



# Arch Capital Group Ltd. Sustainability Accounting Standards Board Disclosure Report 2020

*For the year ended December 31, 2020*



*Prepared in accordance with SASB*

All data in this Sustainability Accounting Standards Board (SASB) disclosure is as of, or for the year ended December 31, 2020 unless otherwise noted.

## SUSTAINABILITY ACCOUNTING STANDARDS BOARD DISCLOSURE

Arch Capital Group Ltd. (together with its subsidiaries, "Arch" or "the Company"), a Bermuda public limited liability company, provides insurance, reinsurance and mortgage insurance on a worldwide basis through its wholly owned subsidiaries. While we are positioned to provide a full range of property, casualty and mortgage insurance and reinsurance lines, we focus on writing specialty lines of insurance and reinsurance.

In addition to providing comprehensive disclosure on our website regarding our approach to value creation, which integrates environmental, social and governance (ESG) factors, Arch is providing the following disclosures, which are aligned with the Sustainability Accounting Standards Board (SASB) framework for the insurance industry.<sup>1</sup>

This report may include forward-looking statements, which reflect our current views with respect to future events, risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. For a complete description of the risks and factors that could cause actual results to differ from our current expectations, please see our annual reports on Form 10-K and quarterly reports on Form 10-Q filed with the SEC.

### I. SUSTAINABILITY DISCLOSURE TOPICS & ACCOUNTING METRICS

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<b>Transparent Information &amp; Fair Advice for Customers</b>	FN-IN-270a.1	Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of insurance product-related information to new and returning customers	<a href="#">3</a>
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<b>Systemic Risk Management</b>	FN-IN-550a.1	Exposure to derivative instruments by category: (1) total potential exposure to non-centrally cleared derivatives, (2) total fair value of acceptable collateral posted with the Central Clearinghouse and (3) total potential exposure to centrally cleared derivatives	<a href="#">11</a>
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<sup>1</sup> The inclusion of information contained in this report should not be construed as a characterization regarding the materiality or financial impact of that information. For a discussion of information that is material to Arch, please see our 2020 Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the SEC on February 26, 2021 (2020 Annual Report).

### II. ACTIVITY METRIC

FN-IN-000.A	Number of policies in force, by segment	<a href="#">13</a>
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### III. DISCUSSION AND EXPLANATIONS OF ACCOUNTING AND ACTIVITY METRICS

## Transparent Information & Fair Advice for Customers

### **FN-IN-270a.1**

Total amount of monetary losses as a result of legal proceedings associated with marketing and communication of insurance product-related information to new and returning customers

In accordance with Securities and Exchange Commission (SEC) requirements, Arch discloses all material legal proceedings, other than ordinary routine litigation incidental to the business, in its Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q. In 2020, legal proceedings and/or losses, if any, associated with marketing and communication of insurance and financial product-related information to new and returning customers were immaterial. See note 24 to our 2020 Annual Report.

### **FN-IN-270a.2**

Complaints-to-claims ratio

We provide a wide range of commercial property and casualty insurance products primarily through our U.S.-based insurance subsidiaries. Our U.S.-based insurance subsidiaries are subject to insurance regulation in the various states and jurisdictions where they transact business. Most state insurance departments provide consumer complaint data to the National Association of Insurance Commissioners (NAIC) Consumer Information Search (CIS), and the NAIC produces several reports combining this data. Neither the NAIC nor Arch, however, calculates a complaints-to-claims ratio. We do not believe a complaints-to-claims ratio is a meaningful metric for assessing a company's claim handling process. For example, companies may track open and closed claims differently, which could result in a comparison that is not meaningful. Additionally, a complaint may be received years after a claim is closed, which could overstate a company's ratio for that reporting period. A complaints-to-claims ratio also would not account for variations in an underwriting company's concentration of lines of business or market share, which further diminishes the usefulness of the metric.

Based on information from the state insurance departments, the NAIC does provide a summary listing of all closed complaints by line of business for each U.S.-domiciled underwriting company. The NAIC then develops a "closed complaint index," which takes into account this information as well as market share and premium by line of business. We believe this closed complaint index is a more meaningful metric, because it factors in market concentration by line of

business, providing a more comparable measure. Accordingly, we are providing the closed complaint indices for our U.S. insurance underwriting companies that report financial information to the NAIC.

The NAIC defines "closed complaints" as complaints where the state has upheld the consumer's position and calculates a "closed complaint index" by comparing a company's closed complaints to the company's market share of premiums for the respective line of business. As part of the closed complaint ratio calculation, the NAIC uses an algorithm that compares each underwriting company's ratio to an industry-wide national median score of 1.0. The national median score attempts to normalize the ratio for each underwriting company based upon the total number of complaints, market share and other factors included in the algorithm. For each policy type, 50% of companies have ratios greater than the median score of 1.0, and 50% have ratios below the median score of 1.0. It is important to note, however, that because the NAIC ratio uses written premium for the denominator, its methodology may skew the ratio for an underwriting company with little or no written premium, such as a company with run-off business. For example, for an underwriting company with little or no written premium, the ratio may appear to be abnormally high even when the company received a minimal number of complaints.

As disclosed on the NAIC website, CIS data is voluntarily supplied by state insurance departments and compiled and coded by the NAIC. Not all states provide complaint data to the CIS.

