

November 15, 2021

Federal Insurance Office  
Room 1410 MT,  
Department of the Treasury

Submitted via electronic filing: [www.regulations.gov](http://www.regulations.gov)

Attention: Ms Elizabeth Brown - Senior Insurance Regulatory Policy Analyst

**Federal Insurance Office (FIO) Insurance Sector and Climate-Related Financial Risks (86 FR 48814) (“Consultation Paper”)**

Dear Ms Brown,

MSCI<sup>1</sup> welcomes the opportunity to comment on the Consultation Paper. As a leading provider of climate risk data and analytics to the global investment community, MSCI has collected climate related and environmental, social and governance (ESG) disclosures from thousands of companies globally for over two decades and developed tools to assist investors in their analysis of climate and ESG risk to their portfolios. The systematic consideration of climate factors in the risk management process of insurers is still at an early stage and guidance is required.

Climate change will require the largest reconstruction of the global economy since the Industrial Revolution. It will pose a systemic risk to the financial sector at large, whilst also producing new investment opportunities. Insurance companies are exposed to both transition and physical risks as a result of their activities as asset owners and underwriters. Moreover, with a large and rising protection gap in particular in exposed regions, insurers have a critical role to play in buffering economic impacts for society from natural disasters.

There are a range of actions needed to address this pressing issue from a supervisory perspective and we have set out in Annex 1 our detailed responses to the Consultation Paper.

We would like to emphasize in particular the following points of general relevance:

- 1. Minimum standards support consistent, comparable and timely climate change disclosure.**  
Based on our research data, we note that U.S. insurers are ahead of their peers<sup>2</sup> in listing climate change as a business risk factor (cf Q2 in Annex1). However, around 20% of U.S. insurers have not explicitly recognized climate change risk in their publicly disclosed reports and most of these disclosures today consist only of boilerplate language without any mention

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<sup>1</sup> MSCI ESG Ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc.

<sup>2</sup>Comparing to insurer constituents of the MSCI All Country World Index (ACWI) which is a flagship global equity index, designed to represent performance of the full opportunity set of large- and mid-cap stocks across 23 developed and 27 emerging markets.

of insurer-specific details. ESG and climate disclosures are important inputs to understanding the future financial prospects of a company. A minimum standard of reporting would enable a base comparison across insurers. The most recent update by the Taskforce for Climate-related Financial Disclosures (“TCFD”) places more emphasis on a core set of quantitative metrics for disclosure across all sectors, including insurance and we note this standard has become a reference for various national regulators globally when considering climate-related financial disclosure. Emission data of insurers’ underwriting and investment portfolio, as well as forward-looking indicators such as transition pathways is critical information necessary to understand the climate risk profile of an insurer’s portfolio and should be made mandatory.

- 2. Propose a well-established set of reference scenarios for stress testing.** Technology exists today to quantitatively assess the resilience of investment portfolios to climate transition and physical risks under a range of scenarios. The data and methodologies can also be applied to insurance liabilities for certain lines of business. Therefore, the FIO may want to consider proposing a single set of reference scenarios e.g. from the Network for Greening the Financial System (NGFS), that supports the shift from a qualitative to a quantitative approach over a clearly defined time horizon allowing for the comparison of results.
- 3. Align with international standard setters to minimize burden and optimize result.** We would encourage the FIO to actively engage with initiatives such as the IFRS Foundation, its recently announced International Sustainability Standard Board (ISSB) and the International Organization of Securities Commissions (“IOSCO”) to help facilitate convergence towards a global ESG and climate change reporting framework.

For the purposes of this submission, we comment only on those matters where we believe MSCI’s expertise and experience are most relevant and would welcome a discussion with the FIO to provide additional granular information on the data we use and the information challenges we face in modelling climate and ESG risk.

Please do not hesitate to contact us to discuss our submission.

Yours Sincerely,

**/s/ Linda-Eling Lee**  
**Managing Director, Global Head of ESG & Climate Research**  
**MSCI Inc.**

## **I. Executive Order on Climate-Related Financial Risk**

*1. Please provide your views on how FIO should assess and implement the action items set forth for FIO in the Executive Order on Climate-Related Financial Risk.*

Response:

We support efforts by the FIO to assess supervisory practice and to provide more detailed guidance for the insurance sector on how to assess and manage climate risk exposure, as well as to promote regular information disclosure.

