to describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios for different extents of warming above pre-industrial levels.

Many different reporting standards for climate impacts have been established over the years; according to the Principles for Responsible Investment, there are roughly 400 reporting frameworks that are related to climate. Most of these focus on a company's impact on the climate through their emissions. By recommending companies evaluate what their operations and supply chain look like under a world with 2 degrees of warming (or other scenarios), TCFD encourages companies to think seriously about how the changing climate will affect them as well. Part of the appeal of TCFD is not just that it is the 401<sup>st</sup> reporting framework, so to speak, but rather that it converges with other reporting requirements to minimize reporting burdens, and that it provides value to investors seeking to make smart investments. By emphasizing the comparability of disclosures, TCFD enables apples-to-apples comparisons

between companies' exposures to and actions on climate-related risk.

Since 2017, the FSB has released an annual status report on the TCFD recommendations. The 2020 report stated that more than 1,500 organizations have expressed their support for the TCFD recommendations, an increase of over 85% since the 2019 status report. Nearly 60% of the world's 100 largest public companies support the TCFD, report in line with the TCFD recommendations, or both. However, the report also found that the aspect of TCFD reporting that was identified as most useful to investors (scenario analysis, or the impacts of future climate change on business operations) was also the least reported on—less than 7% of reporting companies included it.

In late 2020, the UK became the first country in the world to mandate economy wide disclosures in line with the TCFD recommendations. The process begins this year with the largest pension schemes and financial institutions, and it will gradually expand to include smaller firms and broader entities over the next four years. While the formal legislation enacting this mandatory disclosure is not yet available, a guidance document from the UK's Department for Business, Energy, and Industrial Strategy (BEIS), released in March 2021, recommended the scope and mechanism of the report.

The UK's mandatory TCFD disclosures will likely be added to companies' Strategic Reports – documents they are already required to submit and that contain similar environmental and risk-related information. Moreover, the recommendation from BEIS was to require reporting on each of the four pillars of the TCFD recommendations (governance, strategy, risk management, and metrics and targets), but *not* the 11 specific recommendations. This was done to strike a balance between the need for uniform climate-related financial risk information and the burden a full-fledged TCFD report would require from all firms.

- 3) *SEC updates.* Federal Security and Exchange Commission (SEC) regulations require publicly owned companies to disclose certain types of business and financial data on a regular basis to the SEC and to the company's stockholders. By amending some of its regulations, the SEC has attempted to make this system less burdensome on corporations by standardizing various forms and eliminating some differences in reporting requirements to the SEC and to shareholders.

Publicly owned companies prepare two annual reports, one for the SEC and one for their shareholders. Historically, companies have had more leeway in what they include in their annual reports to stockholders. Over the years,

however, the SEC has gained more influence over the content of such annual reports, and SEC regulations require that annual reports to stockholders contain certified financial statements and other specific items.

In February, the Federal Reserve released an Economic Letter noting that climate risk “can adversely affect financial markets, asset classes, and institutions as well as the income and balance sheets of businesses, households, and governments.” More recently, the Acting Chair of the SEC released a statement directing the Division of Corporate Finance to “enhance its focus on climate-related disclosure in public company filings.”

- 4) *Executive Order (EO) N-19-19 and the Climate Investment Framework.* On September 20, 2019, Governor Gavin Newsom signed EO N-19-19 to require the redoubling of the state’s “efforts to reduce GHG emissions and mitigate the impacts of climate change while building a sustainable, inclusive economy.” The Executive Order includes four main directives: investment, transportation, state buildings and operations, and zero-emission vehicles. SB 449 builds upon the direction for investment.

The EO requires that the Department of Finance create a Climate Investment Framework (CIF), including a strategy to align the state’s \$700 billion investment portfolio (an amount equal to nearly one-fourth of California’s annual Gross Domestic Product) toward industries and sectors that contribute to the reduction of carbon emissions and increased resilience to the impacts of climate change.

The CIF was released the following September, in 2020, and it advanced efforts to establish climate change as a commonly recognized and defined financial risk that should be considered and evaluated alongside other long-established investment risks. The CIF found that it is inconsistent for the state to spend scarce resources to mitigate and adapt to climate change while simultaneously exacerbating these risks through its asset management and investment allocation.

To address this, the CIF put forth recommendations for the state and the pension funds to mitigate the impacts of climate change while building a sustainable, inclusive economy. Consistent with those recommendations, Governor Newsom called for the state to do the following: 1) establish a California working group to develop a practical and comprehensive climate risk disclosure standard, 2) increase use of low-carbon strategies by the state’s pension funds, and 3) become a signatory to the Coalition for Climate Resilient Investment.

