Arch Capital Group Ltd.

Task Force on Climate-Related Financial Disclosures

For the year ended Dec. 31, 2024

Important Legal Information

Arch Capital Group Ltd. (together with its subsidiaries, Arch or the Company), is a publicly listed Bermuda exempted company with approximately $23.5 billion in capital at Dec. 31, 2024 and is part of the S&P 500 index. Arch provides insurance, reinsurance and mortgage insurance worldwide 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 sustainability topics, we provide the following disclosures, which are aligned with the Task Force for Climate-related Financial Disclosures (TCFD) framework.

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 2024 Annual Report on Form 10-K for the fiscal year ended Dec. 31, 2024, filed with the Securities and Exchange Commission (SEC) on Feb. 27, 2025 (the 2024 Annual Report). Moreover, Arch's approach to disclosures in this report may differ from the approach to disclosures in other reports, including regulatory filings with the SEC and disclosures made under other regulatory frameworks. This report may use certain terms, including those that TCFD or others may refer to as "material," to reflect the issues or priorities of the Company, its subsidiaries and its stakeholders. Used in this context, however, these terms are distinct from, and should not be confused with, the terms "material" and "materiality" as defined by or construed in accordance with securities, or other laws or as used in the context of financial statements and reporting. This report is intended to present information from a different perspective and, in some cases, in more detail than may be required in other Arch reports, including filings with the SEC or other regulatory disclosures.

This report may include forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA), which reflect our current views with respect to future events, risks and uncertainties. All statements other than statements of historical fact included in or incorporated by reference in this report are forward-looking statements. Forward-looking statements, for purposes of the PSLRA or otherwise, can generally be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" and similar statements of a future or forward-looking nature or their negative or variations or similar terminology. Actual events and results may differ materially from those expressed or implied in these statements. Important factors that could cause actual events or results to differ materially from those indicated in such statements include, among other things, our ability to meet our sustainability goals and targets such as our greenhouse gas reduction targets and those other factors discussed in Item 1A, pages 43-62 of our 2024 Annual Report, and our quarterly reports on Form 10-Q filed with the SEC. These forward-looking statements speak only as of the date of this report. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

This report may contain links to, or information from, other internet sites. Such links and information are not endorsements of any products or services in such sites, and no information in such sites has been endorsed or approved by the Company.

ARCH CAPITAL GROUP LTD.: TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

As a leading (re)insurer, Arch Capital Group Ltd. (together with its subsidiaries, Arch or the Company) offers specialty risk solutions, property and casualty (re)insurance, and housing-sector products in communities worldwide.

Our approach to property-casualty underwriting integrates a comprehensive assessment of risks to provide solutions to protect our clients' employees, assets, property and business. Our risk management process monitors and manages climate risk and catastrophic events worldwide and is applied across our underwriting units.

Climate change presents potentially far-reaching implications for our business, customers and the broader global economy. We are committed to improving our understanding of the short-, medium- and long-term implications of climate change and providing products and services that appropriately address evolving climate-related risks and opportunities.

We continue to focus on improving our energy efficiency and carbon footprint. In 2022, we set a target for reducing our absolute Scope 1 and Scope 2 emissions by 42% by 2030 (from the 2020 base year) and achieving net zero operations by the same year.

This report, in conjunction with the climate-related disclosures in our 2024 Sustainable Accounting Standards Board Report and our 2024 Sustainability Report (together, the Sustainability Reports), discusses our approach to managing the risks and opportunities associated with changing climate conditions. View our Sustainability Reports here.

This report is designed to align with the reporting framework set forth by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) and includes the following disclosure categories:

I. Governance
II. Strategy
III. Risk Management
IV. Metrics and Targets

I. Governance

The TCFD recommends insurance companies disclose the organization's governance around climate-related risks and opportunities, including the roles of the Board of Directors and management.

Our Approach. Our holistic risk management approach involves analyzing risk from top-down and bottom-up perspectives. The Company's risk management framework includes our:

1. Risk philosophy and policies designed to address the material risks confronting the Company.
2. Compliance, approaches and procedures aimed at controlling and/or mitigating these identified risks.

The framework's core comprises the actions and policies implemented to meet Arch's business management and regulatory obligations. Climate change risk is embedded in our existing risk management framework.

Three Lines of Defense. Risk management responsibilities are delegated across our organization through a "Three Lines of Defense" approach to risk governance. This risk management framework, reinforced by key controls and activities, is embedded within our operations and enables us to limit risk and evaluate opportunities. We view sustainability risks as enterprise-wide risks.

BOARD OF DIRECTORS
Accountable for Organizational Oversight

MANAGEMENT
Takes actions (including managing risk) to achieve our strategic goals.

INDEPENDENT ASSURANCE

1 **FIRST LINE:** These are our people on the front lines — such as our underwriters, pricing actuaries and investment professionals.

They're managing risk, complying with regulations and standards, and carrying out our risk control processes daily.

