



# 2018 Climate-Related Financial Disclosures Report

JULY 2019





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## A MESSAGE FROM OUR CHIEF SUSTAINABILITY OFFICER

AIG has a legacy of leadership in sustainability, which we believe is integral to our long-term success as an insurer, investor, employer and corporate citizen. From supporting low carbon renewable energy projects to providing insurance to the underserved and promoting paperless processes, we are engaged in a variety of sustainability efforts across our global footprint.

AIG supports the scientific consensus that climate change is a reality of increasing global concern. In 2006, AIG was one of the first U.S.-based insurers to formally recognize anthropogenic climate change, indicated by higher concentrations of greenhouse gases, a warming atmosphere and ocean, diminished snow and ice, and rising sea levels.

As the effects of climate change accelerate, they have the potential to impact both the frequency and severity of extreme weather conditions. These and other climate-related risks present opportunities and challenges for the insurance sector with implications for insurers' underwriting, risk capacity, financial reserving, investing, risk modeling and own operations.

In response, AIG consistently employs its expertise in underwriting and risk management to help address the impacts of climate change on our clients, our business and on our stakeholders. For example, we continually assess changes in climate and weather patterns as part of our General Insurance underwriting process. Our General Insurance business continues to identify, adapt, and respond to the developing risk exposures attributed to climate change. AIG is committed to providing insurance products and services to help our clients be proactive against the risks associated with climate change.

As part of our commitment, AIG established a Sustainability Task Force (Task Force) with a mandate to develop recommendations for a corporate sustainability strategy. The Task Force consists of a cross-functional group of AIG employees, including AIG's Executive Vice President and Chief Risk Officer (CRO) and Executive Vice President and Vice Chair, AIG Life Holdings, Inc., who both serve as executive sponsors.

To contribute to this important dialogue and meet stakeholder expectations, we are pleased to present our inaugural climate risk disclosure report, aligned to the Task Force on Climate-related Financial Disclosures (TCFD) framework. It summarizes how we incorporate climate-related risks and opportunities into our governance, strategy and risk management approaches, as well as the metrics and targets we use to track performance.

We look forward to engaging and working with our stakeholders on this important effort and welcome your feedback along the way.

Jennifer Waldner  
AIG Chief Sustainability Officer

# 2018 CLIMATE-RELATED FINANCIAL DISCLOSURES REPORT

## About AIG

American International Group, Inc. (AIG) is a leading global insurance organization. Building on 100 years of experience, today AIG member companies provide a wide range of property casualty, insurance, life insurance, retirement products, and other financial services to customers in more than 80 countries and jurisdictions. These diverse offerings include products and services that help businesses and individuals protect their assets, manage risks and provide for retirement security. AIG common stock is listed on the New York Stock Exchange.

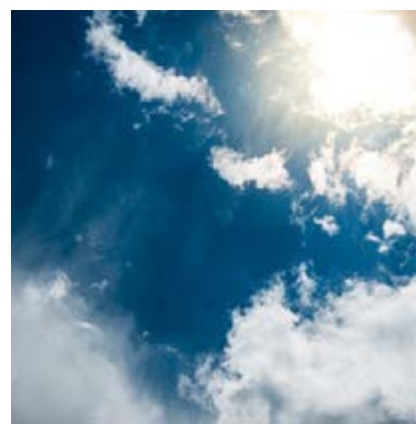
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AIG is the marketing name for the worldwide property-casualty, life and retirement, and general insurance operations of American International Group, Inc. For additional information, please visit our website at [www.aig.com](http://www.aig.com). All products and services are written or provided by subsidiaries or affiliates of American International Group, Inc. Products or services may not be available in all countries, and coverage is subject to actual policy language. Non-insurance products and services may be provided by independent third parties. Certain property-casualty coverages may be provided by a surplus lines insurer. Surplus lines insurers do not generally participate in state guarantee funds, and insureds are therefore not protected by such funds.

The data contained in this presentation are for general informational purposes only. The advice of a professional insurance broker and counsel should always be obtained before purchasing any insurance product or service. The information contained herein has been compiled from sources believed to be reliable. No warranty, guarantee, or representation, either expressed or implied, is made as to the correctness or sufficiency of any representation contained herein.

To learn more about AIG's corporate citizenship efforts, please visit [www.aig.com/about-us/citizenship](http://www.aig.com/about-us/citizenship).

To read AIG's most recent Annual Report, please visit <https://www.aig.com/investor-relations/annual-report-and-proxy-statements>.



# AIG OVERVIEW

To best understand how AIG approaches climate risk—both its own and that of its clients—it is important to understand AIG’s overall business footprint and its organizational structure.

AIG provides a range of insurance products to support our clients in business and in life, including: general property/casualty, life insurance, and retirement and financial services through our General Insurance, Life and Retirement and Investments business units. We serve customers in more than 80 countries and jurisdictions around the world.

As of 2018, our customers included more than 87% of the Fortune Global 500 companies and 81% of the Forbes 2000. AIG had \$47.4 billion in 2018 total revenues; as of 2018, we employed approximately 49,000 employees, and we had \$492 billion in total assets. As of 2018, AIG had over \$56 billion in shareholder’s equity and \$8.3 billion in AIG parent liquidity resources.

**General Insurance** is a leading provider of insurance products and services for commercial and personal insurance customers. It includes one of the world’s most far-reaching property casualty networks. General Insurance offers a broad range of products to customers through a diversified, multichannel distribution network. Customers value General Insurance’s strong capital position, extensive risk management and claims experience and its ability to be a market leader in critical lines of the insurance business. General Insurance is managed by our geographic markets of North America and International.