As acknowledged in the Consultation Paper, with only six states and no federal authority collating high level climate related financial risks data from insurers, we see an immediate need to bridge the data gap. We are of the view that each state should seek public, consistent and comparable quantitative disclosures of climate related financial risks from insurers. This will equip each state with more granular and reliable data for measuring the potential impacts on U.S. financial stability and identifying risk exposure for individual insurers. This data will also be relevant for investors to better assess climate-related financial exposure and mitigation capacity of insurers.

We observe that financial authorities, including regulators and supervisory bodies, around the globe are increasingly involved in assessing climate-related financial risks and conducting stress tests for banks and insurance companies to quantify their exposure to these risks. Such exercises were completed in the Netherlands and France and are underway in the E.U., U.K., Australia, Singapore and Canada.<sup>3</sup> More countries are expected to integrate climate-related risks into macroprudential regimes for the financial sector, including insurance, in the future.<sup>4</sup> We support the FIO, in collaboration with other regulatory bodies, to collectively pursue improved climate data collection from insurers to make stress tests comparable and evaluate whether climate change risks threaten financial stability.

The French Prudential Supervision and Resolution Authority published the results of its pilot climate risk stress test conducted for nine banks and fifteen insurers in May 2021, noting that while their transition risk exposure is moderate, an increase in claims and premiums related to climate is noticeable for some of the insurers.<sup>5</sup> Similarly, the Bank of England launched a program in June 2021 to assess how banks and insurers respond in the next 30 years to risks like flooding, wildfires, and cyclones. It used three different scenarios (early, late and no action taken to mitigate climate change).<sup>6</sup> The European Insurance and Occupational Protection Agency (EIOPA)

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<sup>3</sup> [FSI Insights on policy implementation No 34 Stress-testing banks for climate change – a comparison of practices](#)

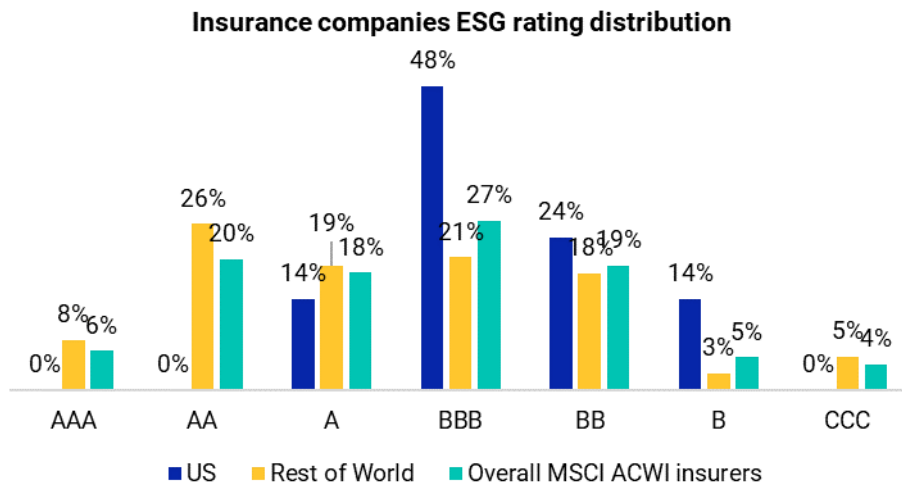
<sup>4</sup> [NGFS publishes the report "Scenarios in Action: a progress report on global supervisory and central bank climate scenario exercises" | Banque de France](#)

<sup>5</sup> [The main results of the 2020 climate pilot exercise | French Prudential Supervision and Resolution Authority](#)

<sup>6</sup> [Stress testing | Bank of England](#)

published several reports in July 2021 assessing the *natcat* protection gap, proposing a methodology for integrating climate in underwriting risk capital charges and a report on non-life underwriting and pricing in light of climate change.<sup>7</sup>

MSCI is collecting ESG data and uses it to inform our MSCI ESG Ratings, which could serve as a valuable tool to evaluate insurers' long-term resilience to financially relevant ESG risks, including climate change risks. The ratings identify sector leaders (AAA and AA rated) and laggards (B and CCC rated) according to their exposure to ESG risks and how well they manage those risks relative to peers. For the insurance sector on climate change resiliency, we measure how exposed insurers are to the physical risk of climate change and assess their risk mitigation practices. We also assess insurers' investment portfolios on how they incorporate ESG considerations in the investment process, including the possible investment assets' devaluation due to climate change's transition risk. Most US insurers achieved average ESG ratings as of 2021, while insurer ESG leaders were concentrated in Europe.



