Chubb 2022 Climate-Related Financial Disclosure

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

About This Report

The Chubb Corporate Environmental Program is now in its 16th year. The company has long been committed to communicating important information about its environmental initiatives to our clients, shareholders, employees, business partners, the communities where we operate and others who have an interest in our company, our industry and the environment. This report is the second issued by Chubb since we began reporting using the Task Force on Climate-Related Financial Disclosures (TCFD) reporting framework in 2021.

This report reflects Chubb's strategies and actions over the past year with respect to climate risk management and climate strategy, and is responsive to our shareholders' request for information regarding our climate-related activities. We are committed to supporting our clients as they navigate a transition to a low-carbon economy, and we are actively supporting this transition across our company through the products and services we offer, our underwriting and investment decisions, our philanthropic support and our public engagement on critical climate issues. This report provides insight into where we are and where we are going.

About Chubb

Chubb is the world's largest publicly traded property and casualty insurance company. With operations in 54 countries and territories, Chubb provides commercial and personal property and casualty insurance, personal accident and supplemental health insurance, reinsurance and life insurance to a diverse group of clients. As an underwriting company, we assess, assume and manage risk with insight and discipline. We service and pay our claims fairly and promptly. The company is also defined by its extensive product and service offerings, broad distribution capabilities, exceptional financial strength and local operations globally. Parent company Chubb Limited is listed on the New York Stock Exchange (NYSE: CB) and is a component of the S&P 500 index. Chubb maintains executive offices in Zurich, New York, London, Paris and other locations, and employs approximately 34,000 people worldwide.

Additional information can be found at: chubb.com

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Chubb's Progress on Addressing Climate Change

We are proud to present Chubb's second annual TCFD Report, which reflects our ongoing work to encourage the transition to a net-zero economy that is essential to the future health and welfare of our planet and our society. In April of this year, we issued our Climate Change Policy,[1] which set forth our view on the important role the insurance industry must play in achieving this transition.

We have advanced our climate work in several important ways since we issued that Policy, which explained that our climate-related commitments and actions are grounded in a scientifically based, fact-driven assessment of the extraordinary challenges that the world faces in reaching the goal of net-zero emissions by 2050. Our commitment to realistically addressing these challenges – which requires balancing energy security with the necessity of accelerating a transition to net zero – is reflected in our recent actions.

Addressing Scope 3 emissions

Insurance companies do not produce substantial greenhouse gas (GHG) emissions, but some of our clients do. Those client emissions are what we refer to as Scope 3 emissions. There are fundamental questions about whether, how and to what extent insurers can affect Scope 3 emissions, and we are actively engaged in addressing those issues through:

- **Measuring Scope 3 emissions.** We are working to seek consensus on a scientifically sound methodology to measure the full range of Scope 3 emissions produced by our clients, from millions of individual customers to the largest multinational corporations. This is an extraordinarily complex task. A particular challenge is accounting for emissions associated with dollar values in underwriting and investment activities. For example, Chubb provides a wide array of insurance products, and the generated emissions from providing $1 million of property damage coverage may not be the equivalent of providing $1 million of employment practices liability insurance to the same company. But in order to attribute generated emissions to insurance products, the effect of insurance on the existence of emissions in the measured industries and product lines must be determined. In some cases, the presence of insurance may reduce total emissions of insured clients. The absence of insurance may have no effect on the level of emissions from would-be clients. In order to incentivize reductions in insurance-associated emissions, the causal and contributive relationships to clients' emissions must be clear. Focusing in the near term on the highest GHG emitting activities could provide scientifically sound metrics that we can use internally to measure Scope 3 emissions for certain industries in 2023.
- **Underwriting and investing limitations.** In 2019, we were the first major insurer in the United States to limit coal-related underwriting and investment activity and we more recently announced limitations on oil sands activity.
- **Underwriting criteria.** We are now engaged with a globally leading, science-focused NGO and their experts in the oil and gas and insurance sectors as we define science-based criteria to help drive the reduction in GHG emissions from our insureds. We expect these criteria will be directly applied to our underwriting decisions. The criteria will likely assess, e.g., whether a client has a realistic plan to transition away from higher carbon activity, whether there are lower-carbon alternatives for the specific project for which a client seeks insurance, and the extent of environmental impact associated with a particular activity. While our work in this area continues to evolve, we currently anticipate that we will initially seek to track the Scope 1 and Scope 2 emissions of our insureds in the oil and gas sector to evaluate our progress over time. Additionally, we are working to develop approaches that would allow for benchmarking the companies we underwrite in a particular industry against the progress of that industry segment as a whole.
- **Scope 3 thought leadership.** We are also proud to be sponsoring a series of workshops in 2022-2023, hosted by the University of Pennsylvania, to further the conversation between insurance companies, our investors and other stakeholders, including regulators, emissions measurement groups and academics, around how our industry can assess and track climate risk and opportunities and develop meaningful metrics to communicate our progress.

[1] https://about.chubb.com/content/dam/chubb-sites/chubb/about-chubb/citizenship/environment/pdf/Chubb-Our_Climate_Change_Policy.pdf

Encouraging the development of clean energy

The transition to net zero depends largely on the development of alternative energy sources and other technologies. We have been a leading insurer of alternative energy and clean tech, and we recently launched a new business initiative – Chubb's Global Climate Practice — to substantially expand our capability to provide the risk transfer mechanisms that will allow these businesses to develop and expand. This initiative combines our risk engineering and technical underwriting expertise to identify new and expanded clean tech underwriting opportunities. The line between the fossil fuel and alternative energy industries is blurring; some of our largest fossil fuel energy companies are rapidly diversifying to include lower-carbon and clean energy alternatives as increasing percentages of their output. We are working with these clients to encourage that transition.

