Greenhouse Gas Reduction

2024 Annual Report

Environment Article § 2-1305(c)

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Pursuant to the statutory requirements of § 2-1305(c) of the Environment Article of the Maryland Code, this report provides a status update on the Maryland Insurance Administration's ("MIA") on-going and future operational initiatives, which serve to reduce the state of Maryland's greenhouse gas emissions. As an informational addendum, this report also considers the MIA's regulatory activities, which involve the assessment and monitoring of insurers' climate-related financial risk, and provides an overview of the various pre-disaster mitigation initiatives, adaptation strategies, and innovative risk transfer programs undertaken by the insurance sector to address the consequences of a changing climate and climate-related risk exposures.

Usage-Based Insurance in Maryland

Program Description

Usage-based automobile insurance is generally designed to align the amount of premium paid with actual vehicle usage. The distance an automobile is driven, the speed at which it is driven and the time of day it is driven are some of the vehicle usage factors that an insurer can use to determine premiums under a usage-based plan. Under usage-based plans, the consumer generally uses a telematics device or web-based application on a phone that transmits such data and information about other driving behaviors to the insurer. The insurer can use the data to determine the price of coverage based on the degree of risk posed by the insured's actual driving behavior.

As of July 2024, thirty four insurance groups and/or companies have filed telematics programs for personal automobile programs with the MIA. The programs include seven vendor companies and Insurance Service Office, Inc. ("ISO"). In addition, twenty-seven insurance groups and/or companies have filed telematics programs for commercial automobile programs, including five vendor companies (all of which have also filed personal auto programs) and ISO. These programs are mostly voluntary, meaning the insured must sign up for the program. However, at least one insurer in the market will only write a policy for an applicant who agrees upfront to the terms of the insurer's usage-based program. While some insurers utilize their own usage-based technology, others purchase it from third party vendors. An insurer that uses a vendor-created product must file it with the MIA prior to implementation.

Since consumers typically receive a discount for participating in a usage-based program, the MIA expects an increase in the number of policyholders that opt in to a usage-based program. Generally, younger drivers and drivers who do not drive a high amount of miles annually are receptive to usage-based coverage programs. The percentage of policyholders that signed up for an existing usage-based program likely increased during the pandemic, because many drivers worked from home. Consumers may opt in to usage-based programs for an initial discount on their premium. However, their premiums may actually increase as a result of the data collected by the insurer through the usage-based program, because insurers may consider a variety of driving behaviors in rating the risk.

Program Objectives

The MIA continues to work with insurers to increase the number of companies offering these programs.

Measurable Implementation Milestones

The nature of this program makes it impossible for the MIA to measure any emissions reduction that is directly attributable to usage-based insurance programs. Even though it is unclear to what extent usage-based automobile insurance will reduce greenhouse gas production, the MIA encourages the expansion of these programs in the state, because they offer more options to consumers.

Obstacles/Considerations

There are no statutory or regulatory prohibitions on usage-based automobile insurance at this time. However, any such program must operate within the confines of Maryland law. The following is a list of some of the obstacles and considerations to take into account when reviewing these programs:

1. Usage-based automobile insurance only produces financial rewards for individuals who drive short distances, or those whose measured driving behaviors (e.g., reducing speed, time and duration of trips, avoiding distracted driving and hard-braking, etc.) are better than the standards established by the insurer. Individuals lacking access to public transportation or alternatives to driving, such as those who live in rural areas or those who commute to work, may not be inclined to sign up for this type of program if they think they will not reap any cost savings. Individuals who qualify for the best premium rates are unlikely to receive significant savings from a usage-based program, and may be less likely to enroll.
2. Consumers may be concerned about privacy issues surrounding programs that utilize devices that monitor how, when and where they drive in order to justify the discounts provided.
3. Individuals who sign up for usage-based automobile insurance are most likely persons who drive a limited number of miles, and as such, the actual reduction in greenhouse gas may not add up to the volume projected.
4. If the usage is measured by an application on a phone, the application may record data assuming the insured is driving when the insured is a passenger or in other circumstances, such as riding a roller coaster, that lead to inaccurate data measurement.
5. The programs need to disclose the behaviors that are being measured, and provide feedback to the driver, in order to modify driving behavior. A driver who changes behaviors to get a lower premium rate will drive less, accelerate more gradually, drive at overall lower speeds, and otherwise be safer and use less fuel. If a driver does not understand the behaviors that are rated, and does not get feedback on actual performance, they will be less likely to change behaviors. Notices of premium increase are required to disclose the factors used to increase premium, and apps may give a safety score or other feedback. The MIA is aware of one company that changes premiums monthly, and some companies may change the premium after an initial period of data measurement, but most will only change the premium at the ordinary time for renewal.