2 **SECOND LINE:** These roles are responsible for oversight and challenge of the front line.

They develop and implement risk management processes policies and procedures.

3 **THIRD LINE:** Their role is to provide the Board and management with independent, risk-based, and objective assurance, advice, insight and foresight.

KEY CONTROLS/ACTIVITIES

- Underwriting guidelines.
- Business segment reviews.
- Peer reviews and quality control.
- Pricing models.
- Reinsurance purchases.
- Natural catastrophe modeling and assessment.
- Investment guidelines.
- Customer vetting.
- IT Access Controls and cybersecurity.

- Risk Management Board Reporting.
- Aggregate exposure measurement and monitoring.
- Risk Assessments and Control Mapping.
- Own Risk and Solvency Assessment.
- Capital modeling and forecasting.
- Operational Risk Committee.
- Regulatory issues reporting.
- Third-party service provider approval and monitoring.

- Risk Assessments and Internal Audit Plan Development.
- Ongoing Monitoring of Business Risks and Trends.
- Internal Audit Reviews and Ongoing Control Testing.

Sustainability Oversight. Our Board of Directors (Board) oversees and monitors enterprise risk to support our long-term financial strategies and objectives. As outlined in its charter, our Board's Nominating and Governance Committee (N&G Committee) oversees sustainability matters, including the establishment and management of our sustainability initiatives. Our Chief Sustainability Officer meets with the N&G Committee approximately two times a year and provides substantive quarterly updates. In addition, given the regulatory reporting requirements mandated by the European Union and other jurisdictions, the Chief Sustainability Officer also engages with the Company's Audit Committee and the boards of applicable subsidiaries to keep them informed.

The Sustainability Steering Committee, established in 2019, comprises executive leadership that oversees sustainability topics and practices organization-wide and contributes to executing the sustainability strategy. Led by the Chief Sustainability Officer, the Sustainability Steering Committee maintains regular communication with leaders across our operations to ensure sustainability topics are integrated into business processes. Our dedicated sustainability team actively enhances our management of initiatives and coordinates our efforts across our businesses, including the assessment of climate change risk within our corporate strategy.

For our investments, our Investment Group Sustainability Steering Committee (Sustainability Investments Steering Committee) oversees the assessment of sustainability risk in our investment strategy. See "Sustainability Investment Governance" below for additional details.

Our oversight structure extends to business and operating-level committees to manage specific sustainability integration initiatives. In the U.K., we have in place a Sustainability Steering Committee (the U.K. Sustainability Committee) which leads our efforts to incorporate our sustainability framework and strategy into existing management and committee structures and to promote Arch's long-term sustainability success in alignment with the Company's overall sustainability strategy. The U.K. Sustainability Committee, chaired by the U.K. Chief Executive Officer (CEO), meets quarterly and comprises senior leaders throughout our U.K. primary insurance operations and the Chief Sustainability Officer. Beyond embedding sustainability considerations into the U.K. business, the group built on our Thermal Coal Policy framework (described below) and developed principles-based policies for sensitive underwriting factors applicable to accounts covering oil sands and Arctic energy exploration and production.

Separately, a committee comprising senior underwriting officers, risk professionals and the sustainability team has led our efforts to integrate environmentally-sensitive considerations into underwriting insurance risks associated with the thermal coal industry. The global insurance groups have committees that continue to meet and monitor submissions. See page 14 of our 2024 Sustainability Report for more information about our approach to underwriting thermal coal. See also our Thermal Coal Policy.

Risk Identification and Assessment. Our Board's Audit, Underwriting Oversight, and Finance, Investment and Risk (FI&R) committees oversee the top-down and bottom-up review of risks. These committees provide a forum for discussion among management and the Board as they consider insurance, investments, operational, liquidity, credit, group and strategic risks. Our Chief Risk Officer (CRO) assists these committees in identifying and assessing key risks, including physical risks arising from climate change. The evaluation extends to understanding how these risks may be influenced by changing weather patterns and potentially impact our business and operations.

Risk Monitoring, Control and Reporting. Our CRO is responsible for maintaining the Company’s Risk Register and regularly reviewing and applying rigor to risk assessments, including for climate change impacts. The Risk Register incorporates sustainability factors and the risks associated with severe weather events. See this report's "Risk Management" section for additional information on the Risk Register process. Quarterly, the CRO compiles key findings from the risk review process into a report presented to the Board and relevant committees. Annually, the Company's Risk Register undergoes a review by the Board and relevant committees, followed by Board approval.

Sustainability Investment Governance. Our investment team is responsible for investing and managing assets totaling more than $41.4 billion for our policyholders and shareholders as of Dec. 31, 2024. We manage the investment portfolio to ensure the ongoing ability to pay claims when due and achieve asset growth over investment cycles. Through our fundamental analysis, we incorporate investee companies' sustainability risk ratings, including corporate governance, climate risk exposure, carbon reduction and workforce policies. We aim to deliver total return for Arch while potentially realizing added benefits when investing to create a positive societal benefit.