Source: MSCI ESG Research as of November 15, 2021. Scope of study includes 98 insurance companies (Life & Health, Property & Casualty, Multi-line, and Reinsurance) within MSCI ACWI Index.

**II. FIO's Initial Climate-Related Priorities**

2. Please provide your views on FIO's three climate-related priorities and related activities, particularly with regard to whether there are alternative or additional priorities or activities that FIO should evaluate regarding the impact of climate change on the insurance sector and the sector's effect on mitigation and adaptation efforts.

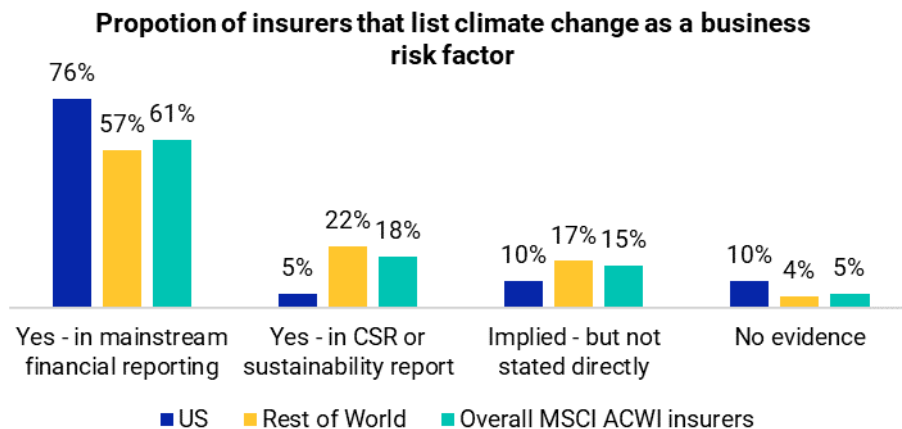
Response:

<sup>7</sup> [EiOPA further contributes to sustainable finance | Eiopa \(europa.eu\)](https://www.eiopa.europa.eu/press-releases/2021/11/eiopa-further-contributes-to-sustainable-finance)

2.1 - FIO plans to assess supervisory practices and resources, including but not limited to examination policies and procedures, solvency assessment and techniques, data availability and integrity, public disclosures, modeling, and forward-looking assessments (e.g., scenario analysis, stress testing).

We support the FIO’s plan to assess its supervisory practices and resources as they relate to examining the insurance sector’s exposure and resiliency to climate-related risks.

Based on our research data, we note that U.S. insurers are ahead of their peers<sup>8</sup> in listing climate change as a business risk factor (see chart below), but around 20% of U.S. insurers have not explicitly recognized climate change risk in their publicly disclosed reports and most of these disclosures today consist only of boilerplate language without any mention of insurer-specific details.



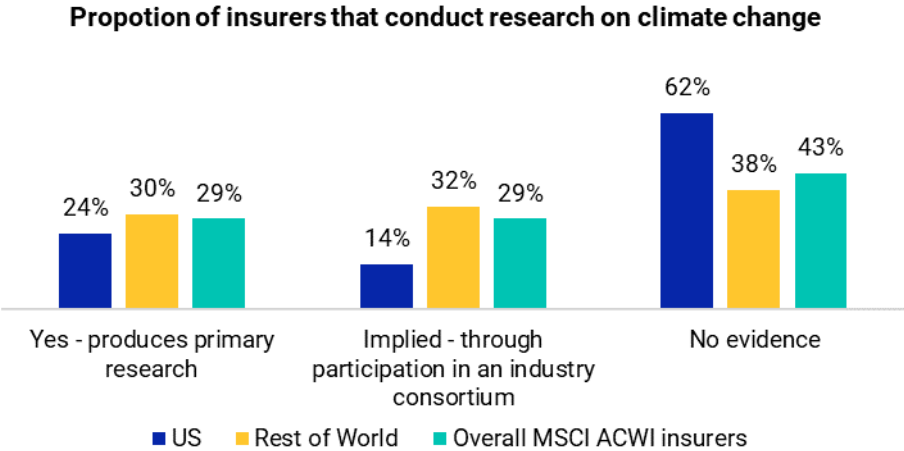
Source: MSCI ESG Research as of November 15, 2021. Scope of study includes 98 insurance companies (Life & Health, Property & Casualty, Multi-line, and Reinsurance) within MSCI ACWI Index.