Product categories within General Insurance include:

- **Liability.** General liability, environmental, commercial automobile liability, workers’ compensation, excess casualty and crisis management insurance, as well as risk-sharing and other customized structured programs for large corporate and multinational customers
- **Financial Lines.** Professional liability insurance for a range of businesses and risks, including directors and officers liability (D&O), mergers and acquisitions (M&A), fidelity, employment practices, fiduciary liability, cyber risk, kidnap and ransom, and errors and omissions insurance (E&O)
- **Property.** Commercial and industrial property insurance products and services that cover exposures to man-made and natural disasters, including business interruption
- **Special Risks.** Aerospace, political risk, trade credit, portfolio solutions, energy-related property insurance products, surety, marine and crop insurance
- **Personal Lines.** Personal auto and property in selected markets and insurance for high net worth individuals offered through AIG Private Client Group (PCG) in the U.S. that covers auto, homeowners, umbrella, yacht, fine art and collections. In addition, we offer extended warranty insurance and services covering electronics, appliances, and HVAC

- **Accident & Health.** Voluntary and sponsor-paid personal accident and supplemental health products for individuals, employees, associations and other organizations, as well as a broad range of travel insurance products and services for leisure and business travelers

**Life and Retirement** is a unique franchise that brings together a broad portfolio of life insurance, retirement and institutional products offered through an extensive, multichannel distribution network. It holds longstanding, leading market positions in many of the markets it serves in the U.S. With its strong capital position, customer-focused service, breadth of product expertise and deep distribution relationships across multiple channels, Life and Retirement is well positioned to serve growing market needs. Product categories within Life and Retirement include:

- **Individual Retirement.** Variable annuities (annuities that offer a combination of growth potential, death benefit features and income protection features), index annuities (fixed index annuities that provide growth potential based in part on the performance of a market index, as well as certain fixed index annuity products offer optional income protection features), fixed annuities (single-premium fixed annuities, immediate annuities and deferred income annuities) and retail mutual funds (mutual fund sales and related administration and servicing operations)
- **Group Retirement.** Group mutual funds, group fixed annuities, group variable annuities, individual annuity and investment products, and financial planning and advisory services

- **Life Insurance.** U.S.: Primarily term life and universal life insurance; International: Distribution of life and health products in the UK and Ireland
- **Institutional Markets.** Primarily stable value wrap products, structured settlement and pension risk transfer annuities, corporate- and bank-owned life insurance and guaranteed investment contracts (GICs)

**Investments** oversees an investment portfolio totaling more than \$314 billion, as of 2018. Our investment strategies are tailored to the specific business needs of each operating unit. The investment objectives are driven by the respective operating segments and AIG parent. The primary objectives are generation of investment income, preservation of capital, liquidity management and growth of surplus to support the insurance products. The majority of assets backing our insurance liabilities consist of fixed maturity securities.

**Blackboard** is a subsidiary focused on delivering commercial insurance solutions using digital technology, data analytics and automation. AIG also has a Legacy Portfolio that consists of our run-off insurance lines and legacy investments that we consider non-core. Effective February 2018, our Bermuda-domiciled composite reinsurer, Fortitude Re, is included in our Legacy Portfolio. AIG shared services consist of those operations that service the enterprise as a whole or do not otherwise exist within a single business unit. This includes operations such as Human Resources, Legal, IT, Marketing and Communications, Government Affairs, Facilities and Security.

This report draws from AIG's 2018 Form 10-K filing. To read that filing in full, please [click here](#).

# 1. GOVERNANCE OF CLIMATE-RELATED RISKS

AIG's Board of Directors and executive leadership team are responsible for addressing the risks and opportunities posed by climate change while providing the robust governance and risk management oversight needed to ensure the company's ongoing financial strength. AIG strives for transparent and clear communication with our stakeholders, and adheres to high ethical standards in our financial and non-financial disclosures.

## **BOARD OVERSIGHT**

The AIG Board of Directors has delegated overall responsibility for climate-related issues facing the company to the Nominating and Corporate Governance Committee (NCGC). The Risk and Capital Committee (RCC) may be informed of climate-related risks insofar as the RCC's role and responsibility is to oversee and review AIG's material risks as well as its approach to managing those risks. Both committees meet at least four times per year or more frequently, as deemed necessary, in order to carry out their responsibilities.

## **Nominating and Corporate Governance Committee (NCGC)**

The scope of duties and responsibilities of the NCGC includes the regular review and assessment of AIG's policies, practices and reporting with respect to sustainability, which includes climate-related issues. The committee is also responsible for how AIG engages in public policy issues, social and environmental practices and any other matters corresponding with AIG's corporate social responsibility efforts.

## **Risk and Capital Committee (RCC)**

The RCC oversees and reviews all aspects of AIG's Enterprise Risk Management (ERM) framework. This

involves reviewing policies, procedures and practices employed to manage all of AIG's key risks (e.g., liquidity, credit, market, operational and insurance), which may be impacted by climate change. The RCC also assists the Board in its oversight of AIG's investment policies.

## **Management Oversight**

AIG's Executive Vice President, Government Affairs, Public Policy and Communications—as a member of the senior management team that reports to the CEO—has overall responsibility for all sustainability-related issues within the company, including matters related to climate change. This executive oversees colleagues who regularly interact with external stakeholders (e.g., policymakers, government officials, regulators, interest groups, the public, etc.) on a variety of topics of interest, including climate change. This role reports periodically, and as appropriate to the NCGC, including on climate-related matters.