As outlined in its charter, the FI&R Committee oversees the Board's responsibilities related to the Company's investment policy. This includes reviewing investment allocation, manager selection, benchmark selection and investment performance. Our Chief Investment Officer (CIO) reports to the FI&R Committee quarterly and assists the committee in assessing our approach to long-term sustainable value creation and incorporating sustainability factors in the investment process.

Our investment team has a designated Sustainability Officer responsible for sustainability oversight and overseeing the Sustainability Investments Steering Committee. This committee sets forth the investment team's sustainability strategy and focuses on managing sustainability-related risks in our investment portfolio with sustainability-themed investments. Comprised of our CIO, CRO, Chief Sustainability Officer and key investment team members, the Sustainability Investments Steering Committee meets quarterly.

We follow a "Responsible Investing Policy" that provides a framework for governance and strategy and outlines our approach to engagement, reporting, training and communications regarding our responsible investing practices. See page 38 of our 2024 Sustainability Report for more detail regarding our Responsible Investing Policy.

II. Strategy

The TCFD recommends insurance companies disclose the actual and potential impacts of climate-related risks and opportunities on their businesses, strategy and financial planning where such information is material.

Arch has undertaken steps to integrate climate factors and considerations across our business. Starting at the corporate level, we conduct an annual high-level assessment to identify the climate factors most relevant to our worldwide business over the short-, medium- and long-term. This assessment incorporates feedback from our global risk management leadership, underwriters and actuaries with our CRO's ultimate oversight. Feedback includes evaluations of natural catastrophe loss trends over the short-, medium- and long-terms that, in some instances, lead us to adjust the premium we require for assuming risk.

We identify climate-related risks and opportunities across our key business units and develop strategic responses for our underwriting and investment management activities.

Provided below, "Our Identified Climate-Related Business Risks" table outlines relevant climate-related considerations and potential business risks.

Our Identified Climate-Related Business Risks.

Time Horizon	Climate Change Risks (Transition[1]/Physical[2]/Liability[3])	Business Risk
Short Term (<1 year)	Increased stakeholder expectations and regulatory requirements/mandates related to climate-related issues.	Underwriting and exposure selection risk.
		Exposure monitoring and reporting risk.
		Reputational risk related to reporting requirements.
		Impact on investment strategy.
		Regulatory risk related to non-compliance.
	Increased uncertainty and unpredictability of frequency and severity of natural catastrophes such as extreme weather events, including the aggregation of such events.	Pricing and reserving risk.
		Product profitability and demand risk.
		Accumulation management and catastrophe (CAT) loss risk.
	Increased/divergent regulatory requirements/ mandates on existing products/services and climate-related reporting/issues.	Regulatory risk related to disclosure/reporting non-compliance.
		Reputational risk related to reporting requirements.
		Potential loss of revenue.
		Impact on investment and underwriting strategy.
Medium Term (1–10 years)	Shifts in strategy and market dynamics tied to climate change risk (e.g., risk profiles, technological innovation, regulatory scrutiny, rating agency requirements, government policies and evolving consumer and stakeholder preferences).	Risk profile uncertainty for carbon-intensive assets, firms or sectors, including revenue and/or income loss.
		Reputational risk associated with failing to transition to and/or meeting new market environment, customer expectations and regulatory requirements.
		External influences impact Arch's strategic plan.
		Reduction in reinsurer/counterparty financial strength and risk transfer appetite or capacity.
	Change in risk profiles of insurance product exposures.	Underwriting exposure and selection risk including property, general liability, financial lines, professional liability, business interruption, agriculture, and mortgage insurance.
		Accumulation management risk.
		Model risk from increased claims frequency and severity not included in historical data.
	Regional economic hardship due to climate change events and regulation.	Underwriting exposure and selection risk.
		Product design and demand risk.
		Pricing, reserving and regulatory risk.
	Increased capital requirements, counterparty risk and/or reduced returns on equity.	Potential loss of investment income.
		Increased capital charges for climate change from ratings agencies or regulators.
		Adverse impact on counterparty credit strength.
	Increased frequency and/or severity of natural catastrophe and extreme weather events.	Underwriting exposure and selection risk.
		Accumulation management and CAT loss risk.
		Product design and demand risk.
		Potential loss of investment income and risk to capital.
Long Term (10+ years)	Stringent regulatory mandates such as government policies and sustainable reforms on climate change restricting insuring/investing in carbon-intensive sectors.	Revenue and/or business risk due to government policies and/or influence from external pressure groups.
	Further increased frequency and/or severity of natural catastrophe and extreme weather events.	Underwriting exposure and selection risk.
		Accumulation management and CAT loss risk.
		Product design and demand risk.
		Potential loss of investment income and risk to capital.
	Substantial change in economic activities and risk profiles due to climate change.	Product design and demand risk.
	Physical impact of climate change on business operations.	Increased business interruption and operational costs.