For Arch Insurance Company, the closed complaint index reported by the NAIC for 2020 was 0.20 (based on 10 complaints). For Arch Indemnity Insurance Company, the closed complaint index reported by the NAIC for 2020 was 1.63 (based on 3 complaints). For Arch Specialty Insurance Company, the closed complaint index reported by the NAIC for 2020 was 0.13 (based on 1 complaint). For Arch Property Casualty Insurance Company, the closed complaint index reported by the NAIC for 2020 was 0 (based on 0 complaints). The above information is as of March 26, 2021 and may also be obtained through the Consumer page on the NAIC site at: [https://www.naic.org/index\\_consumer.htm](https://www.naic.org/index_consumer.htm).

For our U.S. mortgage insurance (MI) subsidiaries, we rarely deal directly with consumers and, therefore, do not receive many consumer complaints filed with state insurance departments. Because of the structure of MI products, the minimal number of complaints received is not a meaningful metric for assessing our claims handling process. Therefore, our U.S. MI subsidiaries do not measure claims performance based upon complaint volume.

For our reinsurance subsidiaries, we do not deal directly with consumers and, therefore, do not receive consumer complaints filed with state insurance departments. In addition, our reinsurance subsidiaries do not typically receive formal complaints from their ceding company clients other than in respect to infrequent claims disputes. Therefore, our reinsurance subsidiaries do not track or measure claims performance based upon complaint volume.

### **FN-IN-270a.3**

#### Customer retention rate

For our U.S.-based insurance subsidiaries, we routinely monitor our customer retention rates for all measurable lines of business, excluding products that are by their nature nonrecurring (e.g., surety, travel). We include this measure as part of our internal management reporting, ensuring we account for and address any unexpected changes within a business unit. We look at customer retention on both a premium-weighted and policy-count-weighted basis. We feel each diagnostic is informative, and we analyze customer retention at lower segmented levels where useful. Note that our methodology does not adjust the calculation for involuntarily terminated customers as is provided in the SASB standards.

Due to the wide diversification of business written by our U.S.-based insurance subsidiaries, the expected customer retention ratio varies significantly across our business units. The majority of our business units achieve retention ratios between 75% and 90%, which remain relatively consistent over time.

For our U.S. MI subsidiaries, we do not track customer retention rates since we do not have direct contact with the customer. Instead, for our MI business, the customer is a lending institution. Based on this structure, a more meaningful metric is the retention rate of new insurance written (NIW), a common term in mortgage insurance that refers to the aggregate dollar amount of newly insured mortgage loans, on a quarterly basis. In 2019 and 2020, on average, over 90% of the lender home offices that submitted at least one loan (or unit count) that became NIW, submitted at least one loan (or unit count) that became NIW the following quarter.

We do not track customer retention at a group level for our U.S.-based reinsurance business because we do not find it to be a useful metric given that our customers are insurance companies and our strategic focus is on adjusting capacity in different markets based on pricing. While the metric is not relevant at a group level, some individual departments do track retention rates when it makes sense for their part of the business.

### **FN-IN-270a.4**

#### Description of approach to informing customers about products

For our insurance and mortgage products, customer interactions are handled generally through a limited number of specialized intermediaries including professionally licensed brokers, agents, wholesalers, administrators and mortgage originators, as applicable, who are instrumental in providing information and advisory assistance to existing and potential customers. These intermediaries are also generally involved in reviewing the policies and their terms and managing the insurance relationship following the policy's purchase. The policyholders are also encouraged to carefully review the content wording and to seek clarification as needed.

Our underwriters and sales employees have regular contact with the intermediaries to confirm that their understanding of our products is clear and comprehensive. The applicable underwriting business unit, communications group and legal department are all involved in preparing and reviewing communications that are distributed to customers or prospective customers. Our communications are tailored to meet the specific needs of the customer and vary based on the underlying product type and segment. The information we provide may include, among other things, the specific product and policy scope (including limits and deductibles as applicable), underwriting terms and conditions, pricing information, industry and exposure-related materials, risk management support and other general information about the company issuing the underlying policy, our brand and/or our financial strength as well as information regarding how to make a claim and claims procedures, as applicable.

In our mortgage business, we work closely with lenders and industry associations to identify areas of opportunity to educate the public on our solutions and address common misconceptions about down payment requirements and the homebuying process. We understand that owning a home can be financially challenging, so we see immense value in clearer and more inclusive opportunities for the public to engage with experts at Arch and across the industry.

We are constantly working to provide education on the meaningful role this part of our business plays in society. We support the efforts of the U.S. Department of Housing and Urban Development's (HUD) to identify approved housing counseling agencies by state on their website. These programs offer advice on understanding the homebuying process, default prevention and credit management.

We provide access to Government Sponsored Enterprise-approved homebuyer education courses at [archmi.com/hbe](http://archmi.com/hbe) to help borrowers prepare for the challenges and responsibilities of homeownership. We believe that prospective homebuyers can also benefit from homebuyer education programs sponsored by community, nonprofit and governmental agencies. We are proud to partner with BALANCE, a nonprofit financial counseling organization that makes homebuyer education accessible to a wider audience. We are constantly working on ways to spotlight the meaningful role this part of our business plays in promoting a healthy economy and a stronger society. In 2020, over 4,700 potential homebuyers completed the homebuyer education course.

