

Via Electronic Submission
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Department of the Treasury
Room 1410 MT, 1500 Pennsylvania Avenue NW, Washington DC 20220

Re: FIO Insurance Sector and Climate-Related Financial Risks

Dear Director Seitz,

We are pleased to submit comments in response to the Request for Information on the Insurance Sector and Climate-Related Financial Risks on behalf of RMI's Center for Climate-Aligned Finance. We are encouraged by President Biden's Executive Order on Climate-Related Financial Risk and the Financial Stability Oversight Committee's (FSOC) Report on Climate-Related Financial Risk (FSOC Report). We agree with and welcome the Treasury and Federal Insurance Office's (FIO) acknowledgment that climate change poses significant risks to the stability of the insurance sector, and that insurers have a unique and important ability to influence the transition of the real economy toward alignment with US climate goals in order to mitigate the worst impacts of climate change while protecting historically disadvantaged communities.

Background on RMI and Our Expertise

RMI is an independent nonprofit founded in 1982 that transforms global energy systems through market driven solutions to align with a 1.5°C future and secure a clean, prosperous, zero-carbon future for all. We work in the world's most critical geographies and engage businesses, policymakers, communities, and NGOs to identify and scale energy system interventions that will cut greenhouse gas emissions at least 50 percent by 2030.

In July 2020, RMI launched the [Center for Climate-Aligned Finance](#) (the Center) to help the financial sector transition the global economy toward a zero-carbon, 1.5°C future. Through deep partnerships in finance, industry, government, and civil society, the Center works to develop decarbonization agreements within high-emitting sectors and supports financial institutions to decarbonize their loan books and investment portfolios. The Center also works to shape the financial sector's operating environment by addressing barriers common to all financial institutions, such as data availability and regulatory clarity.

Transitioning the real economy at the pace required to limit warming to 1.5°C will necessitate an all-hands approach by institutions across the financial sector, including insurers. As both investors and underwriters of real economy assets, insurers play a deeply important and cross-cutting role in the financial sector, as well as in the financial sector's role transitioning the real economy in line with US climate goals. The insights derived from the Center's work to date on the risks, barriers, and opportunities that climate presents for financial institutions are relevant to several questions posed by FIO in this RFI. We appreciate the opportunity to provide comments on select questions from this perspective.

Responses to RFI Questions

Climate-Related Data and FIO's Data Collection and Data Dissemination Authorities

The FIO is well-positioned to facilitate understanding on the financial sector's exposure to the physical, transition, and liability risks posed by climate change across sectors, asset types, and geographies. By working with state insurance regulators to collect climate-related data on the insurance sector, the FIO can help regulators, policymakers, insurance clients, and investors assess the insurance sector's exposure to climate risks, identify potential coverage gaps across markets, and better understand insurers' role in enabling decarbonization outcomes.

Insurers face exposure to climate-related financial risks through both their underwriting and investing portfolios, and data is needed to assess both sides of the equation. On the liability side, climate change introduces an unprecedented risk of larger and more frequent insurance claims. This increased payout burden challenges insurers' business models and solvency, increasing liquidity or default risk when invested assets are insufficient to match rising claims. Meanwhile, insurers' investment portfolios are also exposed, as climate change threatens asset values and the profitability of business-as-usual across the US economy.

The following, non-comprehensive list includes categories of data on insurers' 1) underwriting portfolios and 2) investment portfolios that would be valuable to assess the sector's exposures to climate-related financial risks:

- Granular, asset-level, location data, e.g., to assess risks in flood and coastal zones, areas with increased wildfire or drought risk, or changes in precipitation patterns (especially for crop insurance). Beyond whether assets are in an at-risk location, asset-level data can help assess resilience of the surrounding area, including whether there are levies or sustainable land management practices upstream to mitigate flood risk.
- Data on water usage and intensity.
- Data on energy usage and intensity, including information about upstream energy sources.
- Data to support building efficiency and electrification assessments, including whether a building is sufficiently insulated, the remaining useful life of installed gas-reliant appliances, and the difficulty of "trimming" gas infrastructure at the location to enable electrification.
- Data on supply chain processes and vulnerabilities, including:
 - Methane emissions and flaring (e.g., in oil & gas supply chains).
 - Dependency on high-emitting raw materials, including upstream mining practices.
 - Assessment of the possibility of property and casualty "business interruption coverage", for instance, from increased drought conditions halting fluvial transport or increased storms interrupting marine or air transport.
- Data on corporate transition strategies, including related to governance, climate targets and performance, and climate reporting and measurement practices to better understand how companies are exposed to a changing operating environment, such as:
 - Fiduciary liability as companies navigate evolving regulatory expectations (e.g., related to evolving disclosure requirements under the SEC or fiduciary duties under SEC or DOL ERISA rules).

- Directors and officers (D&O) liability, for instance, from perceived failings to properly disclose climate vulnerabilities.
- Workers' compensation claims under increasingly unsuitable conditions for outdoor labor in certain geographies.
- Carbon accounting data, including absolute and intensity Scope 1, 2, and 3 carbon emissions (including insured emissions), including to assess transition risks imposed by possible carbon-related taxes or bans.

Risk to insurers' underwriting and investment portfolios can be rolled up into an insurers' own exposure to the impacts of climate change, which may be useful to investors investing in insurance companies or for regulators examining the risks that individual insurers pose to the financial stability of the US economy. In addition to the bullets above, data on insurers' own transition strategies and performance (e.g., information about what steps medium and large insurers are taking to manage their climate risk exposure over time) can help interested parties understand the effectiveness of insurer strategies to reduce their exposure to climate-related risks.

The FIO asked about the availability of data needed to assess the insurance sector's exposure to climate risks. Obtaining some data types requires use of forward-looking climate models, especially for data related to physical risks. While climate data and models are constantly improving, their predictive ability will never be perfect as the impacts from climate change are non-linear and warming trends are unprecedented in historical data. Regulators, including the FIO, need to take action anyway. It would be a dire mistake for the FIO to wait on perfect models to implement climate risk assessments or other supervisory actions. Rather, regulators should seek to identify flexible, innovative, and precautionary measures that can be urgently implemented despite ongoing modeling and data uncertainties.

In line with the FSOC Report's recommendations 1.6 and 2.2, it is important for FIO to collaborate closely with other US government agencies on data gathering to minimize public disclosure burdens and improve data availability and comparability. Investors and regulators alike can act more effectively on information disclosed in a standardized, comparable, and consistent format. This is essential, for one, so users can connect different datasets with confidence that the reporting standards are the same across agencies. Despite the importance of inter-agency coordination, it should not come at the expense of acting urgently and ambitiously.

As an indirect example of this issue, consider that electric utilities report information that may be relevant to understanding insurers' exposure to climate-related risks to the Federal Energy Regulatory Commission (FERC), Energy Information Administration (EIA), the Securities and Exchange Commission (SEC), and the Environmental Protection Agency (EPA). Linking these federal datasets is a challenging analytical task. For example, the numeric codes used to identify reporting entities are different between reporting frameworks, reporting entities provide differing levels of detail about asset ownership (e.g., at the operating company or parent company level), asset level information is characterized in various ways (e.g., at the plant versus the unit level), and both company and asset names can differ between reporting frameworks and within reporting frameworks (e.g., from year to year).

RMI's [Utility Transition Hub](#) demonstrates how utility disclosures to FERC, EIA, SEC, and EPA, when integrated effectively, can be used to create metrics that provide useful information on climate risk exposure (e.g., assets on utility books net by technology type). As various state and federal regulators

each consider compelling climate-related disclosures from insurers, it is vital that the FIO play a coordinating role to ensure that this information is, at a minimum, comparable across collecting agencies. For instance, existing voluntary state-level disclosure efforts, such as the NAIC Insurer Climate Risk Disclosure Survey, should be coordinated with other regulatory disclosure efforts such as the SEC's review of public climate-related disclosure requirements.