Focusing in on the first component, the Governor called for the creation of a working group comprised of relevant government agencies, pension funds, international climate disclosure researchers, non-profit organizations and institutional investors, to develop common climate risk disclosure standards that would be an international template for investors to use in assessing the financial risk associated with climate change.

- 5) *The Climate-Related Risk Disclosure Advisory Group*. Earlier this month, the state launched the 19-member Climate-Related Risk Disclosure Advisory Group, led by OPR in partnership with Stanford University's Sustainable Finance Initiative, to further California's leadership on addressing the immense challenges posed by climate change.

The Governor called for the Advisory Group to support California through the development of a climate risk disclosure standard, consistent with federal and international best practices. The Advisory Group, as part of California's cross-government framework for urgently addressing and mitigating the impacts of climate change, will focus not only on identifying best practices across national and international climate risk disclosure, but also on the unique challenges and opportunities that might arise when applying climate risk disclosure to a public sector decision-making context.

At the time of this hearing, no further details have yet been released as to the specific duties the advisory group will have, nor timelines for the identification of best practices.

## Comments

- 1) *Purpose of Bill*. According to the author, "The growing effects of climate change not only directly impact our environment with rising sea levels and extreme weather events, but they also impact and influence our economy in a variety of ways that include the health of workers, the availability of raw materials, and the resiliency of supply chains. These are economic challenges that pose systemic risks that have the potential to destabilize capital markets and lead to serious negative consequences for financial institutions and the broader economy. California's economy can be made less susceptible to such system risks through the accurate and timely disclosure of how climate risks impact a company's finances. Such disclosure will provide transparency and drive more financially sustainable practices throughout the economy, supporting economic growth and progress towards a healthier, more resilient

carbon neutral future.”

- 2) *Aligned intents.* SB 449 tasks the advisory group with collecting and reviewing submitted climate-related financial risk reports, preparing an annual public report on them, and regularly convening specified experts and stakeholders. The purpose of those convenings under SB 449 is to “offer input on current best practices regarding the disclosure of financial risks resulting from climate change.” This is including, but not limited to, proposals to update the definition of “climate-related financial risk,” the framework or disclosure standard of “climate-related financial risk reports,” and the membership of the advisory group.

Governor Newsom called for the advisory group to support the state of California through the development of a climate risk disclosure standard, consistent with federal and international best practices. There has not as of yet been a more defined plan released for the advisory group’s intended work. However, based on the language of SB 449 and the Governor’s direction, it appears the directives given to the advisory group are complementary,

- 3) *Flexible report contents.* As California seeks to lead the way in the US towards establishing climate-related financial risk disclosures, it may be instructive to look towards the UK, where the same process is already underway. Notably, the suggested approach there is for climate-related financial risk disclosure reports’ content to be only somewhat flexible. By still requiring entities to disclose information on each of the four pillars (governance, strategy, risk management, and metrics and targets), but still not the 11 more-specific recommendations within those topics, a balance can be struck to provide information without overly burdening companies.

The approach in SB 449 differs from the UK’s: covered entities in California are required more generally to submit their reports in accordance with the recommended framework and disclosures from the TCFD. The most recent TCFD status report, released in 2020, looked at a sample of disclosures from 1,700 firms worldwide, and it provides some insight into how those recommendations have been adopted. The analysis showed that no single TCFD recommendation was adopted by at least half of the firms in the sample and less than one quarter of firms adopted recommendations related to board oversight, resilience of strategy, and integration into overall risk management.

The information provided in climate-related risk reports is the most valuable when it is the most comparable between firms. This allows investors to make apples-to-apples comparisons on risk management. While following the



recommendations of the TCFD is a good place to start, it is likely that in order to get the most valuable insights, more specific requirements beyond just following the TCFD framework will be necessary. This is within the purview of the advisory group's role in determining best practices.

- 4) *Uncertain federal action.* As described in the background, it is likely that federal guidance from the SEC on reporting climate-related financial risk is imminent. Should that be the case, it will be important to align standards and ensure companies are not responsible for duplicative and unnecessarily burdensome reporting requirements.

It is yet uncertain what SEC will require, and it would be in the advisory group's purview to align reporting standards as a matter of best practices. The author has already committed to amendments to this effect in the Senate Banking and Financial Institutions committee on 4/21/21, though at the time of publication of this analysis, the details of those amendments are still uncertain.