In the unfortunate cases where our policyholders experience a covered loss, we are committed to providing timely client service when paying claims. We offer a customer-focused approach to claims management and endeavor to deliver a quick and efficient resolution of claimant needs. Our policies are clear about the scope of coverage and the claims process. We communicate with our customers through a variety of channels, including through our intermediaries, website, email, social media, events and conferences and advertising and promotional materials.

Our reinsurance group generally markets its reinsurance products through professionally licensed intermediaries, except for our property facultative reinsurance group, which generally deals directly with the ceding companies. Per the applicable reinsurance contracts, all communications with ceding companies are directed through these intermediaries, including claims communications. The reinsurance group does not market to, contract with or communicate directly with individual insureds.

Please also refer to Item 1 of our 2020 Annual Report for certain responsive information.

## Incorporation of Environmental, Social & Governance Factors in Investment Management

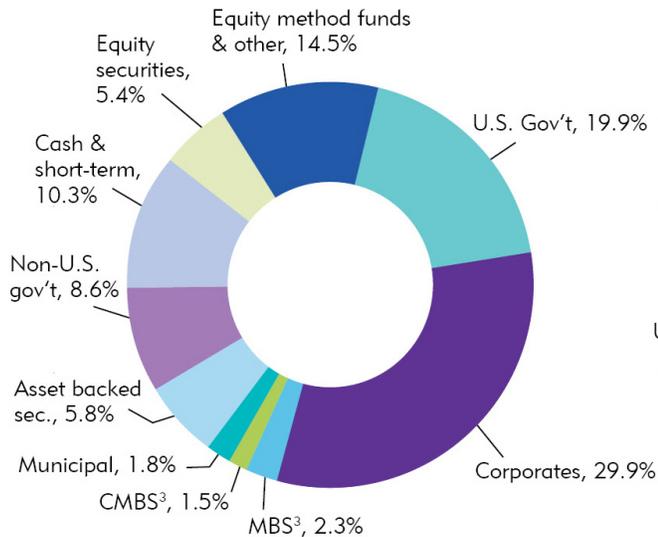
### FN-IN-410a.1

#### Total invested assets, by industry and asset class

Our investment approach seeks to enhance Arch's return on equity while avoiding undue risk. We manage the portfolio conservatively, securing our reserves and ensuring an ongoing ability to pay claims when due. This approach preserves the Company's capital and ensures ready liquidity.

For a discussion of our investment portfolio, see "Management's Discussion and Analysis of Financial Condition and Results of Operations - Financial Condition - Investable Assets, Liquidity, and Capital Resources" in our 2020 Annual Report. As of December 31, 2020, approximately 80.2% of our total investable assets were invested in fixed maturity, short-term investments and cash. The portfolio is diversified across sectors, with U.S. government securities and investment-grade corporates representing the two largest sectors. The portfolio's average S&P/Moody's credit rating was AA/Aa2.

## INVESTMENTS BY TYPE<sup>1</sup>



<sup>1</sup> Excludes the results of Watford Holdings Ltd.

<sup>2</sup> MBS = Mortgage-backed securities.

<sup>3</sup> CMBS = Commercial mortgage-backed securities.

<sup>4</sup> Includes U.S. government-sponsored agency MBS and agency CMBS.

### FN-IN-410a.2

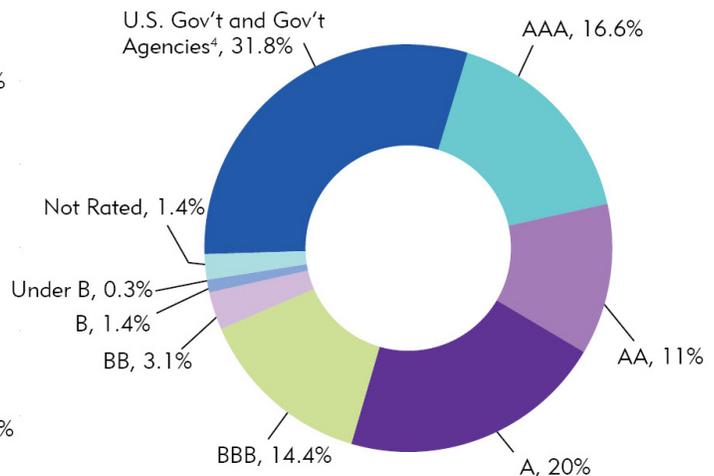
#### Description of approach to incorporation of environment, social and governance factors in investment management processes and strategies

Insurance companies are subject to significant regulatory investment requirements that limit our investment flexibility in terms of the types of investments we may hold and the concentrations of credit and equity risk we may amass. These requirements are designed to ensure that insurers have sufficient liquidity to pay claims as they are presented.

As disclosed in our 2020 Annual Report, a significant majority of our funds available for investment are deployed in a widely diversified portfolio of U.S. government, corporate and other high-quality, liquid assets. The majority of our portfolio is comprised of securities issued by the U.S. government and government agencies and AAA, AA and A-rated securities.

We believe that the incorporation of material, nonfinancial factors into investment selection and risk management has the potential to enhance long-term investment returns. We consider ESG factors with respect to both our internally managed assets and to those assets managed by third parties. Additionally, we measure our exposure to ESG risks at both individual asset classes and total portfolio levels. We recognize the importance, relevance and significance of ESG factors in assessing the sustainability performance of the entities in which we invest. Our ESG Aware Statement (Statement), approved by our Board of Directors and formalized in 2019, reflects our sustainable value creation

## FIXED MATURITIES BY RATING<sup>1</sup>



approach. The Statement requires that we consider ESG factors in the investment process to the extent relevant.