[1] *Transition Risk:* resulting from the global transition to a carbon-neutral or low-carbon economy.
[2] *Physical Risk:* resulting from the direct damages caused by climate events.
[3] *Liability Risk:* relating to climate-related insurance claims under liability insurance policies and direct legal claims against insurers for failing to manage climate risks.

Climate Opportunities for Our Underwriting and Services. The physical impacts of climate change may result in increased frequency and intensity of weather patterns, severe weather and natural catastrophic events. These impacts broaden the scope of our business solutions. Below are examples of climate-related opportunities across our identified time horizons. These examples should not be construed as a characterization regarding the materiality or financial impact of these opportunities.

Time Horizon	Climate-Related Opportunities
Short Term (<1 year)	Regulations are likely to drive increased demand for specific products and services as governments and companies worldwide pledge to achieve net-zero greenhouse gas emissions and to transition to clean energy.
	Through our lenders products, demand in service contracts for individuals generating renewable energy (i.e., solar energy).
	Increase risk control offerings as awareness increases around climate-change and mitigation risk.
Medium Term (1-10 years)	Further innovation is expected to drive development of product/services for clean energy and clean technology business.
	Changes in weather patterns may lead to an increase in customer demand for insurance coverage.
	Work with insureds to improve their environmental preservation, safety and loss prevention practices.
	Our insureds' business models may change due to the energy transition which may lead to an increase in demand for certain of our insurance products and services.
	Construction projects requiring a focus on clean energy and LEED®-certified construction design may require specialized insurance products.
	Increased economic activity and research and development related to clean energy and clean technology is expected to generate additional revenue to Arch as a result of increased demand for certain of our insurance products.
	Regulation encouraging commercial and personal vehicle owners to drive hybrid or electric vehicles could increase demand for specialized product offerings.
Long Term (10+ years)	Changing patterns of weather-related events is likely to further increase demand for certain of our insurance products and services.
	Greater demand for insurance products/services that support both the development of new technology and infrastructure, and the adaptation or decommissioning of heritage assets.

Climate change presents new opportunities for our underwriting business. Decarbonization efforts driven by market demand for clean energy, renewable energy and clean technology may allow Arch to generate more revenue. An increase or expansion in legislation and regulation related to energy use, including solar energy, could increase demand for insurance products relating to such regulations. Our specialized insurance products are well-positioned to address the unique aspects of sustainable energy projects. For example, there could be more demand for coverage on Leadership in Energy and Environmental Design-certified (LEED®) construction, excess and surplus casualty products that cover all stages of renewable energy construction, directors' and officers' liability coverage in the renewable energy sector, professional indemnity coverage for energy consultants, property managers, architects and engineers with LEED® certifications.

Through our property risk and loss-control service platform, "Arch Property Risk Control," we work with insureds to improve their loss-prevention practices. Our comprehensive services include dedicated training, technical information and consulting solutions for reducing fire risk, emergency response planning, flood emergency response plan development, hurricane preparedness and avoidance of risks commonly associated with solar panel installations and operations. Our annually renewed property policies can offer natural catastrophe coverage to help customers cope with climate risks. In addition, we undertake special efforts to help expand (re)insurance protection, through our sovereign lending products in underdeveloped markets and other innovative risk transfer instruments.

In the sustainable energy (re)insurance business, Arch collaborates with brokers and companies specializing in the clean energy sector. We anticipate new opportunities that may necessitate (re)insurance protection across many of our business units, including property, liability, construction and workers' compensation. For our onshore energy group, we are dedicated to growing our portfolio in energy-efficient and low-carbon technology markets, offering products catering to clean energy production such as solar, wind, hydro, nuclear power, biofuel and geothermal power, as well as biofuel production and energy transition technologies, such as battery storage, hydrogen and carbon capture projects.

Further, as the transition to clean energy production progresses, we may see greater demand for specialized insurance products catering to the complexities of decommissioning legacy power generation facilities.

We also identify underwriting opportunities in construction projects as public and private entities address changing climate patterns, such as flood control, infrastructure adaptability, waterproofing, fire safety and susceptibility.

For our mortgage insurance business, because climate trends can develop over long periods, this time horizon allows our risk control team to assist customers with resources to conduct business-impact analyses, prioritize and implement risk management action plans, and make physical improvements, gradually improving resiliency. Similarly, we can provide educational resources to help insureds adapt to the increased risks from climate change, including floods and other natural disasters.

Climate Opportunities for Our Investing

Seeking opportunities to invest in companies committed to positive and measurable environmental outcomes. As a long-term asset manager and owner, we integrate sustainability factors into investment analysis and decision-making. Through our fundamental analysis, we incorporate investee companies' sustainability risk ratings, including corporate governance, climate risk exposure, carbon reduction and workforce policies. We engage with our external asset managers to understand their sustainability integration into investment decisions and portfolio construction. We continue to include responsible investments in our alternative and liquid market investments. Through these investments, we aim to deliver total return for Arch while potentially realizing the societal benefits of sustainability investing.