- 5) *Disclosures and recommendations: chicken or egg?* SB 449 requires covered entities to submit a climate-related financial risk report by December 31, 2022 (and annually thereafter). The advisory group is required to review those reports, but also to convene specified stakeholders to make recommendations on the disclosure framework. As written, it is unclear if the advisory group is expected to provide any recommendations prior to the first submissions of disclosure reports.

On one hand, providing guidance on what components of the TCFD are expected from covered entities could enhance the comparability of the reports received. On the other hand, given the voluntary nature of TCFD disclosures, the advisory group may be better able to assess what guidance is necessary once they have received a first round of reports.

There are advantages to both and not an obvious right answer, but covered entities may need more certainty. The author may wish to clarify whether advisory group guidance or covered entity report submission is envisioned to be the first step of SB 449 implementation.

- 6) *Executive order motivated?* In regards to investment, EO N-19-19 directed the Department of Finance to develop a Climate Investment Framework (CIF), but mentioned nothing of an advisory group. The CIF subsequently called for the creation of a working group with representation from state agencies, private stakeholders, and experts in the arena of climate-related financial risk to explore the development of a practical and comprehensive risk and disclosure

standard. The CIF stated that this working group should review the leading standards utilized by investors and companies around the world, and work closely with the developers of these standards to determine how the state can best support responsible and transparent disclosure and reporting.

- 7) *Who is covered?* SB 449 defines a covered entity as, “a corporation, partnership, limited liability company, or other business entity incorporated, formed, or issued a license to operate or certificate of authority under the laws of the state that had annual gross revenues of at least five hundred million dollars (\$500,000,000) in the prior calendar year.” According to the author’s testimony in the Senate Banking and Financial Institutions committee hearing of 4/21/21, the state’s Franchise Tax Board estimates approximately 500 California-based entities would fall under the current definition. The committee has received several letters from sectors who would be included under this definition and believe the scope should be narrowed further to exclude them.

The California Association of Realtors states that the definition could be interpreted to mean a real estate company would have to report on the climate-related financial risk of property they are attempting to sell, not just property used in their operations.

A coalition of insurance trade organizations states that since 2010, their members have worked with the California Department of Insurance and the National Association of Insurance Commissioners to submit an annual report on how insurers, across all lines of insurance, assess and manage risks related to climate change. They state that since 2012, California has required mandatory submission and reporting of the *Insurer Climate Risk Disclosure Survey* for all insurance companies who would be included under SB 449.

Insurers are included in SB 449 by virtue of necessarily being licensed to operate in California, and the definition of “covered entity” including all business entities who are licensed to operate in California. By this same licensure criteria, banks who are not incorporated in the state may also be included.

- 8) *Additional commitments in Senate Banking and Financial Institutions committee.* During the 4/21/21 hearing of the Senate Banking and Financial Institutions committee, the author committed to a number of amendments brought up by stakeholders and members of the committee. The commitments were to fix the issue raised by the realtors, address the concerns of the insurance and banking industries, and to ensure SB 449 would appropriately interact with any federal action on climate-related financial disclosures.

At the time of publication of this analysis, the exact extent and specifics of those commitments are still unclear. Those details will be refined between the author and the previous committee before the bill is voted on by the entire Senate. This committee should ensure they understand what commitments have been made on this bill, even if the resulting amendments are not yet in print.

#### Related/Prior Legislation

SB 260 (Wiener, 2021) Requires companies, as specified, with over \$1 billion in annual revenues who do business in California to report their direct and indirect GHG emissions from their operations and supply chain to ARB, among other things. SB 260 is currently before the Senate Judiciary Committee.

SB 560 (Allen, 2017) Would have required CalPERS and CalSTRS to consider financial climate risk in their management of their respective funds, including when making decisions about asset allocation, investment levels in individual companies or commingled funds, or in hiring external asset managers. SB 560 was held in the Senate Appropriations Committee.