If climate change risk is not determined to be material for some insurers at the time of assessment, the dynamic nature and long-term uncertainties of climate change and related policies could quickly increase risk materiality for insurers and, therefore, incorporation of climate considerations into an insurer’s enterprise risk management is an important consideration in our ESG ratings assessment.

In our assessment of ESG risks, our models measure an insurance company’s management efforts on climate change risks and where we consider an insurers’ use of in-house research capabilities and/or external resources in conducting climate change risk assessments to better mitigate physical and transition risks and price these risks in the marketplace. Based on the

<sup>8</sup> Comparing to insurer constituents of the MSCI All Country World Index (ACWI) which is a flagship global equity index, designed to represent performance of the full opportunity set of large- and mid-cap stocks across 23 developed and 27 emerging markets.

company public disclosure data collected by MSCI, we found that among the insurer constituents of the MSCI ACWI Index, U.S. insurers lagged the rest of world with over 60% of U.S. insurers showing limited efforts in conducting climate change research.



Source: MSCI ESG Research as of November 15, 2021. Scope of study includes 98 insurance companies (Life & Health, Property & Casualty, Multi-line, and Reinsurance) within MSCI ACWI Index.

We note that there are a range of models currently available in the market to assist insurers in their capacity as asset owner with forward-looking scenario analysis. These data and methodologies can also be applied to insurance liabilities for certain lines of business. For example, the MSCI Climate Value-At-Risk (Climate VaR) model provides forward looking and return-based valuation assessments to measure the potential impact of climate change on company valuations, which can also be used for real estate investments and risk monitoring for the P&C (Property and Casualty) portfolio. The tool provides insights into the potential stressed market valuation of assets. The MSCI Climate VaR model has three main underlying components which can be used separately or in aggregate:

1. **Policy risk:** This component aggregates future policy costs based on an end of the century time horizon. By overlaying climate policy outlooks and future emission reduction price estimates onto company data, the model provides insights into how current and forthcoming climate policies could affect companies.
2. **Technology opportunities:** This component is based on company-specific data on the patents each company holds related to low-carbon technologies, providing insights into how companies’ strategic investments could affect their future competitive positioning in a low carbon economy.
3. **Physical risks:** This component estimates the impact and financial risk relating to several extreme weather hazards, such as extreme heat and cold and flood risk. An extensive asset location database comprising of over 400,000 company facilities has been overlaid with hazards maps. Based on sector-based vulnerabilities, each location’s climate-related

revenue loss for eight extreme weather hazards is computed with the help of damage and business interruption functions.

MSCI notes that using different models and scenarios leads to results that are not easily comparable. While this gives insurers some flexibility for self-examination, it is important for the market to be able to effectively compare the results of a prescribed scenario analysis on various insurers. In order to achieve this objective, FIO may consider providing insurers with a minimum set of specific climate scenarios to consider and align with the most up to date internationally accepted scenarios.

We furthermore suggest that the FIO provides examples of acceptable Representative Concentration Pathways (RCPs), Integrated Assessment Models (IAMs) and/or Shared Socioeconomic Pathways (SSPs) that insurers should utilize during scenario analysis. Further, it would be helpful to prescribe the precise time horizons that the scenario analysis should cover.

The NGFS has delivered several examples of acceptable climate scenario modeling characteristics.<sup>9</sup> The most recent set of climate scenarios was published on June 7, 2021: "NGFS Climate Scenarios for central banks and supervisors".

Characteristics and NGFS scenarios were used in the recent special Global Insurance Market Report by the International Association of Insurance Supervisors (IAIS) on climate implications for insurers.<sup>10</sup>

MSCI has engaged with the TCFD in their work on design judgments for portfolio alignment tools.<sup>11</sup> There are a range of models currently available in the market to assist financial market participants with their forward-looking assessments, as also highlighted in the recent TCFD guidance document. These are used to produce forward-looking metrics on individual companies as well as at portfolio level to determine the exposure or alignment of an entire portfolio or fund.

MSCI has recently introduced a new portfolio climate alignment metrics called Implied Temperature Rise (ITR).<sup>12</sup> Our model allocates an emissions budget to companies under a 2°C warming scenario. Future emissions trajectories are then projected based on publicly disclosed targets by companies. Emissions over/undershoot is benchmarked against a 2°C scenario, and ultimately converted into a temperature measure.

