



Task Force on Climate- related Financial Disclosures (TCFD) report

For calendar year 2024

Investments are not FDIC-insured, nor are they deposits of or guaranteed by a bank or any other entity, so they may lose value.

Advisory services offered through Capital Research and Management Company (CRMC) and its RIA affiliates. Capital Client Group, Inc., member FINRA.

Contents

TCFD alignment	3
Introduction	4
Governance	5
Strategy	7
Risk management	15
Metrics	26
Appendix	34

TCFD alignment

As a privately-owned asset manager, Capital Group considers climate-related risks and opportunities from three vantage points.



Investment management: As an asset manager who makes investments on behalf of our clients in securities that may be exposed to material climate-related risks and opportunities;



Client needs: As a business that needs to evolve its product offerings to meet the changing needs of its clients, particularly in jurisdictions where regulators are increasingly governing climate issues;



Corporate sustainability: As a company that strives to manage its business operations in a sustainable manner.

Recognizing each of these perspectives raises important and distinct considerations with respect to climate-related risks and opportunities, we have sought to call out which of the three focus areas we are referring to throughout the report.

Capital Group has supported Sustainability Accounting Standards Board's (SASB) standards and the Task Force on Climate-related Financial Disclosures (TCFD) since 2020, which have both been merged into the International Sustainability Standards Board (ISSB), a subsidiary of the International Financial Reporting Standards (IFRS) Foundation. Capital Group intends to incorporate the ISSB global sustainability reporting standards IFRS S1 and IFRS S2 into its corporate sustainability reporting in the future.

This report has been prepared based on the recommendations of the TCFD for the period from January 1 to December 31, 2024, on behalf of The Capital Group Companies, Inc. and its subsidiaries (collectively, "Capital Group").

TCFD recommendations		Our response	Pages
Governance Disclose the organization's governance around climate-related risks and opportunities.	a) Describe the board's oversight of climate-related risks and opportunities. b) Describe management's role in assessing and managing climate-related risks and opportunities.	<ul style="list-style-type: none"> We have described our governance structures for climate-related risks and opportunities spanning our three focus areas: investment management, client needs and corporate sustainability. 	5-6
Strategy Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning, where such information is material.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long terms. b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning. c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	<ul style="list-style-type: none"> For investment management, we have identified climate-related risks and opportunities across material sectors in which we invest. We also describe our approach to climate-related scenarios analysis. To address client needs, we identify the actions we have taken to respond to shifting client demands in Europe and Asia. We describe our strategy with respect to corporate sustainability. 	7-14
Risk management Disclose how the organization identifies, assesses, and manages climate-related risks.	a) Describe the organization's processes for identifying and assessing climate-related risks. b) Describe the organization's processes for managing climate-related risks. c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	<ul style="list-style-type: none"> We outline the actions we take to identify, assess and manage climate-related risks in our investment management. We integrate climate risk as a topic into our Europe and Asia Risk Register. 	15-25
Metrics and targets Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, where such information is material.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities, in line with its strategy and risk management process. b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks. c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	<ul style="list-style-type: none"> For investment management, we disclose climate-related metrics at the group and fund levels. For our corporate sustainability approach, we disclose climate-related metrics and targets related to our operations. 	26-33

Introduction



Capital Group's mission is to improve people's lives through successful investing. Every decision we make, whether it relates to the companies we invest in or the solutions we offer, begins with our clients' interests in mind.

Our primary objective in meeting clients' needs is to deliver superior investment results over the long term, and core to our success is our distinctive investment approach, The Capital System™. We believe in collaborative research to yield deeper insights; diverse perspectives from multiple portfolio managers and analysts; and a long-term view to decision-making.

Our long-term view aligns our goals with investors, curbs excessive short-term risk-taking and helps us grow at scale so we can offer competitive fees. We analyze material environmental, social and governance issues as part of our investment research to better understand long-term risks and opportunities as we strive to maximize returns for our investors.

Today, the world continues to change rapidly. From shifting weather patterns and costly natural disasters to new policy changes and technological innovations, the potential implications for companies across different industries can be and usually are significant.

Yet, however the world changes, our mission remains the same, and we believe it has never been more important to conduct fundamental analyses, no matter the issue, so long as we can continue to deliver superior investment results. That's why we are pleased to share our TCFD report.

The following pages provide you with more background on how we go about meeting our fundamental responsibilities to those that rely on us.

Thank you for your interest in Capital Group.

Sincerely,

Hamish Forsyth

President – Europe and Asia, Capital Group



Progress this year

- CRMC reviewed key climate milestones, including enhanced client reporting and research on climate-related topics.
- The Capital Group board of directors reviewed and provided input on progress toward Capital Group's corporate greenhouse gas emissions-reduction goals.