As of Dec. 31, 2024, we had invested $223 million in green bonds issued to fund green projects or activities that promote climate change mitigation or adaptation, or other environmental sustainability purposes. Our green bond investments decreased 1.5% year-over-year.

Monitoring Exposure to Climate Impact and Carbon Intensive Industries. Responsible investing necessitates we measure carbon metrics and other sustainability factors in carbon-intensive industries. Investing in companies making positive progress towards an energy transition allows us to capture the value created by these efforts while reducing our overall risk. As of Dec. 31, 2024, we had no exposure to companies that derive 10% or more of total annual revenues from thermal coal. Our exposure to companies with evidence of owning fossil fuel reserves regardless of their industries, including companies that own less than 50% of a reserves field, was $844 million as of Dec. 31, 2024, representing 2.0% of the total portfolio (down from 2.2% 2023).

Assets with United Nations Principles of Responsible Investing Signatories (UN PRI). We recognize the material commitment required to become UN PRI signatory and highlight our asset owners or asset managers that have achieved this distinction. Our assets managed by UN PRI signatories improved year-over-year (2023 and 2024) representing 32% of the total assets under management (AUM) and 85% of the total externally managed assets, approximately $13.1 billion as of Dec. 31, 2024.

The transition to a low-carbon economy also creates opportunities for specific asset classes, described below in "Making Responsible Investments."

III. Risk Management

The TCFD recommends insurance companies disclose how the organization identifies, assesses and manages climate-related risks.

The Risk Register and the Own Risk and Solvency Assessment (ORSA) process are key elements of our risk management framework. Our Risk Register includes an analysis of all risks facing Arch and details the corresponding controls and/or mitigation concerning these risks. The ORSA process contemplates all risks facing the group as articulated in the Risk Register and is designed to assist our Board in understanding and managing the Company's key risks. Material changes in the underlying risks, such as changes in business mix, reinsurance strategy and investment strategy, are evaluated for potential impact on the Company’s capital requirements. This process ensures material risks are included within the Risk Register and in our ORSA report, feeds into the analysis of capital requirements and, in some cases, triggers further investigation through stress testing.

Although risks tied to climate change have historically been embedded within other risks in our Risk Register and ORSA process, our current process focuses on identifying climate-change risk components in our risk universe and articulating these more specifically in our Risk Register and ORSA process. This initiative was a collaborative effort among our Sustainability, Risk Management, Investments and Business teams to embed evaluations of climate-change risk into our already mature enterprise risk management processes. The current climate-change risk assessment summary is contained in this report in the "Our Identified Climate-Related Business Risks" table.

IV. Metrics & Targets

The TCFD guidance recommends insurance companies examine how resilient their strategies are to climate-related risks and describe risk exposure to weather-related catastrophes in their property insurance by jurisdiction.

Underwriting Resilience under Different Scenarios. For Arch's natural catastrophe-exposed business, we seek to limit the amount of exposure we assume from any single insured or reinsured and the amount of exposure to catastrophe losses from a single event in any geographic zone. We monitor our exposure to catastrophic events, including earthquakes and windstorms, and periodically reevaluate the estimated probable maximum pre-tax loss for such exposures. We seek to limit the net probable maximum pre-tax loss from a severe catastrophic event in any geographic zone at the 1-in-250-year return period to approximately 25% of tangible shareholder's 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 Jan. 1, 2025, our modeled peak zone catastrophe exposure is a windstorm affecting the Florida Tri-County area, with a net probable maximum pre-tax loss of $1.8 billion, followed by windstorms affecting the Northeast U.S. and the Gulf of Mexico with net probable maximum pre-tax losses of $1.7 billion and $1.5 billion, respectively. As of Jan. 1, 2025, our modeled peak zone earthquake exposure (San Francisco, California, area earthquake) represented approximately 57% of our peak zone catastrophe exposure, and our modeled peak zone international exposure (German windstorm) was substantially less than our peak zone windstorm and earthquake exposures.

Net probable maximum loss estimates are net of expected reinsurance recoveries before income tax and excess reinsurance reinstatement premiums. Catastrophe loss estimates reflect the zone indicated and not the entire portfolio. Because hurricanes and windstorms can affect more than one zone and make multiple landfalls, our catastrophe loss estimates include clash estimates from other zones. Our catastrophe loss estimates and realistic disaster scenario loss estimates do not represent our maximum exposures, and it is highly likely our actual incurred losses would vary materially from the modeled estimates.

By evaluating our modeled natural catastrophes across multiple global zones and differing return periods (i.e., likelihoods of occurrence), we can observe the range of possible impacts on our portfolio. We evaluate the impact of single occurrences and study the impact of the aggregation of multiple losses over select periods as part of our corporate risk management.