Further, the insurance sector is uniquely skilled at developing decision-useful risk assessments that could be leveraged by other financial institutions and regulators to better understand the implications of climate-related risks¹. For instance, insurers typically gather asset-level data to inform policy coverage that would be valuable to other agencies seeking asset-level information. FIO should seek opportunities to replicate technical support they provided to the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP) initiatives² to fill information or data gaps faced by other regulatory agencies.

[RMI submitted comments](#) to the SEC's Request for Public Input on Climate Change Disclosure that include RMI's views on the value of consistent, comparable, and quality-assured climate-related disclosures.

Insurance Supervision and Regulation

The FSOC Report says that no state or federal regulator has conducted a nationwide data collection or scenario analysis of the climate-related financial risks faced by the more than 5,900 regulated public and private insurers across the US. Of over 50 insurance sector regulatory bodies in the US, only 15 have taken any steps to address climate related risks. We applaud FIO for taking steps to close this gap by assessing existing supervisory practices and examination tools for possible updates warranted by climate change, and to ensure the agency is prepared to manage and help mitigate climate-related risks to the solvency and operations of insurers.

The health and resilience of the US insurance sector is directly linked to the stability of the US economy, reinforcing the urgent importance for regulators to closely monitor systemic risks to insurance markets. Representing US\$30 trillion of global assets under management (AUM)³, insurers are some of the largest and most significant investors in the global economy and will play a vital role in its transition to a decarbonized future. Yet, US insurers, representing 43% of all poorly rated insurers in the Asset Owner Disclosure Project's (AODP) Global Climate survey⁴, seem to be behind in preparing for climate change⁵. Beyond negative implications for insurance coverage, insolvency impacts insurers' role as significant investors in the US financial system.

Traditional risk assessment tools, such as natural catastrophe models, to assess risk and price insurance policies are well-established. However, traditional tools often neglect forward-looking factors important to understanding the likelihood, severity, timing, frequency, and location of various climate-related

¹ However, regulators also need to evaluate the effectiveness of existing actuarial models with respect to assessing climate risk. As discussed in the next section, existing tools that rely on historical data are ill-suited to forecast future conditions in a changing climate.

² <https://home.treasury.gov/system/files/261/FSOC-Climate-Report.pdf>

³ <https://www.actuarialpost.co.uk/article/what-role-can-insurers-play-in-the-climate-change-crisis-17418.htm>

⁴ The AODP Global Climate Survey analyzes both the assessment and disclosure of climate-related risks by insurers.

⁵ <https://aodproject.net/wp-content/uploads/2018/05/AODP-Got-It-Covered-Insurance-Report-2018.pdf>

risks⁶. FSOCC recommends use of “scenario analysis, where appropriate, as a tool for assessing climate-related financial risks.” PACTA⁷, a tool to assess forward-looking exposure to climate risks, has been used as a scenario analysis tool by insurance regulators like the European Insurance and Occupational Pensions Authority (EIOPA), Bank of England, and state regulators in California and New York to assess the exposure of insurer investments to climate risks. Forward-looking measures like scenario analysis can be helpful to consider the effects of a variety of plausible future economic scenarios stemming from the impacts of climate change, and to make informed recommendations to the industry to improve its resiliency.

For example, the collapse of insurer Merced Property & Casualty Co. (“Merced”) in the wake of the California Camp wildfire illustrates how the existing disclosure regime for insurers can overlook climate-related risks. Merced was well-capitalized and had not raised any regulatory warning signals under the NAIC’s IRIS ratio system since 2012⁸. However, days after the Camp fire was contained, Merced entered liquidation after suffering overwhelming losses from its geographically concentrated portfolio. Enhanced evaluation of climate-related risks like these can help assess exposure across insurers of all sizes and provide a more accurate view of the extent of climate risks facing even seemingly healthy insurers.

Finally, FIO can benefit from borrowing best practices of international regulators, including takeaways uncovered by EIOPA’s annual stress tests⁹. EIOPA has also published a methodological paper¹⁰ outlining steps for integrating climate change in underwriting risk capital charges for insurers for solvency protection. FIO’s continued participation in international regulatory forums like the International Association of Insurance Supervisors (IAIS) can help ensure the US stays abreast of international best practices and learnings.