*2.2- FIO intends to examine the insurability of disasters that are produced or exacerbated by climate change, including wildfires, hurricanes, floods, wind damage, and extreme temperatures.*

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<sup>9</sup> Central Banks and Supervisors Network for Greening the Financial System (NGFS) <https://ngfs.net>

<sup>10</sup> [IAIS Global Insurance Market Report provides first quantitative study on the impact of climate change on insurers' investments](#)

<sup>11</sup> [PAT\\_Measuring\\_Portfolio\\_Alignment\\_Technical\\_Considerations.pdf \(tcfdhub.org\)](#)

<sup>12</sup> [Implied Temperature Rise - Designed to show the temperature alignment of your investments with global climate targets](#)

MSCI supports the FIO's plan to examine the physical risks of climate change and the insurability of those disasters. Insurance companies are at the forefront of helping individuals and businesses respond to climate change's physical risks. In fact, under-protection of physical risk could occur when insurers withdraw cover for certain risks that happen too frequently or perceived to be too impactful, or when premium rises become unaffordable. While this remains an exception, some recent examples include the possibility of Californian homeowners losing coverage in high-risk wildfire areas<sup>13</sup> and a rise in premiums following the heavy floods in Germany's North Rhine Westphalia.<sup>14</sup> This could translate into stranded assets and lower property prices in high-risk zones. The questions of how building permits in these zones should be restricted or how adaptation possibilities could be explored going forward should also be considered.

The protection gap is a useful approach to assess how much of climate exposure is left uninsured. Globally, we have seen the protection gap of weather-related natural catastrophe to be at an average of 0.22% of GDP for the past 20 years.<sup>15</sup> Persistent widening of protection gap within the economy could reflect insurers limiting their exposure to climate risks (e.g., exiting certain locations more prone to climate-related hazards), thus indicating lowering of insurability of natural disasters. It is also important to conduct protection gap analysis more granularly to help inform the insurability assessment of specific locations, climate hazards and business lines.

*2.3 – FIO plans to consider ways to address the lack of common methodology and standardization in measuring financed emissions, particularly those of non-public companies in which the insurance sector underwrites and invests.*

We support emission reporting standards developed by the Greenhouse Gas Protocol,<sup>16</sup> which is the most internationally accepted methodology for companies to report their emissions. However, there is limited guidance on the issue of financed emissions by asset class, which is a gap filled by initiatives like the Partnership for Carbon Accounting Financials (PCAF) that was founded in 2019 and aims to harmonize greenhouse gas accounting methods for financial institutions. The PCAF's standard<sup>17</sup> has been reviewed by the Greenhouse Gas Protocol and recommends a phased-in approach towards disclosing financed emissions, starting with oil, gas, and mining sectors.

MSCI has a robust database that compiles Scope 1, 2 and 3 emissions disclosed by companies themselves and estimates emissions for companies that have not yet done so. Our Scope 3 estimation model was built on Greenhouse Gas Protocol and uses both a bottom-up approach to

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<sup>13</sup> [Millions in fire-ravaged California at risk of losing home insurance](#)

<sup>14</sup> [Food-hit German homes face higher premiums as climate risks grow](#)

<sup>15</sup> [Weather, Climate & Catastrophe Insights 2020 Annual Report, Aon](#)

<sup>16</sup> [Green House Gas Protocol - Standards](#)

<sup>17</sup> [The Global GHG Accounting & Reporting for the Financial Industry Standard](#)



allow for better granularity and accuracy, and a top-down approach using sectoral revenues and emissions intensities when the bottom-up approach is not realistic.

### **III. Climate-Related Data and FIO's Data Collection and Data Dissemination Authorities**

*3. What specific types of data are needed to measure and effectively assess the insurance sector's exposures to climate-related financial risks? If data is not currently available, what are the key challenges in the collection of such climate-related data? In your response, please provide your views on the quality, consistency, comparability, granularity, and reliability of the available or needed data and associated data sources.*

Response:

In our experience, **emissions data** of insurers' underwriting and investment portfolios is lacking. Such disclosure would significantly improve the market's ability to model and assess an insurer's exposure to potential changes in climate policy and to technology displacement. The small set of companies that have disclosed underwriting and investment emissions do so only for select categories of their own choosing, which prevents benchmarking within industry peer groups. A minimum standard of reporting across a broad range of companies would enable a base comparison across insurers.