Climate change may make modeled outcomes less certain or produce new, non-modeled risks. Consequently, we evaluate natural catastrophe models, tools, loss trends and data on a peril-by-peril and region-by-region basis. Evaluations of our clients' risk selection, the quality of the exposure data they provide to us and the tools and processes supporting their risk management are key fundamental components of our underwriting process. Specific areas of research and focus in 2024 included Australian models, European severe thunderstorm, Canadian and U.S. Wildfire, Canadian severe convective storm and Caribbean Earthquake and Hurricane.

Our appetite for natural catastrophe risk is determined by estimated climate patterns and other important factors such as our overall mix of business, market conditions, our market share, regulatory constraints, corporate structure and costs of capital. The complex combination of these, among other factors, determines our appetite for assuming natural catastrophe-related risk.

A key tenet of our business approach is the diversification of risks across risk sources. To the extent climate change leads to a greater proportion of our overall risk exposure from weather-related events, we could adjust our appetite or required economic returns for the risks we would be willing to (re)insure. In addition, climate change may lead to shifts in population densities and the location of physical assets, which could drive our exposure opportunities.

Based on our ongoing evaluation of climate-related risks, our current exposure remains within our risk appetite. We continually measure and monitor our evaluations and assumptions to adjust our views on risk for new information. Since most property/casualty (re)insurance contracts are one year long, we can adequately adjust the price and manage risk efficiently and effectively.

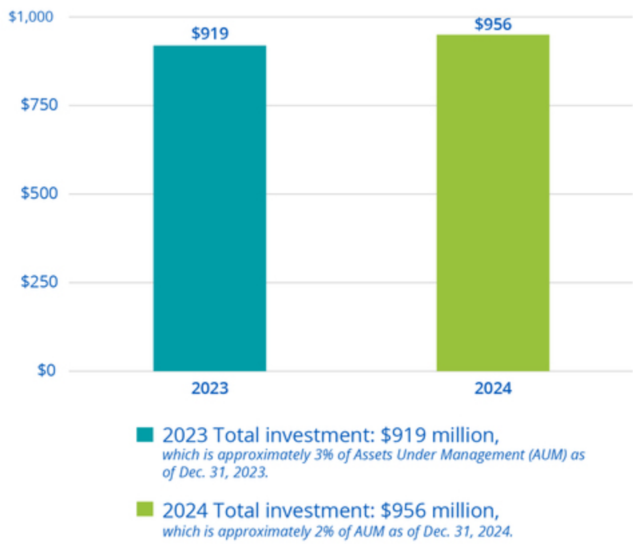
Investments. We continually assess the potential financial impacts of climate change on our investment portfolio. This analysis includes a full understanding of various climate-change factors, metrics and scenarios.

Our Investment team engages with data providers and uses third-party tools to help benchmark and understand our portfolio's climate-impact profile. This process includes analyzing relevant climate risks and exposures, including scenario analysis across our portfolio.

We also recognize the need to examine the portfolio's exposure to the transition and physical elements of climate risk. Future greenhouse gas (GHG) emissions and controversial business practices can expose the portfolio to stranded asset risks over time. Our Portfolio Carbon Risk Rating can indicate how issuers are prepared for a transition over time and provide a forward-looking analysis. Physical risk metrics include analysis of the issuer's physical risk management plans and exposures to major hazards that might increase due to climate change.

Making Responsible Investments. A continued focus on sustainability factors remains core to our decision-making and inclusion of responsible investments in the portfolio. We have made certain investments over time that reflect our consideration of sustainability factors in internal and externally managed investments. Responsible investments currently total approximately 2% of our total AUM as of Dec. 31, 2024.

Responsible Investing ($M)



Environmentally Efficient Operations. At Arch, we are working to reduce and responsibly manage the impact our operations have on the natural environment. By applying energy-efficient strategies to lower our emissions, we enhance our operational efficiency. In this report, we share the results of an assessment of our GHG emissions from 2020 to 2024. We also provide an overview of our approach to measuring our carbon footprint and outline our go-forward strategy to address and reduce our carbon emissions.

Greenhouse Gas Emissions and Methodology.

We continue to measure our global emissions across Scopes 1, 2 and 3 (select categories as reflected in the table). These figures were calculated using a verified methodology in line with the Greenhouse Gas Protocol's[1] reporting standards. The data marks five years of GHG computations. In 2024, we transitioned our efforts in measuring and tracking GHG emissions to a new platform, which uses rigorous carbon accounting techniques aligned with the GHG Protocol and the latest climate science. This transition reflects improvements in methodology accuracy and actionability. While this update may result in changes to previously reported emissions, we believe this enhanced approach provides a more accurate and actionable understanding of our carbon footprint. Any significant variances from prior reporting due to methodology changes will be noted in this and future disclosures.