Space Utilization Study and Space Reduction Plan

Program Description

In the fourth quarter of 2020, pursuant to a request from the Department of General Services ("DGS"), and at the direction of the former Lieutenant Governor Boyd Rutherford, the MIA began to consult Coldwell Banker Richard Ellis ("CBRE") to develop a framework for a space utilization study for the MIA's offices located at 200 Saint Paul Place, Suite 2700, Baltimore, Maryland 21202.

At that time, because of the COVID-19 Pandemic and resulting State of Emergency, the MIA had instituted an agency-wide telework agreement, with some exceptions, for its staff. During that period of remote work, the MIA completed an internal assessment of each Division and/or Unit to determine which positions and personnel the MIA could appropriately reclassify as full-time telework and/or hybrid telework status. Based on that assessment, the MIA found that approximately sixty percent (60%) of its staff was able to perform their essential job functions on a fully remote basis and that the remaining forty percent (40%) could do so on a hybrid basis. From 2021 to today, the MIA continues to effectively operate and perform its core regulatory responsibilities along that 60/40 divide of in-person and remote work – which has resulted in a certain amount of underutilized office space and square footage in the MIA's offices on any given day of the business week.

Program Objectives

The evaluation and utilization of existing, underutilized office space are critical aspects of the MIA's sustainability and energy conservation initiatives. Efficient space utilization is not only a matter of prudent resource management, it also holds significant implications for environmental sustainability. The current underutilization of office square footage represents an opportunity to enhance sustainability and reduce greenhouse gas emissions by minimizing unnecessary energy usage for heating, cooling, lighting and other operational needs.

Determining the optimal square footage needed for the MIA's operations is a pivotal first step in curbing the MIA's emissions. Since 2021, the MIA has deployed its own funding to procure CBRE's consultant services to evaluate its current space utilization and assess the actual square footage needs of each Division and/or Unit. These evaluations have taken into consideration relevant factors such as personnel numbers and schedules, workflow dynamics, technological advancements, as well as the greater evolution of the MIA's work, including the human resources needed to effectively regulate an evolving insurance industry and meet the evolving needs of consumers. This study will lead to the development of recommendations for an actionable space reduction plan. Once implemented, the MIA can measure and compare, on an aggregate level based on percentage of building occupied, its electricity usage in kilowatt-hours against historical usage.

Measurable Implementation Milestones

- Complete the Space Utilization Study and identify potential pathways for space utilization improvements and energy conservation.
- Achieve a reduction in operational energy consumption within the MIA's office located at 200 Saint Paul Place, Suite 2700, Baltimore, Maryland 21202.

Obstacles/Challenges

- For commercial multi-tenant buildings that use a full building heating and cooling system – as is the case for the MIA offices leased at 200 Saint Paul Place – it is not possible to quantify electricity consumption for specific spaces and use cases, which is why DGS's standard lease for state agencies allocates utility costs by percentage of building occupied.
- Given that it is not possible to monitor the allocation of kilowatt usage per use case or space, the variance in the MIA's future electricity usage (i.e. the anticipated decrease) will still be dependent on the total electric consumption of the building and its other tenants, including any new tenant that would occupy space that is returned by the MIA, per the allowances of the MIA's lease agreement with Bay City Management.
- The potential benefits of teleworking and hybrid working on energy conservation should be measured against the economic losses that the Baltimore City community will sustain if new tenants are not found in sufficient quantity and quality to fill the void left by such remote work arrangements, rather than the MIA calling more workers back to the office.