Insurance Markets and Mitigation/Resilience

Climate change is already exposing vulnerabilities in US insurance markets, largely due to the challenge of matching assets with quickly ballooning claims. To illustrate:

- **Recent claims are unprecedented:** record-breaking losses in 2017 and 2018 California wildfire seasons cost the state’s homeowner’s insurance industry *two times the total amount of combined profits* since 1991¹¹. Then, in 2019, more wildfires forced PG&E into bankruptcy when \$30 billion in damages accrued against its insurance coverage of only \$1.4 billion¹².
- Further, **claims are on track to get even worse in a changing climate:** approximately 2.5 million households and commercial properties along US coastlines, collectively valued at \$1.07 trillion in today’s dollars, are at risk of flooding by the century’s end¹³.

⁶ <https://www.mckinsey.com/industries/financial-services/our-insights/climate-change-and-p-and-c-insurance-the-threat-and-opportunity>

⁷ <https://2degrees-investing.org/resource/partnerships-with-supervisors/>

⁸ <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/insolvent-calif-insurer-small-but-hardly-insignificant-48748114>

⁹ https://www.eiopa.europa.eu/insurance-stress-test-2021_en

¹⁰ https://www.eiopa.europa.eu/document-library/methodology/methodological-paper-potential-inclusion-of-climate-change-nat-cat_en

¹¹ https://assets.milliman.com/ektron/Wildfire_catastrophe_models_could_spark_the_changes_California_needs.pdf

¹² <https://www.forbes.com/sites/christopherhelman/2018/11/15/californias-electric-giant-faces-possible-30-billion-in-damages-for-fires-that-have-killed-more-than-100/?sh=431ac6138c2f>

¹³ <https://www.ucsusa.org/sites/default/files/attach/2018/06/underwater-analysis-full-report.pdf>

- And finally, **many at-risk assets are uninsured**: In 2020, the portion of all economic losses from climate-related disasters not covered by insurance in the US was \$45 billion (38 percent)¹⁴, and of the 1.1 million homes with a relatively high risk of flooding (a 1% chance or higher per year), less than half have flood insurance policies, with moderate flood risk areas having even lower insurance coverage rates¹⁵.

Unprecedented risks may prompt unprecedented approaches to risk management. For one, rather than deny coverage, insurers should be held accountable to and should support providing affordable coverage in traditionally underserved communities. This poses a challenge in a system that is already routinely undervaluing risks and struggling to provide coverage to match even undervalued policies.

Following the 2018 Camp Fire, many private insurers tried to cancel homeowner's policies or dramatically increase premiums in high-risk areas^{16, 17}. When private insurance is too costly or unavailable, homeowners will increasingly turn to backstop solutions, like California's FAIR Plan (Fair Access to Insurance Requirements). It is important for the FIO to assess and report on the effectiveness of these backstops to truly render markets resilient to climate change. For instance, from 2014-2019, the number of FAIR Plan's policies jumped 67% (from 120,000 to 200,000)¹⁸. In 2019, the FAIR Plan received \$350 million in claims against \$400 million in annual revenue – and this followed two consecutive years of i) average premium increases for FAIR Plan rates, and ii) mandated bans against insurance companies from revoking private coverage policies¹⁹. When these backstop solutions become oversubscribed or too costly, unprotected communities must turn to local, state, or national government programs for disaster relief, imposing a massive taxpayer burden.