Encouraging rigor and candor in climate dialogue

We are eager to engage on climate issues and seek open and informed dialogue with clients, investors, academic and industry experts, advocates, government officials and any other source that can be helpful. We contributed to the dialogue this year in many ways, including our unique Climate Policy Statement, which candidly set forth our view on critical climate issues, including net-zero climate pledges. As we engage, we wish to be clear not only about our commitment, but also about what we believe is the responsible way for our company – and our industry – to accelerate the net-zero transition. Today, about 80% of the world's energy is provided by fossil fuels. What's missing from much of the dialogue is a recognition that two things can be true at once. First, that the pace of the transition needs to be accelerated. Second, that fossil fuel activity remains essential to ensure energy security across the globe. We are skeptical of any pledges that do not account for the complexity of moving to a net-zero economy from this current reality. The principal drivers of the transition will be – and should be – government action, technological advances and massive private investment. There is also a critical role for insurers in encouraging the transition, which we describe at length in this report. Part of that role is to provide risk mitigation even to the fossil fuel industry as the transition to net zero continues. This view is not shared by those who want insurers to achieve net zero across their entire underwriting portfolio. We cannot accept that view because it is untethered from the complexity of the transition and would lead to unintended consequences. Denying fossil fuel companies insurance coverage through traditional channels would create incentives for them to transfer their risk through other means. Insurers like Chubb would also be denied from providing valuable capabilities and insights that can enable clients to advance realistic transition plans.

This position is not an excuse for inaction. Rather, it frames how we think about the role we can play in executing on our responsibility to facilitate the transition to net zero. We believe that insurance is at its most effective when we serve as a constant presence in the marketplace, engage deeply with our clients, and develop tools and criteria to incentivize our clients to undertake actions that will reduce their own emissions. We are committed to accelerating the net-zero transition, and we welcome an honest assessment of how we are doing so, by looking at our actions, not unrealistic pledges.

Governance

Chubb addresses climate risk through the oversight functions and active engagement of its Board of Directors, through extensive involvement of its most senior executives and through its global enterprise risk management (ERM) framework.

Board of Directors Oversight

The Board of Directors recognizes the critical risks to society and to Chubb arising from climate change and is actively engaged in overseeing the company's climate-related strategies, including the development of its climate policies and climate-related business activities. The Board as a whole receives regular updates from management on climate issues and received two significant climate briefings from outside experts over the last year.

In addition to this general oversight, two Board committees are charged with specific climate-related oversight responsibility:

- **Nominating & Governance Committee:** oversees our corporate citizenship activities and environmental, social and governance (ESG) policies and initiatives, including those relating to climate change and the environment, such as our fossil fuel-related underwriting and investment policies, corporate environmental goals and philanthropic efforts.
- **Risk & Finance Committee:** oversees our ERM function, which includes extensive analysis of climate risk, and reviews investment risks associated with climate change, including climate-related catastrophe risk, such as increased threats of wildfire, sea rise and hurricane frequency and intensity.

Management Responsibilities

Chubb is engaged in a wide range of climate-related activities that include:

- Identifying and analyzing climate risk;
- Public engagement on climate issues with government officials, climate advocacy groups, climate experts and a variety of other interest groups;
- Consideration of appropriate climate-related underwriting and investment actions;
- Development of products and services to promote the transition to a net-zero economy and support our customers' resiliency in the face of climate change;
- Limiting the company's own GHG emissions; and
- Providing philanthropic support for climate resilience projects.

The CEO and Executive Committee provide oversight and direction of these activities and set the company's climate-related strategies. The CEO engages extensively on climate issues, including in his annual shareholder letter and in other public communications. Other senior executives with climate-related responsibilities include:

- The General Counsel coordinates the company's ESG initiatives, including its climate-related policies and strategies.
- The Chief Risk Officer oversees the ERM function, including risks associated with climate change. Various management teams, including the Risk and Underwriting Committee, product boards and risk-related committees, meet regularly to evaluate specific risks and risk accumulation in Chubb's business activities and investments.
- Currently, the Vice Chairman, Global Underwriting and Claims, has management oversight of climate strategy and the execution of underwriting and portfolio management decisions thereof. The Vice Chairman also oversees Chubb's Global Climate Practice. In January 2023, this responsibility will be assumed by the company's newly appointed Global Chief Climate Officer, who will provide broad oversight of the company's day-to-day climate-related activities.
- The Assistant Vice President, Climate Sustainability Manager is responsible for identifying and implementing opportunities for climate-related products and services, establishing a framework to measure progress and driving operational sustainability, and manages:
  - Internal climate activities, including GHG measurement and reduction activities.
  - The Climate Advisory Group, composed of senior business unit managers and other global leaders, collaborates cross-divisionally to pursue opportunities to develop and expand climate-relevant products and services.

The Transition to Net Zero

We have taken significant actions to address climate change, including limitations on underwriting and investing in coal and oil sands. For more information on our insurance exclusions, please see below.

By limiting underwriting of the most carbon-intensive fossil fuels and supporting low-carbon alternatives, insurers are encouraging the transition to a net-zero economy. But underwriting limitations must be balanced against the essential and core purpose of insurance to provide risk protection for lawful activity, including ensuring energy security across society. Any such limits on entire classes of activity interfere with this purpose and must be an exception based on analytical, fact-based examination of realistic alternatives.

More broadly, Scope 3 GHG underwriting emissions-reduction targets (regardless of insured industry) would presumably be achieved by insurance companies voluntarily declining to insure people, companies, industries or regions. This proposition runs counter to our purpose and mission, raises crucial questions of equity and social justice, and hamstrings society's ability to take action to adapt to the effects of climate change. Moreover, it may prove to have minimal effect in reducing tons of CO_2 emitted to the atmosphere, both because other avenues of obtaining insurance exist and because lack of access to or use of insurance mechanisms typically leads to riskier behavior, poorer long-term planning, and greater volatility in economic activity.