## **Enterprise Risk Management (ERM)**

AIG's Enterprise Risk Management (ERM) function integrates the risk management functions in each of our business units and provides senior management with a consolidated view of AIG's key risks. It supports our businesses and

management in the embedding of risk management in our business processes and in identifying, assessing, quantifying, managing, monitoring, reporting and mitigating AIG's risk exposures.

Within each business unit, senior leaders and executives approve risk-taking policies, targeted risk tolerance, and prioritize risks identified within the framework provided by ERM. Accountability for the implementation and oversight of risk policies is aligned with individual corporate executives, with the risk committees receiving regular reports regarding compliance with each policy to support risk governance at our corporate level as well as in each business unit.

## 2. STRATEGY FOR IDENTIFYING CLIMATE-RELATED RISKS AND OPPORTUNITIES

AIG recognizes that climate change is an area of increasing attention amongst our stakeholders and the wider public. Global insured losses for the industry from natural catastrophe events in 2018 were USD 76 billion, the fourth highest on record.<sup>i</sup> More than 60 percent resulted from so-called “secondary perils”, defined as independent, high-frequency, low- to medium-severity loss events often associated with climate change (e.g., hurricane-induced precipitation/torrential rainfall, floods, landslides, drought or wildfire outbreaks). Ongoing urbanization (and therefore concentration of insurable risk) in areas that are vulnerable to climate change is a trend that may continue.

AIG considers the potential impact from climate-related issues on our business, strategy and financial planning over different time horizons ranging from short- to longer-term. In the short- to medium-term, we consider the physical risks resulting from climate change—which can be event-driven or result from shifts in climate patterns.. We view these risks as manageable in light of AIG’s modeling work, our broadly diversified business, and through regular reviews of our risk appetite and reinsurance strategy. A meaningful proportion of our general insurance policies are renewed on an annual basis providing us the opportunity to re-underwrite and re-price the risk regularly. **Medium- and long-term** impacts are considered in strategy setting and asset liability management decisions in both the General Insurance and Life and Retirement businesses. Fundamental trends and significant changes over longer horizons are more challenging as precise forecasts are difficult to make.

### SHORT-TO MEDIUM-TERM RISKS: PHYSICAL RISKS

#### Natural Catastrophe Risk

By the nature of our business, our company is exposed to various potential catastrophic events in which multiple losses can occur and affect multiple lines of business in any given calendar year. Natural disasters such as hurricanes, earthquakes and other catastrophes have the potential to adversely affect our operating results.

AIG enjoys a unique profile as a composite insurer (that is, life and non-life businesses) operating in over 80 different countries and jurisdictions. Such a broad diversity in business lines helps us to limit the relative economic impact of any single insured event.

AIG’s Risk Appetite Framework establishes and maintains appropriate limits on the material risks identified for our core businesses. Following an extensive review, we have substantially reduced our gross and net limits, particularly in Property and Casualty insurance, which has subsequently lowered our risk of exposure to natural disasters.

Our notable progress on risk management and underwriting in the last year was also critical to a revised reinsurance strategy. In 2018, we reconfigured our reinsurance policies to reduce the net risk in our portfolio, which provided meaningful recoveries in the second half of the year. We will continue to adjust our use of reinsurance to balance our portfolio, manage volatility and protect against extreme events.

The impacts of climate change vary region by region and by type of hazard. While climate change is affecting loss patterns through shifts in hazard frequency and severity,<sup>ii iii iv v vi</sup> factors also contribute to changing loss patterns. Shifting demographics has led to increasing concentrations of catastrophe risk, such as through rapid growth in coastal development and suburban growth next to forests (in what is also known as the “wildland-urban interface”).<sup>x xi xii</sup>

#### Operational Risk

At a physical asset level, AIG assesses the risks and opportunities associated with the physical impacts of climate change, including individual facilities and office locations. AIG has business continuity plans to respond to incidents that may disrupt business operations, including extreme weather events. AIG continuously reviews its existing business continuity and disaster recovery practices. Significant events such as Superstorm Sandy and Hurricane Harvey, for example, have provided us with opportunities to enhance and improve our operational resiliency.



AIG seeks to mitigate financial loss arising from catastrophic events through the purchase of insurance from non-affiliated companies and to require that AIG's service providers and business partners also maintain appropriate insurance coverage. AIG, like many companies with operations in high hazard CAT areas, has experienced property losses but has been able to recoup those losses under its own property insurance policies. To determine the sufficiency of CAT limits, we evaluate AIG's aggregate replacement cost values in high hazard flood, wind and earthquake areas, as well as rely on modeling for probable maximum loss/average annual loss expectancies. AIG continues to evaluate past property losses annually. When we renew our policies, we evaluate, with modeling, the need for higher CAT limits in high hazard areas where AIG has owned/leased high-valued property.



### **Climate Risk and Business Continuity**

The impacts of Superstorm Sandy and Hurricane Harvey in 2012 and 2017, respectively, underscored the importance of AIG's own business continuity planning against the potential impacts of climate risk, as the company was operationally impacted by both storms.

In 2012, Superstorm Sandy struck the eastern coastline of the United States and caused particularly severe damage in New York and New Jersey. At the time, Sandy was the first major Atlantic storm to hit the metropolitan New York area since 1936.