As Paul Bodnar and Tamara Grbusic explained in the New York Times, “The Federal Emergency Management Agency’s National Flood Insurance Program is about \$20.5 billion in debt — meaning the government has so far chosen to absorb losses while also increasing premiums. As the Federal Reserve Bank of San Francisco put it, because of low ‘risk awareness and insurance affordability,’ many government agencies ‘have found themselves being expected to act as insurers of first resort.’”²⁰

Continued provision of insurance to high-risk assets could, in many instances, introduce moral hazard concerns. On the other hand, climate change is an increasingly undiversifiable risk, presenting risks through multiple avenues across the US economy. Additionally, beyond FIO's responsibilities to “[monitor] the availability and affordability of insurance products to traditionally underserved communities and consumers”, protecting historically disadvantaged communities is a tenet of US climate goals²¹. To this end, we encourage FIO to prioritize consideration of how climate impacts underserved communities, including a focus on how gaps in insurance coverage, which may be

¹⁴ <http://thoughtleadership.aon.com/Documents/20210125-if-annual-cat-report.pdf>

¹⁵ <https://www.insurance.ca.gov/cci/docs/climate-insurance-report-07-22-2021.pdf>

¹⁶ <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/insolvent-calif-insurer-small-but-hardly-insignificant-48748114>

¹⁷ <https://www.wsj.com/articles/californians-in-fire-prone-areas-find-it-harder-to-buy-insurance-11566338023>

¹⁸ <https://www.insurance.ca.gov/cci/docs/climate-insurance-report-07-22-2021.pdf>

¹⁹ <https://www.sacbee.com/news/california/fires/article247680725.html>

²⁰ <https://www.nytimes.com/2020/06/23/opinion/climate-change-financial-disaster.html>

²¹ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/27/fact-sheet-president-biden-takes-executive-actions-to-tackle-the-climate-crisis-at-home-and-abroad-create-jobs-and-restore-scientific-integrity-across-federal-government/>

increasingly pervasive across US markets, exacerbate climate-related burdens on certain markets and communities.

Improved disclosures from insurers on policy valuations or formulas that will be used to adjust rates, revoke coverage, or deny claims under various scenarios will improve accountability and transparency in the market. FIO can play a role in collecting, disseminating, and issuing recommendations based on this information. FIO should gather data on rate increases, claim denials, and nonrenewal rates to better understand the impact of climate change on frontline communities nationwide, such as low-and-moderate income consumers. In particular, FIO should work with regulatory agencies like the Consumer Financial Protection Bureau (CFPB) to facilitate better education and protection for communities in climate-impacted areas and improve affordability and access to insurance.

Insurance Sector Engagement

Insurers have a key role to play in enabling and accelerating the transition to a 1.5°C future, which is critical for mitigating systemic risks to US financial markets and the insurance sector. As such, we especially agree with and welcome the FIO's inquiry into the role insurers can play to mitigate the worst impact of climate change by accelerating the transition to a net-zero economy.

Insurers are well-positioned to influence decarbonization through both their underwriting and investing portfolios. As investors, insurers play a unique role in capital markets, especially public and private fixed income products, such as municipal and corporate bonds (representing 20% and 21% of the US markets in 2017), as well as real estate debt and infrastructure²². The FIO should work with policymakers and state regulators to assess the impact of today's regulatory environment for supporting capital toward the highest priority financing needs to facilitate the transition of the real economy in line with US climate goals, while discouraging investment in real assets that will not be climate-aligned over the holding period.

Through their underwriting portfolios, insurers can also play a significant role in the transition, including through product innovations and engagement efforts to reduce asset-level risks (e.g., by working with clients to increase adaptation and resource efficiency) as well as systemic risks (e.g., by working with clients to reduce insured greenhouse gas emissions). Such measures can help actively reduce the climate risk exposure that insurers face by taking advantage of insurers' levers of influence to support progress in transitioning the economy.

Innovative insurance products can also help mitigate risks associated with deploying solutions necessary to transition the real economy across market segments. The availability and price of insurance coverage influences the investment opportunities for other investors, encouraging the flow of capital where it is most needed to transition in a just and inclusive way. For instance, insurance can help protect against market or technology risk for the development of first-of-a-kind, low-carbon technologies. Insurance can also play a role in mitigating environmental risks associated with remediated fossil fuel plants and wells, enabling site repurchasing for greener uses.