Our climate-related commitments and actions are grounded in a fact-driven assessment of the extraordinary challenges that the world faces in reaching the goal of net-zero carbon emissions by 2050. An orderly and equitable transition to a net-zero economy from the current reality, in which about 80% of the world's energy comes from fossil fuels, will require government action to drive innovation and massive private sector investment in alternative energy production. As this transition continues, society will continue to rely on fossil fuel use to sustain access to reliable and affordable power for many years.[2] The net-zero transition therefore requires making fossil fuel production and use as efficient as possible and also rapidly deploying cleaner alternatives.

In July 2022, we launched Chubb's Global Climate Practice to support customers contributing to the transition to a net-zero economy. Our focus involves expanding the company's existing capabilities and expertise. Members of the Global Climate Practice are working on an accelerated timeline to identify new opportunities for Chubb to provide products and services to individuals and companies that are directly helping combat climate change and to companies in transition to meet climate goals. Chubb will assist clients in that journey with preparation, planning and adaptation strategies and solutions. See the Risk Management section for further details.

Engagement in Research and Collaboration

Chubb is engaged in research and advocacy both internally and externally through industry institutions and international organizations.

Internally

Through our catastrophe modeling and enterprise risk management groups, Chubb is at the forefront of the insurance industry's understanding of the potential impact of climate change on our business and our customers. We regularly engage with experts in consulting and academia to further our research and bolster our knowledge. For example, in collaboration with the Bren School of Environmental Science & Management at the University of California Santa Barbara, Chubb is conducting a study seeking to better understand future potential wildfire risk in regions of critical interest.

Externally

In 2022, we supported the launch of a series of climate workshops aimed at insurers, investors and other stakeholders. Convened by the University of Pennsylvania Carey School of Law and sponsored by Chubb, the workshops — *Private Climate Governance: "Net Zero" Prospects and Challenges for the Insurance Sector* — are designed to analyze the various methodologies in place for insurance companies to measure and reduce their Scope 3 emissions.[3] Chubb is committed to the development of tools that can establish consistent, accurate and verifiable emissions accounting methodologies. The investor workshops will explore these issues further and discuss existing methodologies, such as the Partnership for Carbon Accounting Financials' (PCAF) recently released *Global GHG Accounting and Reporting Standard for the Insurance Industry.* Our aim is to identify how we and other

[2] IEA (2022), Global Energy and Climate Model, IEA, Paris https://www.iea.org/reports/global-energy-and-climate-model, License: CC BY 4.0

[3] Scope 3 GHG emissions are emissions generated not by Chubb but by its clients, customers and investments.

insurers can influence the business operations of our clients and what policy considerations we can make in order to facilitate our and our clients' transition to a low-carbon economy. We are working to deepen our understanding of how underwriting policies can facilitate the reduction of GHG emissions, and we have provided comments on the PCAF GHG Accounting Standard for the Insurance Industry and the Net-Zero Insurance Alliance's proposed Target-Setting Protocol.

We also continue to work actively to advance our industry's expertise in climate change mitigation and adaptation. Chubb is a member of the United Nations Global Compact, the largest corporate sustainability project in the world. Chubb has formally committed to making the Compact's environmental principles part of our culture and day-to-day operations. We are also a member of the Geneva Association, an international insurance think tank representing 90 global insurance organizations. Chubb's Chairman and CEO is among the 68 chief executives of major international insurers who have publicly confirmed their commitment to the Geneva Association's Climate Risk Statement — a set of guiding principles on the substantial role insurance can play in global efforts to tackle climate-related risks. We participate in ClimateWise, a U.K.-based organization of insurance companies committed to taking action on climate change and reporting publicly on our performance. Further, Chubb is both a member of the Business Roundtable (BRT), which supports collective actions that will lead to the reduction of GHG emissions on a global basis, and the Reinsurance Association of America's (RAA) Extreme Event Committee, which focuses on catastrophe modeling improvements to reflect climate change.

Our Fossil Fuel Underwriting

Making the transition to a low-carbon economy involves planning and action by policymakers, investors, businesses and citizens. We are making appropriate commitments on climate action, including limiting certain underwriting activity.

Coal Policy

Chubb was the first major insurer in the U.S. to announce a policy concerning thermal coal-related underwriting and investment. On July 1, 2019, we adopted the following policy:

Underwriting

- **Coal-fired electric generating plants:** Chubb no longer underwrites risks related to the construction and operation of new coal-fired plants.[4]
- **Coal mining:** Chubb will not underwrite new risks for companies that generate > 30% of revenues from thermal coal mining and will phase out coverage of existing risks that exceed this threshold by the end of 2022.
- **Utilities and power generation companies:** Chubb will not underwrite new risks for companies generating more than 30% of their energy production from coal and began to phase out coverage of existing risks exceeding this threshold at the start of 2022 (accounting for the viability of alternative energy sources in the impacted region).

Investments

- Chubb no longer makes new debt or equity investments in companies that generate more than 30% of revenues from thermal coal mining or that generate more than 30% of energy production from coal.

[4] Until the end of 2022, a few exceptions to this policy will be considered (i) in regions that do not have practical near-term alternative energy sources and (ii) taking into account the insured's commitments to reduce coal dependence.

Oil Sands Policy

In 2022, Chubb adopted a policy that it will no longer underwrite risks for projects involving direct mining or in-situ extraction and processing of bitumen from oil sands.

Chubb will continue to assess our coverage of carbon-intensive industries and their strategies for transitioning to a lower-carbon economy.

Underwriting Criteria for Fossil Fuels

We will continue to carefully listen to the views of those who seek a total exclusion on underwriting fossil fuel activity, or variations such as a ban on supporting new fossil fuel supplies. We respect and appreciate the underlying concerns for the environment, and we agree on the importance of accelerating the transition to a net-zero economy.