Our ESG risk management process involves robust pre-investment due diligence – managed by our investment teams and approved by our Investment Committee – for externally managed assets. The Investment Committee is made up of senior members of our investment team, our Chief Executive Officer and Chief Financial Officer. Active engagement with external managers, post-investment, is another central tenet of our approach. For internally managed assets, ESG themes guide investment selection, resulting in the reduction of ESG risk in the portfolio. Where possible, we seek to reduce exposure to coal, tobacco and firearms, sourcing similar performing assets with stronger sustainability impacts elsewhere. We systematically seek to reduce exposure to companies with poor ESG scores and opportunistically seek to add renewables or positive-ESG assets to the portfolio through all asset classes.

## Policies Designed to Incentivize Responsible Behavior

### **FN-IN-410b.1**

#### Net premiums written related to energy efficiency and low carbon technology

At Arch, we do not currently capture data related to energy efficiency and low carbon technology. Our process is to capture premium data based on the line of business and by state (as applicable), as required by insurance regulators. In addition, the premium data reporting requirement of state insurance regulators does not lend itself to summarize the net premiums written related to such exposures.

We believe Arch is positioned to benefit from the increased economic activity related to energy and resource efficiency. Through our casualty insurance business, we have introduced products that support solar energy, wind, methane recovery, biofuel production and Leadership in Energy and Environmental Design (LEED)-certified buildings.

### **FN-IN-410b.2**

#### Discussion of products and/or product features that incentivize health, safety and/or environmentally responsible actions and/or behaviors

Through our U.S. casualty insurance business units such as construction, national accounts, casualty, retail energy, alternative markets and high excess workers' compensation, we offer primary and excess casualty coverages to middle and large accounts in a variety of industry segments. These underwriting segments specialize in loss sensitive insurance programs including large deductible, self-insured retention and retrospectively rated programs. These types of programs involve individual account ratings and pricing, which offers the insured the opportunity to better manage their premium costs since they are more closely tied to their own loss experience. With this type of program structure, the risk is shared between the insurer and the insured. The insured is significantly incentivized to implement and adhere to strong risk management, safety and loss prevention programs since their individual loss experience will have the most positive impact on their ultimate premium cost.

### **Health & Safety**

1. Through our risk and loss control service platform, Arch Risk Control, we offer health and safety support for our U.S.-based casualty insurance customers including construction, national accounts, retail energy, high excess workers' compensation, alternative markets, property/casualty programs and excess and surplus casualty. We provide businesses with access to comprehensive services that

include dedicated training, technical information and consulting solutions to help our customers safeguard their employees.

Our risk control staff, with over 300 years of combined insurance industry experience, has helped our customers to better understand and manage their health, safety and environmental risks and exposures to loss. During 2020, we expanded our risk control staff by hiring professionals with diverse skill sets to broaden our capabilities and increase our interactions with policyholders.

We engage directly with our customers to provide best practices and support. This support includes:

- **COVID-19 Resource Communication.** Since the pandemic began in early 2020, we have provided our customers with COVID-19 resource communications, including overviews of available government resources, sample pandemic preparedness and response plans, various checklists and tools to manage remote workers, facility sanitation procedures and suggested approaches for employee reentry.
- **Consulting on Work Site Safety and Employee Onboarding Programs.** We understand that a new employee's first few months on the job involve the greatest potential for injury. This is a critical time for employers to properly train and orient employees to be aware of hazards and how to control them. Through our consulting services, we help our customers develop and implement consistent workplace safety orientation and training programs and encourage them to hold their supervisors accountable for these critical activities. Examples of critical work site employee safety training topics include effective daily briefings and task hazard analysis, fall protection, electrical safety, struck-by, confined space entry, excavations, lockout/tagout, driver safety and heavy equipment operations. Beyond the new employee focus, our consulting efforts emphasize client management systems and processes to encourage employee safety practices to be carried out and consistently maintained and audited throughout the employment life cycle.
- **Consulting to Protect the Public.** Many of our policyholders interact with or are exposed to the public in the communities and customers they serve. Some of their scopes of work may create potential injury exposure to the public. Arch Risk Control focuses on these public exposures and helps our clients develop plans and best practices to eliminate or minimize exposure to injuries. This includes (i) driver improvement to prevent policyholder at-fault accidents impacting the traveling public, (ii) assistance with slip/fall exposures in retail environments and (iii) improved safety and management of temporary highway work zones to facilitate safe passage for public vehicles and

pedestrians.