²² https://www.centerforcapitalmarkets.com/wp-content/uploads/2019/03/CCMC_InsurancePaper_v2.pdf

Sustainability-linked or climate-aligned coverage, such as Marsh’s initiative to provide preferred D&O policy terms and conditions for ESG-related exposures²³, is another promising tool. We encourage FIO to study how preferred terms and rates, including through incremental pricing benefits for improved performance against pre-defined targets, can be applied across insurance types, such as to encourage energy efficiency improvements, building electrification retrofits, or other adaptation or resiliency measures. These types of incentives are commonplace in other areas of the insurance industry, such as discounts offered to auto insurance policy holders for taking educational courses on safe driving practices. Resilience bonds, an innovation on catastrophe bonds, can also be useful tools to lower premiums for investments in adaptation or mitigation measures. By monetizing avoided losses, these bonds can lower climate risk exposures by channeling finance to measurable risk-reduction measures while expanding insurance access through lower premiums²⁴.

We encourage FIO to lead on thought leadership related to how insurance companies can further the goals of the administration and help facilitate the growth of these markets. We also encourage FIO to support existing efforts like the Net Zero Insurance Alliance, which is working to support insurers in transitioning portfolios to be in line with trajectories to meet net-zero climate goals.

Conclusion

We are encouraged by the FIO’s leadership on this topic and look forward to the agency’s continued attention to this important work. To summarize our priority messages for the FIO:

- In identifying, collecting, and disseminating data to assess the insurance sector’s exposure to climate-related financial risks, it is important to pay attention to insurers’ full business model, and the role they play as both underwriters and investors in the real economy.
- Interagency coordination and collaboration on data collection and sharing is important to minimize the burden on reporting entities, streamline collection processes (e.g., specializing so each agency collects data that they have an edge in generating), and ensure data sourced by different agencies is collected in a sufficiently standardized format to be comparable.
- Without a centralized effort to evaluate the systemic risks posed by climate change to the insurance sector, it is likely that the full extent of risks is not fully understood or integrated. The FIO’s leadership on consolidating and evaluating data to understand these systemic risks fits squarely within the agency’s mandate and fills an important gap in understanding.
- Climate change is already exposing vulnerabilities in US insurance markets, largely due to the challenge of matching assets with quickly ballooning claims in a way that ensures ongoing availability of affordable insurance. Facilitating better understanding of the potential for gaps in coverage and how to best balance the availability and affordability of insurance with maintaining insurer solvency is ripe for increased attention from regulators. Improved disclosures from insurers on policy valuations, or formulas that will be used to adjust rates or revoke policies or deny claims under various scenarios, will improve accountability and transparency in the market. FIO can play a role in collecting, disseminating, and issuing recommendations based on this information.

²³ https://www.esgtoday.com/marsh-to-reward-risk-benefit-of-superior-esg-frameworks-through-preferred-insurance-terms/?utm_source=rss&utm_medium=rss&utm_campaign=marsh-to-reward-risk-benefit-of-superior-esg-frameworks-through-preferred-insurance-terms

²⁴ <https://rmi.org/six-innovative-funding-methods-to-achieve-climate-action-and-equity-in-us-cities/>

- As both investors and underwriters, insurers have a key role to play in enabling and accelerating the transition to a 1.5°C future. As such, we especially agree with and welcome the FIO's attention to better understanding how insurance can play a proactive role in accelerating decarbonization and what type of regulatory environment can best support insurers in taking those actions.

We hope to see the FIO take urgent steps to ensure stability of the financial and insurance sectors in a changing climate, enable enduring and equitable access to insurance coverage across US markets, and leverage the insurance sector's unique influence in transitioning real economy sectors in line with US climate goals.

If there are questions on the points highlighted here, or if you would like further information, please reach out to Whitney Mann at WMann@rmi.org, Alex Murray at AMurray@rmi.org, and Jessamine Fitzpatrick at JFitzpatrick@rmi.org.

Thank you very much for your consideration of our comments herein. FIO's work and attention to this topic is valued.

Sincerely,



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Kaitlin Crouch-Hess
Jessamine Fitzpatrick
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cc: John Morton