But we are also committed to energy security, and alternative energy sources cannot yet provide enough power to sustain civil society; Chubb cannot agree to a categorical exclusion of fossil fuels. It would be irresponsible for us to do so as it would preclude Chubb from applying its data, insights and capabilities to help manage the complexities of an orderly transition to a net-zero carbon economy. To give just one example of the complexities involved: A ban on "new fossil fuel supplies" could discourage the transition from the most carbon-intensive fossil fuels (e.g., coal) to less carbon-intensive fossil fuel (e.g., natural gas) while clean energy sources remain insufficient to meet total energy demand.

We also believe that a blanket refusal to underwrite an entire industry sector would create perverse incentives. Denying access to the traditional insurance market will not end or dramatically reduce fossil fuel activity. Instead, the fossil fuel industry could resort to alternative types of risk transfer, such as forming a mutual insurance company, a captive insurance company or other risk-financing measures without any additional impetus to prioritize emissions-reduction efforts. Forcing the fossil fuel industry to turn to alternative risk transfer mechanisms with no consideration of local conditions and energy supply also has the potential to lead to inequitable outcomes, placing a disproportionate cost burden on those communities that are least able to afford it or impairing their access to reliable, affordable energy.

Chubb's underwriting sends price signals that encourage movement away from the most carbon-intensive fuels. As the risks associated with fossil fuels have increased, the costs of insuring those risks, including liability for environmental damage and for the actions of the directors and officers of fossil fuel companies, has increased substantially. We also consider climate change issues in determining our corporate policy in underwriting fossil fuel activity. In formulating our coal and oil sands policies, for example, we considered a variety of factors relating to the production and use of both, including carbon intensity, environmental degradation and the availability of less carbon-intensive alternatives. Going forward, we will continue to consider realistic alternatives to other fossil fuels and the extent to which our fossil fuels clients (which we consider to be those companies involved in fossil fuel-based exploration and production, power generation and refining activities) have acknowledged the reality of climate change and, where appropriate, developed long-range plans to support the transition to a net-zero economy. We may decline coverage if a potential policyholder cannot provide information on climate risk mitigation plans and add new climate-related exclusions to policies where appropriate. Chubb expects its fossil fuel risk assessment process to evolve as data quality and availability improve, climate-related regulatory requirements develop, and as our clients advance on their own low-carbon transition plans.

In 2022, we signed a memorandum of understanding with a globally leading science-focused NGO to support our development of sustainable underwriting criteria for the oil and gas sector. We are excited about this new opportunity to build industry-specific insurance guidelines for both Chubb and others to follow, further aiding the insurance industry's support of the energy transition.

Chubb's Investment Portfolio

Chubb employs outside investment managers to manage and execute strategies for the company's investment portfolio; the majority of our investment holdings are corporate bonds with an average credit quality of A (S&P) and A (Moody's). We provide instruction to our investment managers to follow our climate-related investment policies, which include our 30% limitation on coal-related energy production and mining. We are in the process of developing investment strategies to increase our investment in companies engaged in alternative energy and clean tech.

Risk Management

The consequences of climate change comprise numerous perils and hazards, and multiple risks and opportunities. Climate risk identification involves evaluation of the various risks to which Chubb is exposed as a result of our business profile and the external environment within which we operate.

Chubb's Climate Advisory Group meets six times per year to collaborate cross-divisionally in utilizing the company's extensive risk assessment tools to manage climate risks in our existing underwriting portfolio and develop and expand climate-relevant products and services. Additionally, our Global Climate Practice is working on an accelerated timeline to advance Chubb's goals as a leading insurer both for companies that are directly helping combat climate change and for companies in transition to meet climate sustainability, carbon resiliency and net-zero goals.

In its underwriting of risks, Chubb evaluates its exposures with data and analytics by country, by line of business and by individual portfolio. One such means of evaluation is through catastrophe modeling.

Climate change impacts the insurance industry in a number of ways.

Risk Type	Driver	Result
Physical	Arise from direct weather-related events, such as floods, storms and wildfires. Includes physical and economic impact of climate-related risk on individuals, businesses and communities.	Can result in direct impacts to insurers, such as damage to property. Can also result in indirect impacts through subsequent events, such as global supply chain disruptions or resource scarcity.
Transition	Arise from the potential financial impact to the insurance industry from the transition to a low-carbon economy.	Can result in rapid repricing of carbon-intensive financial assets, expanding market demand for low-carbon industry, rapidly developing mitigation and adaption needs.

Catastrophe Modeling

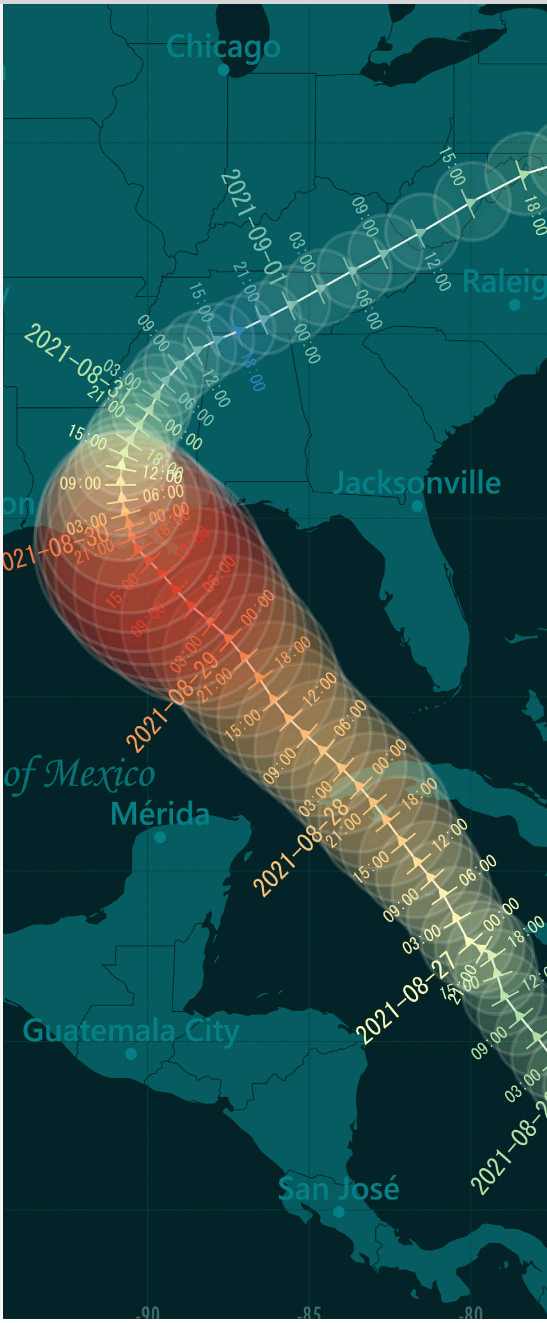
Chubb is a leader in the use of catastrophe models to quantify natural catastrophe risk for product pricing, risk management, capital allocation and estimation of losses. Chubb uses models to aggregate and closely monitor natural catastrophe exposures across our global portfolio and to ensure that our capital base is sufficiently strong to meet the expectations of regulators, rating agencies and policyholders, and to provide shareholders with an appropriate risk-adjusted return.