2024 Highlights of Our Emissions Data:

- Our total Scope 1, 2 and 3 emissions increased by 4% year-over-year, primarily driven by increased average facilities square footage of 8.24% and the addition of a second corporate jet in conjunction with our company's growth. Our total operational footprint (Scope 1 and 2 emissions) increased by 4.5% from our base year of 2020. This increase is observed before accounting for the purchase of renewable energy certificates, which reduce our Scope 2 emissions and are a key facet of our efforts to source renewable energy for our operations.
- To progress toward our 2030 Scope 1 and 2 emissions reduction target in alignment with the Science-Based Targets initiative (SBTi), we purchased 5,389 renewable energy certificates (RECs) from eligible projects in the U.S. and Philippines in 2024 to complement our facilities' existing efforts to source renewable energy, effectively reducing our 2023 Scope 2 market-based emissions by 2,091 metric tons. We expect sourcing renewable energy will remain a key component of our decarbonization strategy.
- Our global headcount increased approximately 17% over the previous year, driven largely by our acquisition of Allianz's U.S. MidCorp and Entertainment insurance businesses, which added nearly 500 employees. Despite this increase in global headcount, the intensity of our Scope 1 and 2 emissions per full-time employee, excluding jet emissions, decreased by 1.3%.
- In addition to our efforts to decarbonize our operations, we strive to mitigate our remaining Scope 1 and 2 emissions by purchasing carbon offsets from verified high-quality projects that generate positive impacts in local communities, including:
  - A Gold Standard-certified project in Kenya focused on repairing and maintaining boreholes to provide clean and safe drinking water to rural communities. By improving access to clean water, the project reduces the need for boiling water, which decreases the use of firewood and charcoal.
  - A Gold Standard-certified project in Malawi that targeted the distribution of improved fuel-efficient cook stoves across households. By burning wood more efficiently, the cookstoves save fuel, decelerate deforestation in Malawi and reduce health hazards associated with indoor smoke pollution.

[1] World Resources Institute and the World Business Council for Sustainable Development. 2015. "The Greenhouse Gas Protocol - A Corporate Accounting and Reporting Standard, Revised Edition." WRI and WBCSD. Available at: https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf

Improving Efficiency and Setting Targets for GHG Reduction. Over half of our operational carbon emissions come from electricity powering our worldwide offices. Monitoring and reducing our office electricity and natural gas consumption levels are priorities for our global facilities team and our environmental sustainability committee, "Blue Goes Green." While we are an office-based company that primarily leases our building space, we still see value in analyzing our Scope 1 and Scope 2 emissions to identify areas where we can work to improve efficiencies each year.

Aligning with the SBTi, we recently defined the activities, boundaries, timeline and scope of ambition for our GHG reduction targets. In 2022, we set the following targets:

1. **Commit to reducing absolute Scope 1 and Scope 2 GHG emissions 42% by 2030, from the 2020 base year, and;**
2. **Commit to achieving net zero operations by 2030 by purchasing carbon removal offsets for our remaining Scope 1 and Scope 2 emissions.**

Our decarbonization strategy continues to focus on promoting energy efficiency measures within our global facilities, sourcing renewable energy through utility providers, purchasing RECs, and right-sizing our office and data center portfolio to fit the needs of our operations. We will adjust this strategy over time to meet our targets.

Arch Capital Group Ltd. 2020 - 2024 GHG Inventory Results* Scopes 1-3 Emissions		2020 Emissions (metric tons CO2e)	2021 Emissions (metric tons CO2e)	2022 Emissions (metric tons CO2e)	2023 Emissions (metric tons CO2e)	2024 Emissions (metric tons CO2e)	2024 vs 2023 %
Scope 1	Natural Gas	249	265	252	256	471	84 %
	Diesel	18	24	46	22	8	(64)%
	Gasoline	—	—	2	—	71	#DIV/0!
	Jet Fuel	213	389	544	717	1,346	88 %
	Refrigerant Leakages	445	440	504	448	356	(21)%
Total Scope 1 Emissions		925	1,118	1,348	1,443	2,252	56 %
Scope 2	Electricity	6,394	5,802	5,244	4,841	6,043	25 %
	Natural Gas	552	431	383	316	—	(100)%
	Diesel	3	3	13	1	17	1600 %
	Steam	108	120	177	144	63	(56)%
	Chilled Water	104	111	114	112	73	(35)%
Total Scope 2 Emissions (Market-based)		7,161	6,467	5,931	5,414	6,198	14 %
Total Scopes 1+ 2 Emissions (Market-based)		**8,086**	**7,585**	**7,279**	**6,857**	**8,450**	23 %
Scope 3	**Cat 1:** Purchased Goods and Services**	31,129	32,702	36,935	44,083	47,769	8 %
	Cat 2: Capital Goods**	6,027	5,887	6,802	11,733	3,757	(68)%
	Cat 3: Fueled- and Energy- Related Activities***	2,086	2,638	2,694	2,121	2,034	(4)%
	Cat 4: Upstream Transportation (Courier Services)	398	507	466	429	740	72 %
	Cat 5: Waste*****	173	176	63	0	880	#DIV/0!
	Cat 6: Business Travel	4,566	2,200	10,552	11,491	11,799	3 %
	Cat 7: Employee Commuting	4,004	3,565	5,636	7,490	10,915	46 %
	Cat 8: Upstream Leased Assets	3	4	6	14	45	221 %
	Cat 13: Downstream Leased Assets	727	1,525	1,438	591	1,739	194 %
Total Scope 3 Emissions		49,113	49,204	64,592	77,952	79,678	2 %