- **Leveraging the Resources of J.J. Keller & Associates, Inc.**® In March 2019, we launched a collaboration with J.J. Keller & Associates, Inc.® (J.J. Keller), to provide our customers with an expansive suite of complimentary tools and resources to create safe, productive and compliant workplaces. J.J. Keller's KellerOnLine® and FleetMentor® solutions provide access to libraries of technical regulatory information, employee training, policy/procedure development, chemical safety, driver safety and the management tools necessary to create and maintain safe work environments. We have enrolled over 630 policyholder safety and risk management users since the program's inception and expect this number to grow over the next several years.
- **Safe Driving.** Driving creates significant risk to our customers' employees and the public. Our risk control staff works with our customers to help them properly screen and manage employee drivers of all types of vehicles to improve their on-the-road safety performance. We also promote safe driving and provide our customers with access to driver training and management resources through J.J. Keller. These resources are designed to, among other things, combat distracted driving and reinforce defensive driving skills. We now offer our customers, through a third-party vendor, access to continuous employee driver record monitoring so that our customers can better assess their drivers' risk profiles on a real time basis.
- **Responsible Pain Management.** As a workers' compensation carrier, we offer products and services to maximize wellness and enable workplace safety. When work-related injuries occur, we facilitate services to enable the injured employee to return to work as soon as medically appropriate. We partner with ANS Solutions, LLC (ANS), a company that offers an industry-leading suite of workers' compensation medical cost containment services. ANS' services are designed to coordinate drug therapies between multiple prescriptions to avoid adverse interactions, consider alternative therapies and identify and recommend weaning programs for over-prescribed narcotics and other medications. This program is designed to encourage optimal outcomes for insured workers.
- **New for 2021.** With the goal of implementing these new programs during 2021, we are currently pursuing various business alliances to provide additional resources for our policyholders. The alliances are focused on preferential pricing and Arch contributory funding arrangements for targeted safety and loss prevention tools such as:
  - Crisis counseling and mental health consulting, including post-traumatic event counseling.

- Mobile device blocking apps to address distracted driving.
- Vehicle camera and telematics systems for driver monitoring and improvement.
- Cloud-based safety management system software.
- Online safety and health training.

2. In addition, through our programs for emergency responders and firefighters, we offer a suite of safety and training aids to help promote safety and reduce the potential of on-the-job error or injury. Our services keep these first responders educated and informed on industry safety and compliance best practices. These services are offered to approximately 150,000 ambulance and emergency workers and volunteers, and we open our webinars to firefighters nationwide. We offer the following programs:

- **E-Learning.** We offer our insureds online training through our e-learning and training management system. While this material is not meant to replace quality face-to-face and hands-on training, we realize that tremendous time requirements are placed on individuals in today's fast-paced environment, making it difficult for everyone to attend scheduled training. Our e-learning courses allow first responders to supplement scheduled hands-on training and are available 24/7. Additional classes are being developed on a regular basis.
  - **Webinars.** We conduct regular webinars to help our insureds, including emergency responders and firefighters, operate safely.
3. In response to COVID-19, we added a series of webinars designed to help our insureds serve their communities during this time of crisis. We also offered these webinars to non-clients to help communities stay safe and supported during the pandemic. In 2020, we hosted over 90 webinars for first responders throughout the United States on a range of topics, including "Protecting Yourself and the Community from COVID-19," "Responding to Special Needs Populations for Fire and EMS Responders," "Responding to Meth Labs," "Diversity & Inclusion," "Workplace Violence and Sexual Harassment Prevention," and "Behavioral Health Concerns and Dealing With Stress During a Pandemic." Through our webinar series, we reached participants in 45 states from more than 1,000 organizations, with over 9,000 unique viewers.
- **Emergency Vehicle Driver Training.** We offer comprehensive driver education covering the skills and knowledge required to operate emergency vehicles. These classroom and hands-on courses are offered to better prepare drivers to cope with the extra demands placed upon them when operating in emergencies.

- **Operation SafeEMS.** This training program is designed to assist in safe patient handling. The program covers both health and safety of the EMS provider and the comfort and safety of the patient.
- **Violence Prevention for Emergency Responders.** Over half of all emergency responders report having been involved in a violent situation at least once in their career. To address this problem, we offer training meant to increase the awareness level of the emergency responder. With this awareness, participants carry knowledge to the emergency scene to help prevent violence from occurring.
- **Intersection Accident Prevention Course.** Intersection accidents are the most frequent type of accident faced by emergency responders and are often expensive and deadly. Our course teaches emergency responders how to navigate intersections more safely, decreasing the frequency and severity of these types of accidents.
- **Safe Handling of Fire Gear.** We provide education on safely cleaning and storing protective fire gear that often contains by-products of combustion. Because some firefighters, especially volunteer firefighters, often take their gear home with them, we provide education about the secondary exposure risks to their families and how to prevent them.

## Environmentally Responsible

One of our core commitments is to identify business opportunities associated with more environmentally friendly trends. We develop products and product features that address our customers' evolving needs and incentivize responsible environmental behavior, while being priced to meet our long-term financial objectives.

- **Green Building Coverages.** Traditional property policies are designed to provide coverage to rebuild a structure as it existed prior to a loss, with materials of like kind and quality. If an insured, further to a covered peril, elects to replace its damaged traditional building with a sustainable one, our "Arch Gateway" policy form covers the additional costs to achieve at least the minimum requirements, including the cost of sustainable materials, certified professionals, the certification application and transporting debris to recycling facilities.
- **Premium Credits Offered in Connection with Commercial Property Coverage.** Arch encourages environmentally responsible behaviors by offering premium credits. Through our risk selection process, insureds can qualify if they:
  - **Have or install early fire detection and suppression systems.** Such systems are designed to reduce the

frequency and severity of fires resulting in reduced carbon emissions.