Chubb uses internal and external data together with sophisticated analytical, catastrophe loss and risk modeling techniques to ensure an appropriate understanding of risk, including diversification and correlation effects, across different product lines and territories. We continually adjust our processes to address climate and weather pattern changes.

Chubb's risk analysis ranges from the known (based on definitive historical loss experience) to the hypothetical (based on a probable maximum loss (PML) calculation). At present, our scenario analyses are modeled on a one-year time horizon to inform underwriting and business planning decisions, though we stress test our portfolio against multiple climate scenarios over a longer timeframe, as described on page 9. We continually assess and improve our modeling capabilities by utilizing our own loss experience, leveraging industry loss experience and expertise, as well as through academic partnerships. Through these efforts, we remain at the leading edge of assessing trends in frequency and severity of natural perils such as wind, flood and wildfire, and therefore incorporate them in a timely manner into pricing, underwriting and risk management decisions.

Swiss Re estimated that insured losses resulting from natural catastrophe events in the first half of 2022 amounted to $35 billion, 22% above the average of the past 10 years ($29 billion)[5], with losses from Hurricane Ian, estimated to be as high as $74 billion by RMS, expected to push that significantly higher.[6] Global economic losses from natural catastrophe events in 2021 were $270 billion.[7] Insurance covered $111 billion of those losses. Swiss Re also noted that secondary peril events accounted for more than half of the natural catastrophe insured losses, resulting mostly from severe convective storms and wildfires. In the last 10 years, severe convective storms have contributed more than half of global insured losses from secondary perils.

Catastrophe losses in recent years highlight the increasing vulnerability of the ever-growing concentration of humans and property values on coastlines and in the urban-wildland interface. The very presence of human and property assets in areas such as these means extreme weather conditions can quickly turn into catastrophe events in terms of losses inflicted.



[5] Floods and Storms Drive Global Insured Catastrophe Losses of USD 38 Billion in First Half of 2022, Swiss Re Institute Estimates, SWISS RE (Aug. 2, 2022)

[6] RMS Range of Insured Losses from Ian $53-$74B, "Best Estimate of $67B." Insurance Journal (Oct. 10, 2022). Accessed from https://www.insurancejournal.com/news/national/2022/10/10/688808.htm

[7] Natural Catastrophes in 2021: The Floodgates Are Open, SWISS RE (Mar. 30, 2022)

ERM

ERM efforts are defined in terms of time horizon and business materiality. Chubb's ERM discipline is defined as the process to identify, assess, mitigate and monitor those risks that, if manifested, might impact Chubb's exposure footprint (investments, operations and short/long-tail liabilities) such that our ability to achieve our strategic business objectives might be impaired. Chubb considers 36 months as the period during which we conduct our strategic ERM planning, but actual execution, and risks associated with that execution, has a one-to-two-year focus (short-term). Medium-term time horizons are two-to-five years, and long-term is five-plus years.

Stress Testing and Scenario Analysis

Extensive work has been done to understand the potential climate impacts to our view of risk and to meet regulatory requirements. For near-term business planning decisions (less than one year), we confirm model appropriateness for current climate risks by ensuring they appropriately incorporate recent trends, loss experience and changing exposure patterns. Climate change has likely resulted in an increase in storm surge from sea level rise as well as an increase in tropical cyclone precipitation. However, there is likely higher U.S. wildfire and inland flood risk. We have stress tested our U.S. wildfire model and the potential impacts of reduced precipitation/snowpack, and longer and more intense wind seasons. The results of this analysis have had a substantive impact on our business in certain U.S. western states, including how we view the evolving nature of wildfire risk in terms of concentrations of that risk in the wildland-urban interface.

For long-term (five-plus years) impacts, we utilize vendor models to assess the impacts of the Intergovernmental Panel on Climate Change (IPCC) scenarios on modeled losses for key region perils such as U.S. windstorm, with a focus on the RCP 8.5 scenario at five-year intervals through 2050.

We also assess the impacts of climate change on our operations beyond natural catastrophes, for instance through the implications of regulatory, legislative and legal activity, and other market activity impacting our clients or the credit and market risk of our investment portfolio.

Litigation Risk

Chubb closely follows emerging trends in climate litigation. The litigation landscape is rapidly changing and may have far-reaching implications. For example, the risk associated with "greenwashing" — the false or misleading impression regarding the environmental practices, policies, products, activities, etc. of a company — is increasing, particularly with expanding regulatory focus. Chubb is monitoring the risks presented by greenwashing on its insurance products, in particular D&O liability coverages.