Sandy's storm surge flooded portions of New York City (including the portion of Lower Manhattan where AIG's corporate headquarters are located), disrupting travel and causing widespread power outages. As a result of this damage, AIG's Lower Manhattan offices remained closed for several weeks after the storm, requiring us to invoke our business continuity planning. Many employees worked remotely, or from secondary locations to ensure steady service to our clients.

In 2017, Hurricane Harvey struck across the Caribbean, Texas and Louisiana, becoming the second costliest Atlantic hurricane on record. Harvey inundated the city of Houston with between 30 and 60 inches of rain, causing severe flooding across the city, where AIG's Life & Retirement headquarters are located. As with Sandy, the storm caused serious disruption to our operations in Houston causing us to rely on our business continuity plans for weeks after the storm.

In response to Sandy, AIG strengthened its business continuity management approach in order to minimize losses and business interruption in the future. Likewise, AIG conducted an after-action review of the impact of Hurricane Harvey.

## **LONGER-TERM RISKS:**

Transitioning to a low-carbon economy often entails extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. AIG is identifying these longer-term transition risks through our ongoing emerging risk assessment program.

In particular, AIG has established an Emerging Risk Forum which conducts horizon scanning to identify longer-term emerging risks and opportunities—including climate change—to our business to catalyze risk management action and/or new product development.

## **Policy and Regulatory Risk**

AIG constantly monitors and assesses the potential future impacts that regulatory developments may have on the company.

As a global financial services provider with a relatively small environmental footprint we expect to be able to comply with future potential regulatory changes, such as heightened energy efficiency standards or greenhouse gas emissions limits/taxes, with minimal financial impact. For example, in the United Kingdom, AIG complies with the Carbon Reduction Commitment (CRC). For the year 2017, the CRC related carbon tax for AIG UK office facilities was £42,126 (2,380 tons emitted at a charge of £17.70 per ton) or approximately \$53,790. This represents a small fraction of AIG's operating expenses globally.

Beyond the potential impact to our physical operations, insurance regulatory bodies continue to show interest in how the financial services industry including insurance companies are managing climate risk within both their business operations and investment portfolios. For example, UK regulators have introduced climate risk scenarios as part of periodic stress testing of financial services firms. AIG will continue to monitor the potential impact of climate change-related regulatory risks to our businesses or investment management practices.

## **Litigation and Legal Risk**

In recent years the industry has seen an overall increase in various climate-related litigation claims brought forward for a multitude of reasons including as a result of a perceived contribution to climate change, or for insufficient disclosure around material financial risks. As the value of loss and damage arising from climate change grows, it is plausible that litigation risk of this kind may increase. For example, Directors and Officers (D&O) may be found personally liable for breaching duty of care and/or due diligence requirements, where they may exist, if they fail to properly consider and disclose foreseeable climate-related risks, which could result in increased D&O claims.

We track ongoing litigation in the United States that seeks to compel companies to remedy their perceived contribution to climate change (i.e., mitigation costs, third party property damage, etc.). Litigation seeking to compel companies to remedy their perceived contribution to climate change may, if successful, also lead to an increase in claims. Based on our monitoring, while the overall volume of litigation activity has increased, past litigation seems to have largely been unsuccessful on numerous grounds including difficulties in determining and attributing fault and

liability to a particular company, and the judiciary's deference to the political branches of government on questions relating to climate change. AIG will continue monitoring litigation trends to assess the potential impact of any developments on its businesses and overall risk mitigation strategies.

#### **Technology Risk**

Technological advancements that support the transition to a lower-carbon, energy-efficient economic system may have a significant impact on a wide range of companies and other organizations. This may affect the nature and financial impact of the risks our customers seek to insure. This economic transition may also materially affect the demand for insurance in specific sectors—most obviously in energy and transport. Although this may not

necessarily reduce the overall demand for insurance products and services, it may alter the patterns of demand and the nature of insurance cover required, to which AIG will need to respond to remain competitive.

#### **Reputation Risk**

Climate change has been identified as a potential source of indirect reputational risk to AIG's corporate brand due to the prospect of changing customer or community perceptions of an organization's contribution to or detraction from the transition to a lower-carbon economy. To date, this has had minimal reputational impact upon AIG or the industry.



## Business Unit Spotlight: AIG Life & Retirement

AIG Life & Retirement is a unique franchise that brings together a broad portfolio of life insurance, retirement and institutional products offered through an extensive, multichannel distribution network. It holds long-standing, leading market positions in many of the markets it serves in the U.S. With its strong capital position, customer-focused service, breadth of product expertise and deep distribution relationships across multiple channels, Life & Retirement is well positioned to serve growing market needs. In 2018 Life and Retirement generated revenues of \$14.1B, with adjusted pre-tax income of \$3.2B.

### PHYSICAL RISK (natural catastrophe risk that gives rise to mortality risk, morbidity risk and business continuity risk):

AIG Life & Retirement is exposed to climate-related mortality and morbidity risks and potential higher than expected losses from actual mortality and morbidity. Mortality risk exists in a number of our product lines but is most significant for our life insurance products.

Higher mortality and morbidity could arise in the event of an increase in the frequency and intensity of natural catastrophes (e.g., floods, droughts, heatwaves, etc.) associated with climate change, although this impact is generally expected to be limited as our risks tend to be dispersed across the country. Nevertheless, climate-related insurance risks are placed relatively low on the spectrum of risks within our Life & Retirement businesses.