- **Meet "substantial" building construction standards.** Commercial properties built to withstand wind or earthquake may, in the event of a loss, have reduced debris disposal at landfills.
- **Adhere to proper property and equipment maintenance.** The benefits include avoiding fires, floods, mechanical breakdowns or water intrusion leading to mold or contamination as well as reduced debris from obsolete equipment.
- **Retail Energy Business Unit.** Our proprietary general liability and umbrella policy forms extend coverage to oil and gas businesses. In this ever-changing industry, we offer expertise and products to address their unique risks. Our underwriting and risk control professionals focus on our customers in this space and seek to provide the products, services and expertise needed to manage risk, avoid accidents and offer the support and resources to help customers recover in the event of a loss.
- **Pollution Spills.** It's critical for the oil and gas industries to keep wells operational and be responsible stewards of the environment. We offer our oil and gas customers protection against oil-site spills including pollution cleanup costs and pollution-related bodily injury and property damage. Recognizing the potential for environmental impact as a result of seepage or a spill, we have written specific coverage enhancements for pollution events into our "Cornerstone CGL" policy to allow our customers the ability to more rapidly address and clean up a spill before it migrates or gets worse.
- **Well Control Events.** To address these potentially significant impacts to our customers, their employees and the environment, we have partnered with Wild Well Control, Inc. to offer our customers best practice oil and gas well control training, emergency response plans and incident response. We also provide certain customers access to a telephone hotline, which allows them to speak with a well control professional as a situation develops who can provide steps to manage well pressure to avoid a well blowout.
- **Renewable Energy Practice.** Through our proprietary general liability practice, our products extend coverage to power generation and renewable energy customers active in solar and wind technology. Our products, services and expertise can help these industries keep their employees safe and protect their physical assets, balance sheet and ultimately their long-term success. Our coverage provides insurance solutions for all aspects of a renewable energy business, from research and development to operations. As U.S. domestic and international renewable energy industries continue to

expand, our renewable energy practice analyzes industry trends, market data and loss trends to design and develop insurance products tailored to the specific needs of renewable energy businesses.

- **Environmentally Focused Risk Control Services.** Our Arch Risk Control platform also provides support and training to our insureds that includes hot work (i.e., welding, flame cutting) and fire impairment protocols and best practices. In addition we plan to provide support for emergency response planning, flood emergency response plan development, hurricane preparedness and safe solar panel installation.

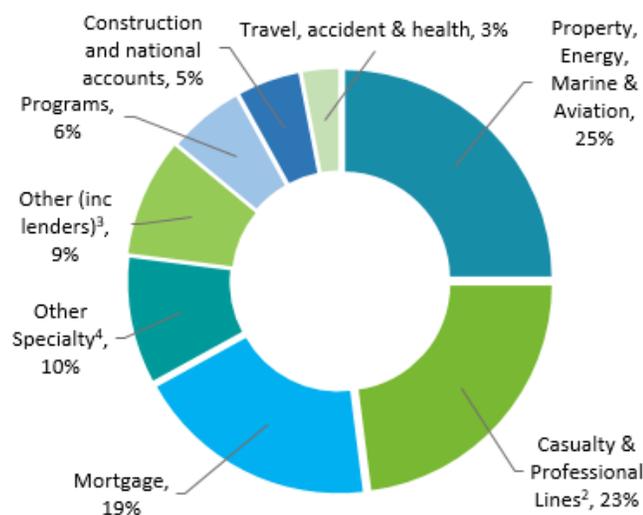
## Environmental Risk Exposure

### FN-IN-450a.1

Probable maximum loss of insured products from weather-related natural catastrophes

We operate leading specialty property and casualty and mortgage insurance businesses across a wide range of geographies and products providing meaningful diversification and earnings stability. Of our total net premiums written in 2020, 81% were from our property and casualty business and 19% originated from our mortgage insurance business. The graph below shows a detailed allocation of our net written premiums.

### LINE OF BUSINESS<sup>1</sup>



1. Based on net premiums written, excluding amounts attributable to the "other" segment (Watford).
2. Includes casualty, professional liability, executive assurance, healthcare, contract binding and excess motor.
3. Includes insurance for lenders products, alternative markets and other insurance and reinsurance.
4. Includes reinsurance for proportional motor, trade credit, surety, workers' compensation catastrophe and other.

We have large aggregate exposures to natural catastrophic events including floods, tsunamis, windstorms, earthquakes, hailstorms, tornadoes, severe winter weather, fires, droughts and other natural disasters. We monitor our exposure to catastrophic events and periodically reevaluate the estimated probable maximum loss for such exposures. We utilize natural catastrophe modeling techniques to estimate loss from catastrophic events. Our approach to evaluating underwriting risk from natural catastrophes employs both proprietary and vendor-based models to inform risk assumption and reinsurance purchasing decisions designed to manage our exposure to catastrophic events. We actively monitor and evaluate the impact of changes in the vendor-based systems and adjust our evaluation of risk, as necessary. As new information and techniques emerge, we update our proprietary models, which are an integral part of our enterprise risk management process and support our long-term financial strategies and objectives.

For our natural catastrophe exposed business, we seek to limit the amount of exposure we will assume from any one insured or reinsured and the amount of the exposure to catastrophe losses from a single event in any geographic zone. We seek to limit the probable maximum pre-tax loss to a specific level for severe catastrophic events. Currently, we seek to limit our 1-in-250 year return period net probable maximum loss from a severe catastrophic event in any geographic zone to approximately 25% of tangible shareholders' equity available to Arch (total shareholders' equity available to Arch Less goodwill and intangible assets). We reserve the right to change this threshold at any time.