Managing Risk

Chubb manages climate-related underwriting risk in a number of ways, including:

Annual Renewability
While climate change is a long-dated risk for insurers, it is generally a short-dated liability. Our insurance contracts are typically renewable annually. Consequently, we can quickly respond to changes as needed by adjusting our pricing or by restricting our exposure.

Exclusions
As part of its underwriting process, Chubb regularly applies exclusions, which depend on the specific conditions and circumstances of the risk being evaluated. Those exclusions may reflect ESG and climate-related considerations. For example, Chubb is among the world's largest global underwriters of environmental liabilities and pollution risks. However, Chubb's underwriting in this business restricts participation in certain industries, including mining and reclamation operations, oil refining, pipeline and related distribution operations, and chemical manufacturing and distribution. Further, a company's ESG profile is assessed in the underwriting of its D&O insurance. We also may decline coverage if a potential policyholder cannot provide information on climate risk mitigation plans and add new climate-related exclusions to policies where appropriate.

Reinsurance
We mitigate our exposure to climate change risk by hedging catastrophe risk in both the reinsurance and capital markets. Successful risk transfer from policyholders to insurance and capital markets also requires industry standards around exposure data. We are committed to helping the industry improve standards that will ultimately help increase risk transfer capacity.

Investment Management
We apply the same risk management rigor to our broadly diversified fixed income investment portfolio as we do to our underwriting practice. Our portfolio, which backs the loss reserves and claims-paying ability of our insurance businesses, is highly diversified by risk, industry, location and type and duration of security. For example, asset concentrations are carefully managed in hurricane- and flood-exposed areas. The impact of climate risk on underlying credits will naturally be an increased factor in our investment decision-making over time given the future impact on certain long-dated asset classes, such as mortgages and municipal bonds. Our portfolio is relatively short-dated, with an average duration of less than four years.

Pursuing Opportunities and Developing Innovative Insurance Solutions

In July 2022, we launched Chubb's Global Climate Practice to focus on expanding Chubb's existing capabilities and expertise supporting customers contributing to the transition to a net-zero economy. Through this practice, we seek to improve our customers' climate resiliency or reduce their exposure to impacts from an economic transition to a low-carbon economy. In the second half of 2022, the Climate Practice inventoried Chubb's climate-relevant existing products and identified more than 100 new product- and appetite-expansion opportunities.

As modeling and data related to specific perils improves, we have the ability to take more risk, particularly for clients that adapt to changing conditions by mitigating their risk. Further, Chubb works with governmental agencies on mutually beneficial insurance capacity solutions in catastrophe-prone areas.

Chubb has offered a suite of coverages through the specialized clean tech industry insurance program for many years. We also support transitional efforts through specialized products, such as our green building restoration coverages. We will continue developing products and services as the opportunities and need arise.

Chubb has also gained business opportunities related to the regulatory aspects of climate change. Chubb's risk appetite, expertise and financial strength enable the company to assume a leadership position in insuring the developing areas of regulated GHG emissions, enhancements to existing products or entirely new product lines required by the potential for increased regulation of greenhouse gases globally, as well as emerging related exposures, such as directors and officers and professional liability. As regulation and awareness increase, these coverages are expected to grow in demand.

Coverage

Flood Insurance
Flood protection coverage for both homeowners and business owners is an existing, well-established business for Chubb. In the U.S., the market for personal flood insurance is dominated by the National Flood Insurance Program. Chubb, however, offers both primary and excess flood insurance policies to homeowners who have higher limits, basement coverage, more coverage for precious possessions, and other features.

Energy and Renewable Energy Insurance
Chubb recognizes that the pace of the transition to a net-zero economy is dependent on the development of alternatives to fossil fuels. Chubb has a strong presence with global representation in the alternative energy and climate tech markets. While we are one of the largest underwriters in this space and insure a third of the top private innovation companies in clean technologies, we intend to continue to expand our presence and product offerings.

Chubb addresses the risks that occur in the two main phases of a typical renewable energy project — construction and operation. Construction risks range from delay in start-up to public or employer liability. Operation risks range from business interruption to premises pollution.

Chubb partners with a variety of companies to provide risk engineering expertise in the following capacities: business continuity assessment, equipment breakdown inspections, maintenance program reviews, pollution risk assessments and many others.

Green Building Restoration

Chubb's Green Property Insurance policy provides coverage for commercial businesses that desire to rebuild to a "greener" standard in the event of a loss to an existing building. This includes energy-efficiency appliances, electronics, heating and cooling systems, interior plumbing systems and lighting fixtures; low volatile organic compound (VOC) paints, primers, solvents, finishes and adhesives; low emissions carpet and floor coverings; and Forest Stewardship Council (FSC) certified wood. There are also premium credits available to customers that buy "preventative measures" coverage, which provides payments to the policyholder if they have certain environmental mitigation features in place.

Crop Insurance

Chubb is the national leader in crop insurance in the U.S. through its Rain and Hail subsidiary. Chubb Agribusiness insures companies that manufacture, process and distribute agricultural products. Through the protection it offers farmers, crop insurance helps promote a more stable food supply chain, even as climate change is contributing to more frequent and severe weather events. Agriculture also has an important role to play in addressing climate change. For example, cover crops are increasingly being used as a conservation and crop production practice that reduces nutrient leaching, soil loss and runoff, while also improving soil health and potentially drawing carbon out of the atmosphere. Chubb provides crop insurance premium subsidies in partnership with the Federal Crop Insurance Corporation and the States of Iowa, Illinois and Indiana for the planting of more than 95,000 acres of cover crops.

Other Coverages

Chubb invests in developing solutions to help clients manage the physical risks posed by climate change and adjacent risks. For example, Chubb's Global Weather coverages help clients insure against unpredictable weather conditions, protecting their assets around the world against damage or loss due to adverse weather conditions. Further, Chubb's political risk insurance is designed to provide businesses with the broadest cover for many of the losses that can result from government action, political unrest and economic turmoil, which may sometimes be related to the impacts of climate change.