In addition, **location and type** of insured assets would assist the market and regulators in assessing the extent to which an insurer's operations are exposed to the range of potential weather and physical hazards. The market is increasingly aware of the risks from changes in weather and climate conditions that can impact future asset value. For example, within MSCI's aggregated Climate VaR model is a physical risk model that aims to estimate the asset value gain/loss from changes in extreme heat, extreme cold, precipitation, wind, cyclones, coastal flooding, fluvial flooding, low river flow (impacting utilities) and wildfire. The disclosure of locations would allow the market and regulators to gain a more detailed assessment of risks, compared to disclosure of companies' overall assessments of their physical risks, as each company could deploy different definitions of scope or model assumptions, which prevents comparability across insurers.

*4. What are the key factors for the insurance sector in developing standardized, comparable, and consistent climate-related financial risk disclosures? In your response, please discuss whether a global approach for disclosure standards needs to be adopted domestically for insurers. Please also address the advantages and disadvantages of current proposals to standardize such disclosures, such as those set forth by the Task Force on Climate-Related Financial Disclosures or the NAIC's Insurer Climate Risk Disclosure Data Survey.*

Response:

As per our response to Question 3, seeking emissions data of insurers' underwriting and investment portfolios and forward-looking indicators such as transition pathways is the need of the hour. MSCI has been collecting voluntary climate-related and other ESG disclosures from thousands of companies globally, which includes insurers as well, for many years.<sup>18</sup> As such, we have experienced a wide variety of forms, frequency and locations in which climate-related disclosures have been made by corporate issuers. All the stakeholders in the insurance market viz., asset owners, exclusive agents, independent agents, insurance brokers, private and institutional clients, banks, reinsurers, outsourcing companies, market competitors, etc. would benefit from consistent, comparable and timely disclosures from insurers in order to better assess the nature, size and timing of the physical, transition or liability risks they face related to climate change. In this context, we recognize the decade-long efforts undertaken by the NAIC in polling insurers' evaluation and mitigating measures to climate-related risks.

Based on our experience, climate disclosures are most effective when provided by companies at least annually, and more frequently, should they experience a significant change in business. The climate disclosures for public companies should be consistent with the time period and filings that govern their financial disclosures. ESG and climate disclosures are important inputs to understanding the future financial prospects of a company. Synchronizing climate and financial disclosures in format and frequency would lower one major barrier for users of company data and assist all stakeholders who do not currently receive timely data, and data that references the same time periods as financial disclosures.

We support the efforts of the IFRS Foundation and the recently created ISSB to propose standardization of the ESG disclosures that aim to capture issues that could be material to companies' enterprise value, starting initially with climate-related disclosures that align with the guidance of the TCFD. The framework set forth by the TCFD has already significantly advanced the convergence of climate-related reporting to be more robust and consistent.

*5. Please provide your views on how FIO's data collection and dissemination authorities should be used by FIO to research, monitor, assess, and publicize climate-related financial risk and other areas of the insurance markets that are affected by climate change.*

Response:

Please refer to our response to Question 1.

*6. What are the likely advantages and disadvantages of a verified, open-source, centralized database for climate-related information on the insurance sector? Please include in your response*

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<sup>18</sup> Innovest Strategic Value Advisors, founded in 1995, served as the research provider of the Carbon Disclosure Project (CDP) in its initial years. KLD Research & Analytics, founded in 1988, was the among first ESG research providers. Both companies were subsequently acquired by MSCI.

*the types of information, if any, that may be most useful to disseminate through such a database and the key elements in the development and design of such a database.*

Response:

We support the proposal of having a centralized database for basic climate related information on the insurance sector (e.g., emissions and locations data mentioned in question 3). This can positively, effectively, and efficiently support the various initiatives which are to be carried out by FIO within its supervisory remit. Consistent quantitative disclosures of climate related information in a standardized format will facilitate comparability across insurers. Improved ease of access to provide standardized climate metrics and disclosures by insurers would primarily benefit financial markets through improved transparency and improved capacity to allocate capital. Emissions data of insurers' underwriting and investment portfolios, as well as locations data of insured assets, would be very helpful as a starting point.