**SOURCE:** Natural Resources Defense Council

#### **SUPPORT:**

1000 Grandmothers for Future Generations  
350 Butte County  
350 Conejo / San Fernando Valley  
350 Hawaii  
350 New Orleans  
350 Pdx (portland, Or)  
350 Sacramento  
350 Seattle  
350 Silicon Valley  
350 South Bay Los Angeles  
350 Ventura County Climate Hub  
55 Individuals  
Acterra  
Aican  
Alameda County Interfaith Climate Action Network  
California Coalition for Clean Water & Reliability

California League of Conservation Voters  
California Water Research  
Carbon Accountable  
Ceres  
Civic Sundays  
Climate First: Replacing Oil & Gas (CFROG)  
Climate Protection and Recovery Fund  
Conejo Climate Coalition  
Divest NJ Coalition (new Jersey)  
E2 (environmental Entrepreneurs)  
East Valley Indivisibles  
Elders Climate Action, Norcal and Socal Chapters  
Environmental Defense Fund, Incorporated  
Extinction Rebellion Sf Bay  
Feel the Bern San Fernando Valley Democratic Club  
Feminists in Action (formerly Indivisible CA 34 Womens)  
Fossil Free California  
Friends of Public Banking - Santa Rosa  
Friends of The Climate Action Plan  
Glendale Environmental Coalition  
Indivisible Alta Pasadena  
Indivisible CA Statestrong  
Indivisible California Green Team  
Indivisible Conejo  
Indivisible Sacramento  
Indivisible San Jose  
Indivisible San Pedro  
Indivisible Ventura  
Lutheran Office of Public Policy - California  
Mendocino Women's Political Coalition  
Mothers Out Front California  
Natural Resources Defense Council  
New Mexico Climate Justice  
Peninsula Interfaith Climate Action  
San Francisco Bay Physicians for Social Responsibility  
San Jose Community Energy Advocates  
Santa Barbara County Action Network  
Sierra Club California  
Socal350 Climate Action  
Solidarityinfoservice  
Stand.earth  
The Climate Center

Tiaa Divest! From Climate Destruction  
Together We Will - San Jose

**OPPOSITION:**

American Council of Life Insurers  
American Property Casualty Insurance Association  
Association of California Life and Health Insurance Companies  
California Apartment Association  
California Association of Realtors  
California Bankers Association  
California Building Industry Association (CBIA)  
California Business Properties Association  
California Chamber of Commerce  
California Community Banking Network  
California Credit Union League  
California Mortgage Association  
California Mortgage Bankers Association  
National Association of Mutual Insurance Companies  
Pacific Association of Domestic Insurance Companies  
Personal Insurance Federation of California  
Western States Petroleum Association

**ARGUMENTS IN SUPPORT:** According to the sponsor, the Natural Resources Defense Council, “California’s economy is increasingly vulnerable to the effects of climate change; from sea level rise impacting the coast, ongoing droughts affecting agriculture, fishing and critical ecosystems, and wildfires devastating entire communities. However, the financial and economic risks of climate change are not widely disclosed or evaluated to inform responsible investing and lending.

“SB 449 fills this gap by requiring California “covered entities” that include corporations, financial institutions and other businesses incorporated in California, with \$500 million in annual revenues to annually disclose their climate-related risks to the California Secretary of State in a manner aligned with the framework developed by the Task Force on Climate-Related Disclosure (TCFD). SB 449 further requires those entities to disclose the steps they are taking to reduce and adapt to climate-related financial risks.

“The bill also requires the Governor’s Climate-Related Risk Disclosure Advisory Group established pursuant to Executive Order N-19-19 to review and analyze the disclosures. The task force would identify systemic risks and trends to inform

public policies that would address climate-related financial risks to California's economy.”

**ARGUMENTS IN OPPOSITION:** According to a coalition letter from the California Chamber of Commerce and seven additional organizations, “... Given the global nature of climate change, every effort should be made to assess and mitigate climate risks nationally. To impose state requirements lessens the overall effectiveness and leads to a patchwork of disjointed mandates producing confusing, contradicting and misleading information not to mention duplicative, redundant and contradicting reporting requirements at many levels.

“The definition of “climate-related risk” is far too broad and potentially includes financial transactions beyond “investments” and the extension of credit. It appears to reach lending and investments into concentrations in deposits and branch locations. In our view, the definition includes activities undertaken by corporations which includes a whole panoply of industries operating in a wide range of businesses such as automobile dealers, manufacturing operations, agricultural businesses, or small main street business.

“The costs of compliance would likely be huge, and not just in terms of time, effort, and expense for the financial institution but also the potential negative unintended consequence these requirements would have on prospective homeowners seeking mortgage loans or small businesses seeking financing. It is unclear how the climate risk assessment required by the bill would apply for residential 1-4 mortgage transactions, other than pure speculation. And most traditional mortgage lenders are simply abiding by the credit decision factors provided by the federal agencies that back the mortgage loans being made.”

-- END --