Total Scopes 1, 2 and 3 Emissions (Market-based)		**57,199**	**56,789**	**71,871**	**84,809**	**88,128**	**4 %**
Total, adjusted for RECs purchase	**Purchase of RECs (in MWh)**	**n/a**	**6,624**	**6,394**	**5,389**	********	********
	Total Scope 1 and 2 (Market-based, adjusted for RECs)	**8,086**	**5,029**	**5,018**	**4,765**	********	********
Facilities Emissions/sqft		**0.0068**	**0.0063**	**0.0057**	**0.0056**	**0.0060**	**7 %**
Facilities Emissions/FTE		**1.70**	**1.48**	**1.28**	**0.97**	**0.95**	**(2)%**

*Emissions calculations are based on a combination of actual, estimated and extrapolated data, and are calculated in accordance with the GHG Protocol guidelines. We are committed to continually improving our data collection, management and calculation processes. Our 2020, 2021, 2022 and 2023 GHG emissions were retroactively calculated to reflect improved facility and vendor spend data. Our emissions reduction targets are now based on the recalculated 2020 baseline year emissions. As our calculation methodology is refined in future years, our emissions numbers are subject to change. Scope 3 emissions do not include the direct emissions of invested assets.

**Scope 3 Category 1 emissions are calculated on the basis of our 2024 operating expenses, while Scope 3 Category 2 emissions are calculated based on our 2024 capital expenditures.

***As part of our efforts to apply the most up-to-date calculation methodologies, Scope 3 Category 3 emissions have been recalculated to integrate leading upstream emissions factors developed by the International Energy Agency (IEA) and EcoInvent emissions factors to calculate other fuel and energy-related activities not included in Scopes 1 or 2.

****We are in the process of drafting our plans for REC procurement for the 2024 reporting period.

*****To align our greenhouse gas accounting with our financial accounting, we shifted to calculating spend-based emissions using accrual-based data from our Trial Balance in 2023. Consequently, waste activity was assumed to be captured within our wider purchasing activity (Category 1). In 2024, we transitioned our carbon accounting to a new platform that uses rigorous techniques aligned with the GHG Protocol, improving methodology accuracy. Using this system, we estimated emissions from employee-generated waste by utilizing anonymous employee data, including location, start/end dates, and percentage of time remote.

Arch Capital Group Ltd. 2024 Energy Use by Region
Scopes 1 and 2 Emissions

		Asia	Australia	Europe	Middle East	North America	TOTAL/ Average
Electricity Consumption (in kwh)*	Renewable	0	0	603,248	0	0	603,248
	Non-Renewable	880,647	119,776	1,105,324	5,471	13,972,599	16,083,817
	Total	880,647	119,776	1,708,572	5,471	13,972,599	16,687,065
	(%) from Renewable Sources	0%	0%	35%	—%	—%	4%
	(kwh/sqft) Normalized Electrical Power	9.52	9.48	10.17	14.36	16.27	14.74
Energy from Electricity (in GJ)*	Energy from Electricity	3,170	431	6,151	20	50,301	60,073
	Percentage of consumed energy from the grid	96%	87%	80%	82%	62%	65%
Energy Consumption (in GJ)**	Renewable	—	—	2,172	—	—	2,172
	Non-Renewable	3,296	498	5,560	24	80,795	90,173
	Total	3,296	498	7,732	24	80,795	92,345
	(%) from Renewable Sources	0 %	0 %	28 %	0 %	— %	2 %
	(%) from Non-Renewable Sources	100 %	100 %	72 %	100 %	100.00 %	98 %
Calculated Emissions, incl. fleet (in mtCO2e)	Scope 1 Emissions	42	5	143	—	2,062	2,252
	Scope 2 Emissions (Location-based)	602	86	353	3	4,906	5,950
	Scope 2 Emissions (Market-based)	602	97	444	3	5,052	6,198
	Scope 1+2 Emissions (Location-based)	644	91	496	3	8,490	8,202
	Scope 1+2 Emissions (Market-based)	644	102	587	3	8,637	8,450

* Includes Scope 2 electricity consumption from facilities.

** Includes Scope 1 and 2 energy consumption from facilities and fleet vehicles.To convert energy from kilowatt-hours (kWh) to gigajoules (GJ), we use a standard conversion factor. Assumed a conversion rate of 1 kWh of electricity to 0.0036 Gigajoules.