We suggest the additional features and considerations below:

- Report generating in multiple formats – pdf, MS excel, MS Power BI, etc.
- Providing API access to the data for investors and other use cases
- Providing data tagged to broader market identifiers beyond tickers

## **Insurance Supervision and Regulation**

*7. How should FIO identify and assess climate-related issues or gaps in the supervision and regulation of insurers, including their potential impact on financial stability? In your response, please address insurance supervision and regulations concerning: (a) Prudential concerns, (b) market conduct regarding insurance products and services, and (c) consumer protection. In addition, please discuss how FIO should assess the effectiveness of U.S. state insurance regulatory and supervisory policies in addressing and managing the climate-related financial risks with regard to the threat they may pose to U.S financial stability, including identifying (1) the major channels through which climate-related physical, transition, and/or liability risks may impact the stability of the U.S. insurance market, and (2) the degree to which insurers' business models could be affected by each category of risk and the relevant time horizons for such effects.*

No comment.

*8. Please identify the key structural issues that could inhibit the ability of insurance supervisors to assess and manage climate-related financial risk in the insurance sector (e.g., accounting*

frameworks, other standards). What barriers could inhibit the integration of climate-related financial risks into insurance regulation?

No comment.

9. What approaches used by other jurisdictions or multi-national organizations should FIO evaluate that would help inform it about existing supervisory and regulatory issues and gaps concerning climate-related financial risks? Please describe these approaches, including their advantages and disadvantages, as well as available data sources on these approaches.

Response:

MSCI has supported work by the Bank of England (BoE) in 2021 to run their first ever Climate Biennial Exploratory Scenario (CBES) to explore financial impacts posed by climate change for the largest UK banks and insurers.<sup>19</sup> This was an unprecedented exercise at the time and BoE announced that a 'slimmed-down' approach would be taken going forward, with an announcement expected before end of 2021. MSCI added two bespoke physical risk scenarios to our suite of scenarios for the inaugural CBES exercise. The BoE front-loaded a high physical risk scenario for stress-testing purpose and used a country-by-country resolution that may not suit a more granular microprudential purpose. Some areas of the CBES were relatively specific, while others open to interpretation, which may create discrepancies in the reporting.

### **Insurance Markets and Mitigation/Resilience**

10. What factors should FIO consider when identifying and assessing the potential for major disruptions of insurance coverage in U.S. markets that are particularly vulnerable to climate change impacts?

No comment.

11. What markets are currently facing major disruptions due to climate change impacts? What markets are likely to be at risk for major disruptions due to climate change impacts in the future? When discussing markets at risk for future disruption, please estimate the likely time horizons (e.g., 5, 10, 20, or more years) when these disruptions may occur.

Response:

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<sup>19</sup> [Bank of England publishes the key elements of the 2021 Biennial Exploratory Scenario: Financial risks from climate change | Bank of England](#)

The Global Climate Risk Index<sup>20</sup> has shown that The Caribbean (e.g., Puerto Rico, Bahamas, Haiti), South East Asia (e.g., Myanmar, Philippines, Thailand) and South Asia (e.g., Bangladesh, Pakistan) suffered some of the worst losses from extreme weathers relative to their GDP in the past 20 years. In the U.S., similar analysis of historical climate-related data could help assess which markets (by location, by hazards) are most at risk of climate change impacts.

Forward-looking analysis could enable additional insights. MSCI CVaR model is designed to provide forward-looking and return-based valuation assessment by company to measure climate related risks including company value decrease caused by physical risk. Insurers that underwrite for companies having higher CVaR are more likely to face future disruptions caused by climate change.

*12. Climate change is currently exacerbating economic losses caused by weather-related disasters and is projected to cause further damage in the future. Please provide information on the actions that insurers have taken in response to the threat of increased economic losses from climate-related disasters, including how insurers are incorporating mitigation and resilience considerations into their business operations, as well as what other strategies or solutions that insurers or U.S. regulators may want to explore that would help insurers mitigate the impact of climate change and build resilience.*

Response:

Among the larger U.S. insurance firms, we are observing increased efforts to acquire both ESG and climate specific data by both the investment management teams in the insurer as well as the General Account. Within the General Accounts much of the interest is from enterprise risk teams which are seeking to respond to both domestic and global regulation and standards including climate risk, such as the New York Department of Financial Services, TCFD, and EU Sustainable Finance Disclosure Regulations (SFDR). Some insurers are starting to acquire data to better model portfolios and looking towards climate scenario analysis capabilities. The UNEP-FI backed Net Zero Insurance Alliance (NZIA), is seeing an increase in more members joining the alliance. Currently, there are no members in the alliance from the U.S. However, we foresee huge scope for insurers based in the U.S. to be part of this alliance which would be a step forward on the carbon neutrality pathway.<sup>21</sup>