Based on in-force exposure estimated as of January 1, 2021, our modeled peak zone catastrophe exposure is a windstorm affecting the Florida Tri-County area, with a net probable maximum pre-tax loss of \$860 million, followed by windstorms affecting Northeastern U.S. and the Gulf of Mexico with net probable maximum pre-tax losses of \$775 million and \$689 million, respectively. As of January 1, 2021, our modeled peak zone earthquake exposure (San Francisco area earthquake) represented approximately 65% of our peak zone catastrophe exposure, and our modeled peak zone international exposure (U.K. windstorm) was substantially less than both our peak zone windstorm and earthquake exposures.

Net probable maximum loss estimates are net of expected reinsurance recoveries before income tax and before excess reinsurance reinstatement premiums. Catastrophe loss estimates are reflective of the zone indicated and not the entire portfolio. Since windstorms can affect more than one zone and make multiple landfalls, our catastrophe loss estimates include clash estimates from other zones.

## FN-IN-450a.2

Total amount of monetary losses attributable to insurance payouts from (1) modeled natural catastrophes and (2) non-modeled natural catastrophes, by type of event and geographic segment (net and gross of reinsurance)

The table below displays the estimated net losses incurred from current accident year natural catastrophe events for our insurance and reinsurance segments for the last three years, after consideration of ceded reinsurance and reinstatement premiums. Note these are estimates as of December 31 of each year for events occurring in that year, as reported in our Financial Supplements, which are available on the Investors page of our website <http://www.archcapgroup.com>.

Segment	Accident Year		
	2020	2019	2018
Insurance	\$ 154,803	\$ 34,235	\$ 74,598
Reinsurance	258,480	79,192	118,678
<b>Total</b>	<b>\$ 413,283</b>	<b>\$ 113,427</b>	<b>\$ 193,276</b>

Arch does not currently distinguish between modeled/non-modeled losses and does not find that to be a meaningful distinction.

## FN-IN-450a.3

Description of approach to incorporation of environmental risks into (1) the underwriting process for individual contracts and (2) the management of firm-level risks and capital adequacy

For property and casualty lines, we consider climate risk alongside all other relevant perils in our evaluation process and look at the impact of climate factors in the near and long terms. We use various modeling methods, some proprietary and some utilizing third-party computer models, to inform our underwriting and reinsurance decisions and manage our aggregate exposure to climate risk and catastrophic events. The exposures include those from natural catastrophes such as hurricanes, earthquakes, typhoons and wildfires. They keep our management informed of peak high risk zones and insurance policies with exposure to a risk for a substantial loss from a catastrophic event.

The underwriting process is tailored by its nature to reflect the unique characteristics of the underlying risk. In addition to natural catastrophe exposures, we may factor other related environmental risk characteristics into our underwriting process. As underlying drivers of risk change, such as those from environmental causes, we reflect the

changed riskiness in both our pricing and our overall risk appetite. We may limit risk through contract endorsements and/or exclusions in certain circumstances.

One key risk metric we incorporate in our underwriting decisions is a target return on capital. Riskier contracts will require a higher return on capital and consequently higher prices. This enables us to manage risk across our portfolio to an acceptable level. Our target returns on capital are based on an overall view of group required risk capital and capital adequacy. We monitor capital adequacy against required capital on an ongoing basis and report the results to our Board of Directors on a quarterly basis. In addition, we perform an annual "Own Risk and Solvency Assessment" (ORSA) focused specifically on firm-wide risks and capital adequacy. The ORSA report is an analysis of firm-wide risks and capital adequacy and is provided to our Board of Directors and regulators.

In addition, Arch maintains ratings from the four major credit rating agencies. This provides an external view of Arch's own assessment of capital adequacy.

## Systemic Risk Management

### FN-IN-550a.1

Exposure to derivative instruments by category: (1) total potential exposure to non-centrally cleared derivatives, (2) total fair value of acceptable collateral posted with the Central Clearinghouse and (3) total potential exposure to centrally cleared derivatives

On December 31, 2020, total investable assets held by Arch were \$26.9 billion, excluding the \$2.7 billion included in the "other" segment (*i.e.*, attributable to Watford). Results for the "other" segment can be found in note 12 of Item 8 in our 2020 Annual Report. Our current investment guidelines and our investment approach stresses preservation of capital, market liquidity and diversification of risk. The portfolio consists primarily of high quality fixed income securities, with fixed maturities, short-term investments and cash representing 80.2%, average effective duration of 3.01 years and average S&P/Moody's credit rating of AA/Aa2. Additional details about the investment portfolio can be found in the "Investable Assets Held by Arch" section of "Financial Condition" in Item 7 in our 2020 Annual Report.

The Company's investment strategy allows for the use of derivative instruments, which are recorded on consolidated balance sheets at fair value. Arch utilizes various derivative instruments such as futures contracts to enhance investment performance, replicate investment positions or manage market exposures and duration risk that would be allowed under our investment guidelines if implemented in other ways.

Certain of the Company's investments are managed in portfolios that incorporate the use of foreign currency forward contracts, which are intended to provide an economic hedge against foreign currency movements. The Company also purchases to-be-announced mortgage-backed securities (TBAs) as part of its investment strategy. TBAs represent commitments to purchase a future issuance of agency mortgage-backed securities. For the period between the purchase of a TBA and issuance of the underlying security, the Company's position is accounted for as a derivative. The Company purchases TBAs in both long and short positions to enhance investment performance and as part of its overall investment strategy.