Risk Engineering

Chubb's more than 600 risk engineers work with our commercial and consumer clients to moderate the risks from climate change perils and make them more resilient. The company brings deep technical knowledge to this work, from providing guidance on construction standards, wildfire land management, and coastal protection to the development of lithium battery storage systems. We advise policyholders in catastrophe-prone areas of potential mitigation and adaptation actions that could help reduce their risk exposure. Chubb also provides risk engineering services to help clients mitigate supply chain and global operations risks from exposures related to a changing climate. For example, Chubb provides wildfire mitigation consultation (such as vegetation management evaluations with geo-mapping and drone-based tools) to businesses and homeowners at elevated or increasing risk from wildfires.

The Clean Tech Sustainability Suite

Chubb offers a suite of coverages through the specialized clean tech industry insurance program. The Clean Tech Sustainability Suite offers tech firms that are creating new technology and driving innovation bespoke insurance solutions for property and business income.

Clean Tech clients face unique exposures through the lifecycle of their business. Chubb's insurance solutions cover companies as they move from start-up to pilot projects to commercialization. The exposures faced by these clients stem from complex supply chains, globalization of their product, intellectual property rights and environmental liability. Our risk engineers provide clients with risk management advice in all of these areas.

The following can fall within our Clean Tech business coverage:

- Renewable and alternative energy producers
- Software and hardware companies, including energy efficiency and smart grid technologies
- Emerging companies, including those in research and development stage with a focus on biorenewables
- Manufacturers and service providers, especially component parts manufacturers or distributors supporting clean technologies, renewable energy producers and clean transportation

As part of our commitment to engage deeply with the industry, Chubb has joined clean tech associations and sponsored industry events: Global Cleantech 100, Cleantech Forum San Francisco, Colorado Cleantech Industries Association, Cleantech San Diego, SustainOC, and sponsor of Greentown Labs (Boston). Such involvement expands our understanding of client exposures and thus enhances product development. This approach ensures that our insurance solutions tailored for this fast-paced innovative segment remain relevant.

Helping Companies Assess Physical Risks

In October 2022, Chubb began offering U.S.-based publicly traded companies, regardless of whether they were current clients, a complimentary physical risk climate score for two locations of their choosing. The scores, based on best available science, describe the level of increased risk from climate change for flood, storm surge, wind, fire and heat. The goal is to help companies assess whether climate-related physical risks (or climate-driven increases in physical risks) are material to their business and assist companies in evaluating the applicability of any regulatory or disclosure requirements on the materiality of climate-related physical risks relative to their business, results of operations or financial condition. This initial offering is backed by a suite of climate preparedness services should companies decide that further management of physical climate risk is necessary.

Chubb's Offshore Wind Farm Policy

Chubb's Offshore Wind Farm policy was developed to support green energy providers through the entire offshore wind farm process — from project inception through to energy production, storage and distribution.

The policy offers coverages for construction, operation, delay in start-up, business interruption, third-party liability and terrorism. It has been developed by the energy team at Chubb Global Markets (CGM), which comprises Chubb's London Market wholesale and specialty business.

The development of renewable offshore wind energy has become a key aspect of the green energy strategy of many countries around the world. Annual renewable capacity additions broke a new record in 2021, increasing 6% to almost 295 GW, and renewable capacity is expected to increase over 8% in 2022.[8] Our Global Climate Practice is examining opportunities to expand on this policy.

[8] Renewable energy market update — May 2022: Outlook for 2022 and 2023, IEA (May 2022)

Metrics and Targets

Chubb measures and reports on climate risk in a number of different ways.

Greenhouse Gas Reduction Goals

As of year-end 2021, Chubb achieved our Scope 1 and Scope 2 GHG emissions goal by reducing our Scope 1 and Scope 2 GHG emissions by 49% off a 2016 baseline through a combination of real estate portfolio optimization, energy efficiency projects, and renewable electricity purchased. In 2021, Chubb pledged to achieve carbon neutrality in its own global operations (Scope 1 and Scope 2 emissions) by year-end 2022 and is on track to do so through a combination of renewable electricity and purchase of carbon offsets. Chubb is evaluating how to most impactfully address our direct contribution to climate change (in Scope 1 and Scope 2 emissions) by setting new GHG emissions reduction goals. While we purchased carbon offsets in 2022 to mitigate the impact of our Scope 1 GHG emissions, we are assessing how best to participate in and support the development of scientifically verifiable carbon sequestration markets in the future. We consider it vital that any carbon sequestration efforts have measurable, verifiable impact in the real economy and support collective action targets to a net-zero transition.

Chubb has conducted multiple energy efficiency projects in various offices and regions over the course of several decades. For example, in 2015-2019, Chubb performed energy audits on offices representing 89% of electricity used in Chubb's Mexico operations. As a result, total electricity for Chubb's Mexico operations pre-pandemic had decreased 5% since 2015, despite the addition of new offices and higher average temperatures in the region. In 2019, Chubb upgraded the lighting in the Whitehouse Station, N.J. buildings to LEDs, substantially reducing electricity usage at that location.

Since 2015, Chubb has purchased renewable energy as our source of electricity for our real estate portfolio in the U.K. and since 2020 for a majority of its portfolio in the U.S. via the use of renewable energy credits. In 2021, these programs reduced Chubb's Scope 2 GHG emissions by 6,947 metric tons of CO_2e.

A Note on the Covid-19 Pandemic's Effect on Our GHG Emissions

Scope 1 and Scope 2 greenhouse gas (GHG) emissions in 2020 were down 41% from a 2016 baseline, an anomalous result due to Covid-19 pandemic-related office closures. Chubb reopened its offices worldwide in 2021, and we believe the 49% reduction in Scope 1 and Scope 2 GHG emissions from 2016 is reasonably representative of our office operations going forward.