Cloud Migration of MIA Data Center

Program Description

Data centers are facilities housing a multitude of interconnected servers and networking equipment that store, process, and manage vast amounts of digital information for various applications and services. Physical data centers consume a substantial amount of electricity due to their continuous operation and power-demanding infrastructure. The primary reason for traditional data center's high consumption of electricity is the constant need for servers to remain operational and ready to process requests at all times. In traditional data center setups, like the MIA's, there are no mechanisms to control power intake effectively, leading to servers running round-the-clock, regardless of the workload. Additionally, processor chips within the MIA's servers lack built-in analytics to regulate power consumption during periods of peak demand or low usage, resulting in a constant and inefficient power draw.

Furthermore, the MIA's data center lacks the integration of renewable energy sources, a feature increasingly adopted by major tech companies like Amazon, Google, and Microsoft. The absence of renewable energy utilization compounds the environmental impact of continuously operating the data center, as conventional electricity sources tend to rely heavily on fossil fuels,

contributing to higher net greenhouse gas emissions. By migrating to a cloud-based platform, the MIA can leverage the cloud provider's infrastructure, which often incorporates energy-efficient technologies and renewable energy sources, thereby significantly reducing the carbon footprint associated with electricity consumption.

Program Objectives

A pivotal aspect of the MIA's transformation of its information technology operations involves migrating the agency's physical data center to the cloud at the conclusion of the MIA's ITS Project with Salesforce ("ITS Project"). The MIA anticipates that this migration will reduce the MIA's overall electricity consumption vis-à-vis eliminating the energy usage associated with the operation and maintenance of the MIA's data center, thereby reducing the MIA's carbon footprint and dependency on non-renewable energy sources.

Measurable Implementation Milestones

- Retire relevant data center servers and complete the migration of critical data center operations to the cloud within one year of ECTS and Enterprise System functionality being moved over to the Salesforce platform.
- Achieve a reduction in operational energy consumption within the MIA's office located at 200 Saint Paul Place, Suite 2700, Baltimore, Maryland 21202.

Obstacles/Challenges

- The timing of the retirement of existing data center servers is dependent on the completion of the ITS Project and the build out of ECTS and Enterprise System functionality via the Salesforce platform.
- The anticipated decrease in the MIA's electricity usage, specific to the operations of the data center, cannot be easily measured due to the aggregated method of metering electricity consumption (based on a percentage of building occupied) in a commercial multi-tenant building such as 200 Saint Paul Place.

State, National, and International Policy Groups

The MIA participates in several state, national, and international groups focused on evaluating climate-related risks and considering policy interventions to address these risks. These groups are not MIA planning, regulatory, or fiscal programs. Thus, the MIA cannot provide information concerning these groups responsive to each data point listed in §2–1305(c)(2) of the Environment Article. However, the MIA's participation in these groups is an important part of its work to understand how climate-related risks may impact the insurance industry and how insurance regulators can mitigate harmful effects of climate change. This section of the Report provides a brief overview of the climate related policy groups that the MIA participates in and work recently undertaken by these groups.

- **Maryland Commission on Climate Change:** The MIA is a member (appointed by the Secretary of the Environment) of two Maryland Commission on Climate Change ("MCCC") working groups established pursuant to § 2-1303 of the Environment Article: (1) the Adaptation and Response Working Group (referred to as the Adaptation

and Response Working Group in § 2-1303); and (2) the Education, Communication, and Outreach Working Group.