The previously discussed business continuity risks resulting from climate change are due to the possibility of increased natural catastrophes in Life & Retirements primary business locations (e.g., Texas coastal and California wildfire and earthquake areas). The impact of Hurricane Harvey on our Houston location was a reminder of why we prepare to quickly respond to a large-scale business disruption with minimal advanced warning. AIG continues to strengthen its business continuity plans and develop mitigation strategies to further enhance our operational resiliency.

**TRANSITION RISK** (market risk): In the case of AIG Life & Retirement, certain policyholder obligations can stretch decades out into the future which we seek to match with equally long-dated assets. In matching assets to these long-duration liabilities, AIG necessarily seeks out investments that offer sustainable and predictable returns over the long-term. Assets identified as posing an increased credit and/or market risk over the long-term would therefore receive additional scrutiny, or possibly may be excluded from consideration in the portfolio.

**OPPORTUNITY** (products and services): AIG's Retail Mutual Funds (RMFs) business launched the AIG Environmental, Social and Governance (ESG) Fund(s) in 2016. This fund uses ESG practices and a rules-based investment approach to seek capital appreciation and current income with a positive social impact. Looking ahead, Life & Retirement has identified expanding our suite of ESG funds as an opportunity.

## Investment/Credit Risks

AIG's investment strategies are tailored to specific business needs with the primary objectives of investment income, preservation of capital, liquidity management and growth of surplus.

AIG is a diversified company that takes on both short- and long-term liabilities from policyholders. To the fullest extent practicable, AIG seeks to duration-match its assets to its liabilities. As such, for our long-term liabilities that can stretch

30, 40, or even 50 years into the future, we necessarily seek out long-term investments. This involves taking a long-term view including the return profile and sustainability of the investment(s).

Broad asset classes in the portfolio include fixed income securities, real estate, and alternative investments. Some of these investments are either secured by, or heavily dependent on physical assets. Although our credit

process considers protections that are in place such as property and business interruption insurance, increased risk from climate change may affect the value of these assets in the future. Given the long-dated nature of our liabilities, our credit research process assesses the long-term sustainability of our borrowers and the assets that secure them.

Over the longer-term, as efforts to move away from a carbon-intensive economy gather pace, we recognize the possibility that, financial market participants may fundamentally reassess the value of carbon-intensive assets and the businesses that rely on them. Shifts in consumer behavior may affect the long-term viability of these businesses and their ability to repay debt. This re-valuation may lead to impairments to the value of these assets. We consider long-term trends as part of our initial credit review process and regularly reassess credit worthiness.

### **CLIMATE-RELATED OPPORTUNITIES**

An important part of AIG's strategy for managing climate risk is to pursue climate-related market opportunities that are consistent with our core business strategy. Key areas of opportunity for AIG include providing our risk solutions and expertise to clients, developing new products and services to help our clients and customers manage their climate-related risks, establishing partnerships to leverage expertise in order to contribute to resiliency, supporting more energy-efficient operations, investing in renewable energy sources and offering sustainable investment products.

### **Providing Risk Solutions and Expertise to Clients**

AIG delivers technical expertise and tailored, solutions-based approaches to assist clients in proactively identifying their exposures, including those stemming from climate change risk, with the aim of managing them to lower their cost of risk and build stronger business resiliency. To this end, we are able to deploy our catastrophe models, consultants and engineers to partner with clients to assess risks and build business resiliency to natural perils (e.g., flooding).

### **New Products and Services**

AIG regularly consults with our clients to understand the unique and emerging risks they face and to consider the development of responsive products and services that meet their needs. As AIG collects relevant data and available metrics on unaddressed risks, we can use that data to guide new product development and underwriting approaches. As the impacts of climate risk are more deeply felt—especially those that currently lack an insurance solution framework—we may explore the development of new products and services to address the needs of current and potential clients.

AIG recognizes that without insurance, the appetite for taking risks in a new or unproven field of opportunity would be dramatically reduced. Our role as an insurer of renewable energy and lower-carbon industries helps support the overall market transition to a lower-carbon economy. AIG is a recognized market leader in the insurance of offshore wind farms, as well as a sizeable number of solar (photovoltaic/concentrated solar power) plants and other renewable energy operations.

In addition to development opportunities for new clean energy products supporting industry migration to a lower-carbon economy, AIG is a provider of parametric insurance, which protects against economic loss not adequately addressed by traditional property and casualty products. Parametric coverage is not new to the insurance industry but we are noting an increasing demand for it as buyers seek alternative insurance solutions that will assist in recovering more quickly from certain environmental conditions, weather events or catastrophic perils. Coverage is triggered by an event, such as an earthquake or named storm,

### **Business Unit Spotlight: Lexington Insurance**

Lexington Insurance Company, part of our General Insurance business, offers innovative products and services to assist U.S. clients in becoming more resilient against the effects of climate change. These include:

- Private market flood insurance that covers flood damage and allows policyholders to rebuild.
- Upgrade to Green, a product offering that provides upgrade benefits that allow for green building upgrades to be included in the recovery from partial and total losses to homes and commercial buildings, and during the construction phases of building.

within a designated geographic area and reaching specified parameters (certain earthquake magnitude or hurricane wind speed / central pressure reading). Parametric insurance links the amount of the loss payment to occurrence of the triggering event – providing a predetermined dollar payout upon its occurrence. Because parametric insurance virtually eliminates the need for claim adjusting, the payout can be made relatively quickly. This, in turn, speeds up the insured's ability to recover from the triggering event by having cash on hand to handle collateral losses or recovery expenses.