We seek to measure Scope 1, Scope 2 and Scope 3 emissions where we can do so with consistent, accurate and verifiable methodology accepted by consensus, and our Scope 1, Scope 2 and Scope 3 emissions disclosures are set out in the chart below.

2021 GHG Emissions

2021 Scope 1 Emissions	19,933 metric ton CO_2e
2021 Scope 2 Emissions (market-based)	24,393 metric tons CO_2e
2021 Scope 3 Emissions	
Fuel-and-energy-related activities (not included in Scope 1 or 2)	21,736 metric tons CO_2e
Upstream transportation and distribution	167 metric tons CO_2e
Waste generated in operations	1,147 metric tons CO_2e
Business travel	5,207 metric tons CO_2e
Air travel	3,555.15 metric tons CO_2e
Other (rail travel, car rentals, car services, and reimbursed mileage for global operations)	1,651.85 metric tons CO_2e
Employee commuting	8,576 metric tons CO_2e

Chubb first developed its Corporate Greenhouse Gas Inventory Management and Reduction Plan in 2007, when we joined the voluntary Climate Leaders initiative sponsored by the U.S. Environmental Protection Agency (EPA). We continue to use methodology based on the World Resources Institute and the World Business Council for Sustainable Development (WRI/ WBCSD) GHG Protocol for data collection and analysis for Scope 1, Scope 2 and some Scope 3 GHG emissions. Chubb's emissions are third-party verified to ISO 14064–3 standards.

Metrics and Targets

Catastrophe Losses

In 2021, Chubb recorded net pre-tax catastrophe losses of $2.4 billion. Notwithstanding this amount, our global property and casualty combined ratio in 2021 was 89.1%. Both catastrophe and crop losses in 2021 were within our risk tolerance.

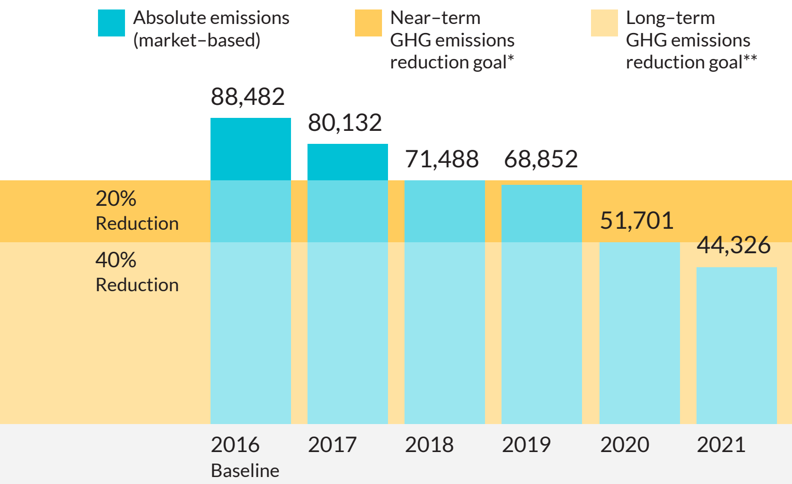
Climate Disclosures and Reporting

In addition to utilizing the TCFD Recommendations for our reporting, Chubb also reports each year to the Carbon Disclosure Project (CDP), an international non-profit organization running the most widely used global climate disclosure program. In 2021, Chubb received a score of "B" on its climate risk management and disclosure.

Chubb reports to ClimateWise, a U.K.-based global insurance industry leadership group that drives action on climate change risk through collaboration with the University of Cambridge. Chubb is a member of the organization's ClimateWise Scenario Analysis Working Group. Chubb is also a member of the Geneva Association, an international insurance industry think tank, and is an active participant in the Climate Change Working Group and subgroup Task Force on Climate Risk Assessment.

Chubb also provides disclosures on related risk to numerous organizations and regulators in the U.S., U.K., France, Ecuador, Australia and others.

Chubb's Scope 1 and Scope 2 GHG Emissions 2016-2021



Metric tons of CO_2 equivalent

*Goal achieved in 2019
**Goal achieved in 2021; 2020 CO_2 emissions included reductions related to Covid–19 and are anomalous

Climate and Environment Metrics

- GHG emissions reduction goals:
  - Short-term goal: Reduce global Scope 1 and Scope 2 emissions on an absolute basis 20% by 2025 from a 2016 baseline. Achieved at the end of 2019 with a 22% reduction.
  - Long-term goal: Reduce global Scope 1 and Scope 2 emissions on an absolute basis 40% by 2035 from a 2016 baseline. Achieved at the end of 2021 with a 49% reduction.
- CDP's 2021 climate change program ranking score: **B**
- Number of years of Chubb's Corporate Environmental Program: **16**
- Number of Chubb offices in LEED-certified buildings: **25**
- Number of trees the company has planted through its Environmental Risk Business's sponsorship of American Forests ReLeaf Program since 2007: **240,000**
- Proportion of the Global Cleantech 100, the top private innovation companies in clean tech, insured by Chubb: **1/3**
- Number of acres of threatened lands and waters in the U.S. that Chubb has helped save through its support of The Conservation Fund: **370,000**

Additional Information and Resources

Chubb Group

[Chubb Website: Citizenship]

Chubb and Climate Change: Our Policy

Chubb's CDP Responses and Scores (free registration required)

Responsible Underwriting at Chubb

Chubb's Coal Policy

Selected Philanthropy Partners

The Conservation Fund

The Nature Conservancy

Bren School of Environmental Science & Management

American Forests' ReLeaf Program

Supporting Partnerships

Business Roundtable

ClimateWise

Geneva Association

Insurance Information Institute

Reinsurance Association of America

UN Global Compact

Chubb. Insured.℠