- **The Adaptation and Resiliency Working Group ("ARWG")** supports the MCCC by developing a comprehensive strategy for reducing the state's climate change vulnerability and providing state and local governments with tools to plan for and adapt to the more extreme weather and rise in sea levels anticipated as a consequence of climate change. The MIA' Associate Commissioner for Property and Casualty Insurance represents the MIA on the ARWG. In 2023, the ARWG published the Next Generation Adaptation Plan, which provides a ten-year roadmap to increase Maryland's resilience to climate change. At its last quarterly meeting in August of 2024, the ARWG: (1) received a presentation from the Eastern Shore Land Conservancy on the model Climate Resilience Element ("CRE"), which is designed to support county and town planning commissions in integrating action items that enhance climate resiliency into planning efforts; and (2) received a panel presentation on policies to ensure equitable access to climate funding from representatives of the Nature Conservancy Maryland/DC, Maryland Department of Natural Resources, and Chesapeake Bay Trust.
- **The Education, Communication and Outreach ("ECO") Working Group** manages the MCCC's public relations. The members work to educate Marylanders on climate change and to inform them about what the MCCC is doing to address climate change's impacts on our state. The group is made up of eight representatives from non-profit organizations focusing on conservation and climate change issues and nine representatives from state agencies or the University of Maryland system. The MIA's Chief of Communication and Public Engagement represents the MIA on the ECO Working Group. Recent work by ECO Working Group includes: (1) planning for the 2025 Maryland Climate Teach-In, an annual week of events focused on climate change education and solutions; (2) formulating recommendations for the 2025 General Assembly session, including a potential climate education grants program; and (3) developing climate change education and communications materials.

- Maryland is a member of the **Maryland Resiliency Partnership** and works with that group to educate Marylanders regarding their flood risks and steps that individuals, businesses, and communities can take to reduce those risks.
- **National Association of Insurance Commissioners' Climate and Resiliency Task Force:** The National Association of Insurance Commissioners ("NAIC") is governed by the chief insurance regulators from the 50 states, District of Columbia, and five U.S. territories. Through the NAIC, state insurance regulators establish standards and best practices, conduct peer review, and coordinate their regulatory oversight to better protect the interests of consumers while ensuring a strong and viable insurance marketplace. Insurance regulators participate in NAIC committees, task forces, and working groups convened to address specific charges approved by NAIC leadership. The MIA is a member of the Climate and Resiliency Task Force, which serves as the coordinating NAIC body for discussion and engagement on climate-related risk and resiliency issues, including dialogue among state insurance regulators, industry, and other stakeholders. In addition to the overarching Task Force, the MIA is also a member

of two of the Task Force's "workstreams": (1) the Solvency Workstream; and (2) the Climate Risk Disclosure Workstream.

  - **Solvency Workstream**: The workstream's current undertakings include: (1) recommending enhancements to tools that regulators use to monitor and assess the financial condition of insurers in order to better account for climate related risks – these tools include the Own Risk Solvency Assessment that insurers submit annually, the NAIC Financial Analysis Handbook, and the NAIC Financial Condition Examiners Handbook; and (2) developing climate risk stress tests and scenario analysis to evaluate potential financial exposure to both the physical and transition impacts of climate change.
  - **Climate Risk Disclosure Workstream**: The worksteam recently implemented modifications to the NAIC's Annual Climate Risk Disclosure Surveys to better align it with reporting requirements established by the Financial Stability Board's Task Force on Climate-related Financial Disclosures, thereby standardizing reporting requirements for publicly traded insurance companies.

- **NAIC Northeast Zone Initiatives**: The NAIC member jurisdictions are organized into four geographic zones: Northeastern, Southeastern, Midwestern and Western. Each zone has its own chair, vice chair and secretary who sit on the NAIC's Executive Committee. Maryland (via the MIA) is a member of the Northeast Zone.
  - **NAIC Northeast Zone Natural Catastrophe Resilience Technical Training**: In April of 2024, representatives of NAIC Northeast Zone jurisdictions convened in Rhode Island for a two-day training program that covered catastrophe risk, building codes, and resilience retrofit programs. The MIA's Associate Commissioner for Property and Casualty Insurance attended on Maryland's behalf, along with a Senior Engineer from the Maryland Department of the Environment's Flood Management Division (both are members of the ARWG, described above). The first day of the training program consisted of lectures and discussions in a classroom setting. On the second day of the training program, attendees toured and the Natural Hazards Research Lab at FM Global. At the lab, attendees watched demonstrations of structures improved through various fortification techniques being subjected to simulated severe weather conditions.
  - **Coordinated Resiliency Group:** In July of 2024, the Northeast Zone established a Coordinated Resiliency Group. The mission of this group is to discuss current and ongoing resiliency efforts in each Northeast Zone state and develop a coordinated resilience strategy that addresses specific climate related perils faced by the Northeast Zone. The group has held two meeting to-date, during which members discussed resiliency efforts that have been implemented or are under consideration in their states.
- **Sustainable Insurance Forum**: The Sustainable Insurance Forum ("SIF") is a global network of insurance supervisors and regulators working to address sustainability challenges facing the insurance sector. SIF's work includes research on emerging risks, knowledge-sharing on supervisory practices, high-level policy engagement, and joint supervisory statements. Although the NAIC (as a body) is a member of the SIF, Maryland (via the MIA) is one of only seven NAIC jurisdictions that directly participates as a member. The MIA is a member of two SIF working groups: (1) the