## Partnerships

Due to the scale and complexity of the challenge associated with climate change, AIG is increasingly seeking to partner with private sector peers, academic institutions, NGOs, international organizations and other groups to leverage our expertise in risk management with other key skills sets.

For example, AIG is a founding member of Blue Marble, a consortium of nine companies that provides small-premium, low-limits micro insurance to smallholder farmers in Uganda and Zimbabwe against extreme weather.

Through a partnership with Wood Plc and Enactus, AIG is involved in the Rockefeller Foundation's 100 Resilient Cities (100 RC) program, which assists cities in identifying and managing the risks associated with climate change as well as design and construction solutions to reduce or mitigate these risks.

Through a partnership with the Insurance Development Forum (IDF)—a public-private sector partnership bringing together the World Bank, the United Nations and the insurance sector—AIG is contributing to the goal of developing solutions in order to tackle low insurance penetration rates across jurisdictions through commercially viable means. The IDF is also acting as a platform, bringing together a range of stakeholders, such that the insurance industry can address the issue of climate change in a more coordinated and focused manner.

## Resource Efficiency

AIG is not an energy-intensive business, nor does AIG consume large amounts of natural resources for the operation of our business. However, we recognize that shifting our energy usage toward lower emission energy sources can result in potential savings on annual energy costs while contributing to a lower-carbon economy. For more information on how we are implementing operational efficiency initiatives, please refer to the [Metrics and Targets](#) section of this report.

## Investment opportunities

AIG has been a leading investor in renewable energy projects for over 30 years, with \$2.9 billion invested in private placement wind, solar, geothermal and hydroelectric projects worldwide in 2018, resulting in significant reductions in carbon emissions. In addition to renewable power, AIG is a leading investor in green energy projects, such as waste-to-energy, transmission and distributed generation. AIG also invests in infrastructure assets that improve energy efficiency, grid connectivity and reliability. We are also investing in innovative transportation networks that improve mobility and use less energy. Many of these investments are characterized as "Green Bonds."



### **Methanol as Ship Fuel**

In 2018, AIG was a lead investor in a portfolio of dual-powered, 50,000 deadweight ton, ocean tankers. The tankers were delivered in 2016 and are under long-term contract to Marininvest, a major international chemical company. The tankers are built according to eco-design standards which enable the main engines to burn either standard bunker fuel or methanol.

Methanol provides a cleaner marine fuel alternative, and it is estimated that the emissions reduction compared to burning heavy fuel will be up to a 99% reduction in SO<sub>x</sub>, a 95% reduction in particulate matter, a 60% reduction in NO<sub>x</sub>, and a 5% reduction in CO<sub>2</sub>.

Since being placed in service, the tankers have operated almost exclusively on methanol.

In addition to the reduction in greenhouse gases and airborne pollution, ship operations on methanol reduces the risk of heavy fuel oil spills. Methanol readily dissolves in water and biodegrades rapidly.<sup>xiii</sup>

AIG's diverse investment portfolio includes investments in both fossil fuel generation as well as renewable energy. We recognize that by investing in clean energy technology, we diversify our portfolio and further enable those innovations to drop in cost, improve storage capability and expand uptake globally.

### **Sustainable investment products**

AIG recognizes the investment community's growing interest in Environmental, Social and Governance (ESG) products. In 2009, SAAMCo, an AIG asset management company, began offering ESG investment products (VALIC Socially Responsible and VALIC Global

Social Awareness). In 2016, AIG launched our first ESG product into the retail mutual fund market (AIG ESG Dividend Fund).

### **LOOKING AHEAD**

AIG continually works to augment its strategic management of climate risk and opportunities. AIG's Executive Leadership Team has committed in 2019 to explore the development of a climate change scenario analysis, which is a formal analysis of the impact that a +2° Celsius scenario would have across the company's underwriting, investments and operations.

### 3. MANAGEMENT OF CLIMATE-RELATED RISKS

AIG has an integrated process for managing risks throughout our organization in accordance with our robust risk management framework. Climate-related risks are included in AIG's risk management framework and integrated into our identification processes, scenario modeling and emerging risk assessment.

#### Risk Appetite Frameworks

Our Risk Appetite Framework integrates stakeholder interests, strategic business goals and available financial resources. We balance these by seeking to take measured risks that are expected to generate repeatable, sustainable earnings and create long-term value for our shareholders. The framework reflects our risk appetite statement approved by the Board of Directors or a committee thereof. It also encompasses a set of supporting tools, including risk tolerances, risk limits and policies, which we use to manage our risk profile and allocation of financial resources.

#### Risk Limits

A key component of our Risk Appetite Framework is having a process in place that establishes and maintains appropriate limits for the material risks related to our core businesses. The potential impact of climate-related risks on these material risks are considered within the framework. Further details on our approach to risk limits can be found on pages 145-146 of the AIG 2018 10-K.

#### Risk Identification

Risk identification serves as a key tool used to inform the Risk Appetite Framework. We conduct risk identification through a number of processes at the business unit and corporate level focused on capturing our material risks and key areas of focus for follow-up risk management actions.

A key initiative is our integrated bottom-up risk identification and assessment process down to the product-line level. These processes are used as a critical input to enhance and develop our analytics for measuring and assessing risks across the organization.

#### Risk Modeling and Other Risk Management Tools

AIG employs recognized third-party catastrophe risk models to evaluate and simulate the frequency and severity of catastrophe events and associated losses to our portfolio of exposures. These models are sophisticated, employing physically based modeling with parameters and assumptions derived from historical hazard and claims data. The models are updated as new science and data become available in order to ensure they are continually improved and validated.