*13. To what extent, if any, are models (whether internal proprietary models, open-source models, or third-party vendor models) used in the underwriting process to consider the impact of climate change? How do these models affect pricing of insurance products and business decisions (e.g.,*

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<sup>20</sup> [Global Climate Risk Index 2021](#)

<sup>21</sup> [Net-Zero Insurance Alliance – United Nations Environment – Finance Initiative \(unepfi.org\)](#)  
[Net-Zero Insurance Alliance Breaks Ground In Africa And Asia As It Expands In Europe](#)

*level of catastrophe exposure, utilization of reinsurance)? What are the best practices for model validation?*

Response:

Historically, MSCI has had some interaction with underwriters who seek to incorporate forensic accounting and governance risk into their actuarial modelling processes. Recently there has been increasing interest from insurers in ESG data to better assess a variety of risk exposures. On a more limited basis, some underwriting teams MSCI has engaged with are looking to acquire more climate related data such as emissions in order to better footprint climate risk. Beyond some efforts related to physical risk assessments, MSCI has to date not seen any advanced climate data integration into sophisticated actuarial modelling by U.S. insurers.

*14. How should FIO assess the availability and affordability of insurance coverage in U.S. markets that are particularly vulnerable to climate change impacts? In your response, please discuss how to balance maintaining insurer solvency with the need to address the availability and affordability of insurance products responsive to perils associated with climate-related risks, particularly for traditionally underserved communities and consumers, minorities, and low and moderate-income persons.*

No comment.

*15. In what areas have public-private partnerships or collaborations among state or local governments been effective in developing responses to climate change that may be taken by the insurance sector or insurance regulators? How can FIO evaluate the potential long-term or permanent effects on the insurance sector of such public private partnerships or state and local collaborations to address climate-related risks? How should FIO consider state insurance regulatory efforts on consumer education related to climate risks?*

No comment.

### **Insurance Sector Engagement**

*16. Please provide your views on additional ways that FIO should engage with the insurance sector on climate related issues.*

No comment.

*17. How should FIO assess the efforts of insurers, through their underwriting activities, investment holdings, and business operations to meet the United States' climate goals, including reaching net-zero emissions by 2050? For example, what steps should the insurance sector be taking to help improve transparency, comparability, and assessment of Scope 1, Scope 2, and, to the extent possible, Scope 3 GHG activities?*

Response:

We support emission reporting standards developed by Greenhouse Gas Protocol, which is the most internationally accepted methodology for companies to report their emissions. We support insurers disclosing emissions of their insurance business operations. These include Scope 1, 2 and 3 emissions. Please refer to our response to Question 2.3 for more details.

Currently, underwriting emissions are not part of the Scope 3 emissions and it is unclear who should take on the responsibility of disclosing underwriting emissions. Nonetheless, we are seeing leading global insurers act on reducing this part of emissions. For example, the members of the NZIA commit to achieve net-zero for re/insurance underwriting portfolios by 2050.<sup>22</sup> NZIA and PCAF launched a working group to develop the first global standard to measure and disclose underwriting emissions.<sup>23</sup>

MSCI's Implied Temperature Rise metric, which is designed to support TCFD reporting, helps the market understand how companies are aligning themselves with global temperature targets. ITR projects greenhouse gas emissions of nearly 10,000 publicly listed companies, including insurance companies, across all emissions scopes (based on the company's track record and stated reduction targets) to assess company efforts to meet net-zero and Paris goals.

*18. What role or actions might states take to encourage the insurance sector's transition to a low emissions environment and an adaptive and resilient economy? In your response, please discuss whether efforts by states to encourage the development of new insurance products, to promote sustainable investment and underwriting activities, and to address protection gaps created by climate related financial risks might facilitate this transition.*

No comment.

### **General**

*19. Please provide any additional comments or information on other issues or topics that may be relevant to FIO's work on insurance and climate related risks.*

No comment.

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<sup>22</sup> [The Net Zero Insurance Alliance – Statement of Commitment by Signatory Companies](#)

<sup>23</sup> [Partnership for Carbon Accounting Financials collaborates with UN-convened Net-Zero Insurance Alliance to develop standard to measure insured emissions](#)