Transition Plans Working Group; and (2) the Capital and Supervisory Frameworks Working Group.

- **Transition Plans Working Group ("TPWG")**: During the past year, the working group developed and sent a survey to members to gather information about progress that insurance regulatory bodies have made towards developing transition strategies to deliver climate targets and manage risks associated with the global transition towards net zero.
- **Capital and Supervisory Frameworks Working Group ("CSWG")**: During the past year, the working group developed and sent a survey to members to ascertain which reporting requirements are in place to gather information from insurers concerning how they quantify climate related risks.

- **EU-U.S. Insurance Project:** The EU-U.S. Insurance Dialogue Project (the "Project") includes representatives of the NAIC, the Federal Insurance Office of the U.S. Department of the Treasury, the Federal Reserve Board, the European Insurance and Occupational Pensions Authority, EU National Competent Authorities, and the European Commission. Maryland is one of seven NAIC jurisdictions that directly participates in the Project. The objective of the Project is to increase mutual understanding and enhance cooperation between the EU and the United States in order to promote business opportunity, consumer protection, and effective supervision. There are several workstreams of the Project, which serve as discussion forums on various insurance regulatory issues. Maryland is a member of two workstreams of the Project: (1) the Climate Risk and Resilience Workstream; and (2) the Climate Risk Financial Oversight Workstream.
  - The mission of the **Climate Risk and Resilience Workstream** is to further the understanding of insurance laws, regulations, supervisory practices and initiatives on climate risk and resilience across the EU and the US. Workstream discussions focus on topics such as the use of sensitivity analysis, stress testing, and scenario analysis to address climate-related risks.
  - The **Climate Risk Financial Oversight Workstream** provides a forum for members to share information and discuss the relevant laws and activities undertaken within their respective jurisdictions to address climate-related disclosures and reporting requirements for regulated entities and knowledge of, and views on: (1) appropriate climate risk disclosures within the insurance sector, including the evolution of the disclosure framework developed by the Task Force on Climate-Related Financial Disclosures (TCFD), how insurance regulators are adapting to those TCFD changes, and what the interrelationships are between them; and (2) other climate-related supervisory reporting and financial surveillance within the European Union (EU) and the United States (US).

Conclusion

Currently, the MIA has already employed or is laying the groundwork for several operational initiatives in consideration of Maryland's goal of reducing greenhouse gas and the impacts of climate change. One way the MIA is fostering this goal is by working with insurers to encourage the offering of usage-based insurance in Maryland, given the potential connection

between using usage-based insurance and reductions in greenhouse gasses. The MIA has also taken the initial steps toward the execution of a study to assess underutilized spaces and initiate a reduction in that space to improve utilization and energy conservation, ultimately enhancing sustainability. Additionally, the agency is working toward Cloud migration of the MIA data center in order to reduce the carbon footprint associated with electricity consumption. Lastly, the MIA is participating in several state, national, and international groups focused on evaluating climate-related risks and considering policy interventions to address these risks. The MIA looks forward to continuing to build on these measures to further the State's goals around addressing greenhouse gas reduction and climate change.