#### Emerging Risk Forum

AIG has an Emerging Risk Forum to monitor, assess and analyze climate-related risks, among other key emerging risks facing the company. The forum is comprised of AIG subject matter experts from across many global geographies and functions and conducts horizon scanning intended to facilitate cross-functional dialogue, improve information flow across the company, catalyze risk management action and spark product innovation. Within its mandate, the Forum considers a range of risks to AIG associated with climate change, including climate-related insurance liabilities, transition risks and investments.

We make adjustments to modeled losses to account for loss adjustment expenses, model biases, data quality and non-modeled risks. Our modeling work contributes to prudent underwriting and pricing of traditional climate risks related to natural catastrophes, as well as the use of hedging/protective measures such as issuing catastrophe bonds and purchasing reinsurance.

When catastrophic events happen, AIG uses them as an opportunity to detect and remedy any weaknesses in how we model, select and price risk. Since most of our policies exposed to catastrophic risks are one-year contracts, we can adjust our underwriting guidelines, pricing and exposure accumulation in a relatively short period. Lessons learned from post-catastrophe event studies are incorporated into modeling and underwriting processes of risk pricing and selection.

AIG also utilizes scenario or deterministic analysis to measure and monitor risks that may be exposed to climate change, for example pandemic risk or market and credit risks within our investment portfolios.

#### Underwriting and Pricing

We recognize that climate change has implications for the insurance industry exposure to natural catastrophe risk. With multiple levels of risk management processes in place, we actively analyze the latest climate science and policy to anticipate potential changes to our risk profile, pricing models and strategic planning. For example, we continually consider changes in climate and weather patterns as an integral part of the underwriting process.

We manage this exposure through multiple approaches such as setting



### **Hurricane and Flood Models**

In 2018, AIG developed an internal U.S. hurricane model in order to provide a more bespoke view of the impacts of climate change on wind, storm surge and flood risks to our business stemming from U.S. hurricanes. Additionally, we used our internally developed flood models to create an AIG view of flood maps in more than 25 countries, which can be customized to incorporate climate change views for underwriting and pricing flood risk. In addition to internal models, we also analyze extreme disaster scenarios, such as flooding in London resulting from the failure of the Thames Barrier due to an increase in windstorm intensity and sea level rise from climate change, to monitor and manage concentration risks within our portfolios.

risk limits based on aggregate Probable Maximum Loss (PML) modeling, monitoring overall exposures and risk accumulations, and purchasing catastrophe reinsurance through both the traditional reinsurance and capital markets in addition to other reinsurance protections.

The majority of our general insurance policies exposed to catastrophic risks are one-year contracts that allow us to adjust our underwriting guidelines, pricing and exposure accumulation in a relatively short period. We further manage these risks through risk review and selection processes, exposure limitations, exclusions, deductibles, self-insured retentions, coverage limits, attachment points, and reinsurance.

This management is supported by sound underwriting practices, pricing procedures and the use of actuarial analysis to help determine overall adequacy of provisions for insurance. Underwriting practices and pricing procedures incorporate historical experience, changes in underlying exposure, current regulation and judicial decisions as well as proposed or anticipated regulatory changes.

### **Concentration Management**

We closely manage insurance risk by monitoring and controlling the nature and geographic location of the risks in each line of business underwritten, the terms and conditions of the underwriting and the premiums we charge for taking on the risk. The aforementioned modeling techniques, both stochastic and deterministic, are used to analyze these concentrations. Our broad-based distribution also assists in managing concentrations. In addition, we actively manage concentration of exposure for our group mortality risks.

As previously mentioned some invested assets may be impacted by climate change in the future given their long-dated nature. Our credit risk mitigation tools include the use of third party guarantees or collateral. This assists in mitigating or avoiding unwanted accumulations.

### **Credit and Market Exposure Management**

In recognition of the credit risk exposures we face as a company spanning, for example, real estate, fixed income and equities investments, we have a team of credit professionals in place, subject to ERM oversight, to assure appropriate credit risk management in accordance with our credit policies and procedures relative to our credit risk parameters. AIG's Chief Credit Officer (CCO) and other

credit executives within the company are responsible for the development, implementation and maintenance of this risk management framework. (For further details on AIG's credit risk management framework, please consult AIG's 2018 Form 10-K; pg. 147-148).

We are engaged in a variety of insurance, investment and other financial services businesses that expose us to market risk, directly and indirectly. We define market risk as the risk of adverse impact due to systemic movements in a variety of market drivers, including: equity and commodity prices, residential and commercial real-estate values, and credit spreads. The Risk Officer with each business is responsible for creating a framework to properly identify these risks, then ensuring that they are appropriately measured, monitored and managed in accordance with the risk governance framework established by AIG's Investments Portfolio Managers, with support from AIG's CCO and AIG's Chief Market Risk Officer (CMRO). The scope and magnitude of our market risk exposures is managed under a robust framework that contains defined risk limits and minimum standards for managing market risk in a manner consistent with our risk appetite statement. Our market risk management framework focuses on quantifying the financial repercussions of changes in these broad market observables, as opposed to the idiosyncratic risks associated with individual assets that are addressed through our credit risk management function. (For further details on AIG's market risk management framework, please consult AIG's 2018 Form 10-K; pg. 148-153)

## Mitigation Through Reinsurance

AIG uses reinsurance (that is, insurance against losses experienced within our own insurance portfolio) to manage overall capital adequacy and mitigate the insurance loss (Life and Non-Life) exposure related to certain events, such as natural and man-made catastrophes or death events. AIG purchases catastrophe reinsurance and retrocessional cover through traditional reinsurance markets, capital markets through insurance-linked securities and collateralized reinsurance transactions, such as catastrophe bonds, sidecars and similar vehicles.