The estimated fair value and notional values of the Company's derivative instruments at December 31, 2020 are summarized below:

(\$000's)	Estimated Fair Value		
	Asset Derivatives	Liability Derivatives	Notional Value <sup>1</sup>
Futures contracts	\$ 11,046	\$ (4,496)	\$ 3,099,796
Foreign currency forward contracts	52,716	(6,202)	1,656,729
Other	113,621	(98,007)	5,763,919
<b>Total</b>	<b>\$ 177,383</b>	<b>\$ (108,705)</b>	

1 Represents the absolute notional value of all outstanding contracts, consisting of long and short positions.

See note 11, "Derivative Instruments," to our consolidated financial statements in Item 8 of our 2020 Annual Report for additional disclosures concerning derivatives.

## FN-IN-550a.2

### Total fair value of securities lending collateral assets

Arch enters into securities lending agreements with financial institutions to enhance investment income whereby it loans certain of its securities to third parties, primarily major brokerage firms, for short periods through a lending agent. The Company maintains legal control over the securities it lends (shown as "Securities pledged under securities lending, at fair value" on Arch's balance sheet), retains the earnings and cash flows associated with the loaned securities and receives a fee from the borrower for the temporary use of the securities. An indemnification agreement with the lending agent protects Arch if a borrower becomes insolvent or fails to return any of the securities on loan to Arch.

Collateral received is required at a rate of 102% or greater of the fair value of the loaned securities including accrued investment income and is monitored and maintained by the lending agent.

On December 31, 2020, the fair value of the cash collateral received on securities lending was zero and the fair value of security collateral received was \$301.1 million.

Arch's securities lending transactions were accounted for as secured borrowings with significant investment categories as follows:

December 31, 2020	Remaining Contractual Maturity of the Agreements				
	Overnight and Continuous	Less than 30 Days	30-90 Days	90 Days or More	Total
U.S. government and government agencies	\$ 142,317	\$ —	\$ 139,290	\$ —	\$ 281,607
Corporate bonds	3,021	—	—	—	3,021
Equity securities	16,461	—	—	—	16,461
<b>Total</b>	<b>\$ 161,799</b>	<b>\$ —</b>	<b>\$ 139,290</b>	<b>\$ —</b>	<b>\$ 301,089</b>

### FN-IN-550a.3

#### Description of approach to managing capital- and liquidity-related risks associated with systemic non-insurance activities

Arch's Enterprise Risk Management (ERM) framework encompasses all entities across the group. We have a number of non-insurance company entities performing various functions and/or services, primarily for our underwriting units. They are not considered to be material sources of risk to the enterprise, and are covered by our group risk policy. Included in these non-insurance entities are: (i) the ultimate parent holding company and the intermediate holding companies, (ii) the servicing companies for the group's operational activities, (iii) providers of insurance related services, (iv) managing general agents for certain of our insurance entities and (v) investment holding companies.

As a large property and casualty and mortgage insurance enterprise, we are exposed to risks from many sources. There are certain risks that we seek for return, while other risks we accept as a by-product of being in business. Since certain risks can be correlated with other risks, the impact of an event or a series of events can aggregate across multiple areas simultaneously and have a material effect on our

results of operations, financial position and/or liquidity. These exposures require an enterprise-wide view of risk with respect to the potential impact on all aspects of our operations. We manage our risk-taking to be within our stated risk appetites to create and preserve value for all of our stakeholders.

ERM activities involve identifying and assessing a broad range of risks, monitoring those risks and executing strategies to manage these risks. Effective ERM also includes determining of our capital requirements to support these risks from economic, financial and regulatory perspectives.

Our Board of Directors oversees and monitors enterprise risk in support of our long-term financial strategies and objectives. Executive management has day-to-day responsibility for the risk management of our operations. Our Chief Risk Officer is responsible for risk management in support of executive management. Our risk management framework is reviewed at least annually to ensure that it aligns with our risk profile.

## Activity Metric

### FN-IN-000.A

#### Number of policies in force, by segment

**Insurance and Reinsurance.** The number of policies in force is not an activity metric we use for the insurance or reinsurance coverages we sell to businesses as this measure is not a meaningful metric for coverages that are sold and managed on an account or customer relationship basis.

**U.S. Mortgage Insurance.** We report policies-in-force data on a quarterly basis for our U.S. primary mortgage insurance operations. Information regarding our policies in force for 2019 and 2020 is disclosed in the table below:

Mortgage Insurance	1Q 2019	2Q 2019	3Q 2019	4Q 2019	1Q 2020	2Q 2020	3Q 2020	4Q 2020
Ending number of policies in force *	1,286,877	1,292,215	1,304,263	1,307,884	1,293,799	1,259,328	1,245,408	1,245,771
Change from prior year quarter (%)	6.0 %	4.2 %	2.6 %	1.4 %	0.5 %	(2.5)%	(4.5)%	(4.7)%
Change from prior quarter (%)	(0.2)%	0.4 %	0.9 %	0.3 %	(1.1)%	(2.7)%	(1.1)%	0.0 %

\* Includes first lien primary and pool policies.