The AIG catastrophe reinsurance program provides protection on both an aggregate and occurrence basis. AIG has also purchased property-per-risk covers that provide protections against large losses globally, which include those emanating from non-critical catastrophe events (i.e., all events except for named windstorms and earthquakes) globally as well as critical catastrophe events (i.e., named windstorms and earthquakes) outside North America.

## Life and Retirement

AIG's Life and Retirement employs a variety of risk management practices that mitigate the natural catastrophe and pandemic risks some of which may be associated with climate change. In particular:

### Portfolio Concentration Risk Management

- We have a broad-based distribution that markets our products across the entire U.S. This mitigates concentration risk across our book. In addition we actively manage concentration of exposure for our group mortality risks.
- We also limit the amount of losses attributable to a single policy and also utilize reinsurance to mitigate volatility from a very large claim and the risk of an unexpected significant event.

### Risk Monitoring & Trend Analysis

- We conduct ongoing monitoring and assessment of mortality, longevity and morbidity experience relative to that assumed in pricing, valuation, stress testing and cash flow testing. Significant analysis is carried out around claims and actual to expected mortality and longevity ratios to understand trends and potential emerging risks. If experience significantly deviates from our expectation then we are able to adjust our pricing accordingly and establish higher reserves on inforce if necessary.
- Within L&R, we have a Chief Medical Director and supporting medical team responsible for researching emerging trends and suggesting corresponding modifications to our underwriting guidelines.

## Underwriting

Within Life & Retirement, product design that allows us to, in certain cases, increase mortality charges to align them with our updated best estimate mortality assumptions in the face of increasing rates is another example of managing potential climate-related risks through our underwriting and pricing processes.

## 4. METRICS AND TARGETS

AIG uses select metrics to assess and manage our climate-related risks and opportunities in line with our strategy and risk management process.

We have responded publicly to the CDP (formerly Carbon Disclosure Project) Climate Change questionnaire since 2010. Due to the complexity of aggregating the data for our global operations, we have historically reported the data for which we have the most visibility and verification, specifically Scope 1 and 2 emissions for our New York City and UK operations.

As an insurance company that does not manufacture or sell tangible products, most indirect upstream and downstream (Scope 3) emissions that occur in AIG's value chain are not applicable. Business travel is relevant to our operations, but not currently disclosed.

### Greenhouse Gas Emissions

AIG's emissions disclosures to date are limited to Scope 1 and 2 emissions associated with UK and New York City operations. We calculate our GHG emissions in line with the GHG Protocol methodology.

	2016	2017	2018
Scope 1 emissions (metric tons CO2e)	582	265	TBD
Scope 2 emissions (metric tons CO2e)	12,135	9,781	TBD
Total	12,717	10,046	TBD

Our 2018 emissions reflect a 9 percent year-over-year reduction from the prior reporting period. The decreases for the reported geographies were driven by energy efficiency initiatives and consolidation/reductions of office footprints through consolidation, densification, and work-from-home strategies.

### Emission Reduction Targets

AIG has two regional targets set for reducing operational emissions in the UK and New York City.

- AIG is a supporter of the UK Carbon Reduction Commitment in the UK and has committed to reducing the Scope 1 and Scope 2 carbon emissions associated with its UK business operations by 20 percent below the 2010 baseline level by 2020. As of 1/1/2019, AIG's UK operations have exceeded the target commitment, reducing overall Scope 1 and Scope 2 emissions by 40 percent, 200 percent of the original target.
- As an original participant in the 2013 NYC Carbon Challenge, AIG committed to reduce the carbon emissions associated with its NYC operations by 30 percent from

2011 levels within 10 years, or by 2023. As of the end of 2018 we are on track to meeting that goal, having achieved 77 percent of the total reductions needed. In 2019, AIG renewed its participation and commitment to the NYC Carbon Challenge, committing to further reduce emissions by 40 percent below 2011 levels by 2030.

For both of these regional targets, AIG has reduced emissions through a combination of energy-efficient operational controls and investments in energy efficient infrastructure.

## Operational Efficiencies

AIG is committed to implementing practices that reduce the environmental impact of our business. Efforts include encouraging the company's suppliers to improve the sustainability of products and services, increasing the efficiencies of internal company operations and physical assets under the company's control, and reducing energy usage.

AIG has invested more than \$800 million over the past five years to continuously update our worldwide offices, including the use of high efficiency lighting, sustainably manufactured products, and energy-efficient mechanical infrastructure and computer server technologies. AIG currently occupies over 1MM square feet of office space in Leadership in Energy and Environmental Design (LEED) certified green buildings, and recently committed to relocating our global headquarters office in New York City to a LEED certified building for target occupancy at the end of 2020. Globally, AIG has continued to reduce office footprints through consolidation, densification, and work from home strategies, delivering material impacts which will result in future long-term reductions to our overall GHG emissions.



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American International Group, Inc. (AIG) is a leading global insurance organization. Building on 100 years of experience, today AIG member companies provide a wide range of property casualty insurance, life insurance, retirement products, and other financial services to customers in more than 80 countries and jurisdictions. These diverse offerings include products and services that help businesses and individuals protect their assets, manage risks and provide for retirement security. AIG common stock is listed on the New York Stock Exchange.

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