A description of governance structure for climate-related risks and opportunities

In 2024, we continued to implement the firmwide governance and functional teams responsible for the business decisions and practices related to each of the three areas through which we consider climate-related risks and opportunities at Capital: **investment management, client needs and corporate sustainability**. The following highlights the governance model we are working toward. By evolving our governance structures and strengthening our teams, we aim to continue to deepen firmwide knowledge on sustainability issues, ensure appropriate communication and collaboration, and support effective and efficient decision-making.

Firmwide governance

The Capital Group Board of Directors and Capital Group Management Committee (CGMC) are responsible for setting and communicating the long-term strategy of the firm, including goals related to environmental, social and governance (ESG) and stewardship, as well as those affecting Capital Group's own corporate sustainability goals.

Capital Group's subsidiary **Capital Research and Management Company (CRMC)** is responsible for investment management activity on behalf of CRMC's clients. In order to fulfill this responsibility, the CRMC board (and related subsidiary boards) acts through investment policy, investment oversight and proxy voting committees, and the investment and operations teams. This activity considers material climate-related investment risks and opportunities on behalf of CRMC's clients and helps ensure ESG is being integrated into the investment process.

Capital Group's committee approach reflects our desire to foster a collaborative culture. We believe that we can make better decisions when ideas are aired among leaders with different perspectives. This approach has served us well in all manner of business environments; it allows us to involve a broad range of associates in the decision-making process, helping to ensure we ground decisions in the long-term interests of our clients.

An abridged organization chart is included below.

Figure 1: Governance structures for climate-related risks and opportunities.

Capital Group Board & Management Committee

Board and Management Committee are responsible for overseeing Capital Group's long-term strategy, including climate-related risks and opportunities.

CRMC Board of Directors (and related subsidiary boards)

Oversees Capital Group's investment advisers, which includes responsibility for how material climate-related investment risks and opportunities are considered in the investment process.

Functional responsibilities

Investment Group: More than 120 portfolio managers and 220 in-house analysts work to integrate material ESG considerations into their investment decision-making to help generate long-term value. As part of their fundamental investment research, they evaluate ESG-related and other issues that could impact a company's ability to generate long-term returns. Decisions are based on a holistic view of each issuer that incorporates the long-term prospects of the individual entity, as well as the context of markets, industries and geographies in which the issuer operates.

ESG team: Capital Group has a dedicated 43-person ESG team,¹ led by the global head of ESG and ESG Leadership Team, that partners with investment professionals on integrating material ESG considerations into the investment process. Team members have experience in areas such as research and thought leadership, issuer engagement, proxy voting, ESG regulations, ESG data and reporting.

Within the global team, 30 specialists, each with distinct roles and areas of expertise, are responsible for partnering with the Investment Group to:

- Produce thematic and sector-focused research that provides insight into key ESG themes and issues that are material.
- Execute our stewardship efforts, including analyzing proxies and engaging companies, both in partnership with investors.
- Employ an evidence-based approach to the analysis of ESG risks and opportunities using data-driven tools.

An additional 12 specialists provide leadership and expertise on areas including our ESG Monitoring Process, ESG data and operations, and supporting client, product, industry and regulatory needs, as well as ESG content development and thought leadership.

Sustainability & Social Responsibility (SSR) team: The SSR team was formed in 2022 to bring together Capital Group's efforts around corporate sustainability and community engagement. With respect to climate-related risks and opportunities, the SSR team measures and reports on the greenhouse gas (GHG) emissions associated with Capital Group's business operations and works with relevant business units to make progress toward our goal of reducing our corporate GHG emissions by 25% by 2025 (relative to a 2019 baseline) across Scope 1, Scope 2 and Scope 3 (business travel) emissions.² Reporting on our GHG emissions is or will be required under regulations that are applicable in several jurisdictions in which Capital Group operates. The global head of SSR is responsible for overseeing progress toward our emissions-reduction goal.

¹As of December 31, 2024.

²Scopes 1 and 2 emissions, mostly from energy use at our sites globally and Scope 3 emissions from business travel.



Progress this year

- Launched three Capital Group Future Generations funds through our Luxembourg fund umbrella
- Enhanced on-demand climate reporting for clients
- ESG sector analysts collaborated with investment analysts on climate-related research

In our investment management practices, we seek to understand climate-related risks and opportunities that could impact the value of our investments as we pursue superior long-term investment results for our clients. We also strive to provide ESG products and services in response to regional client demand and regulation in Europe and Asia.

Investment management: Climate-related risks and opportunities

Sector-level investment impacts

Physical and transition risks and opportunities affect issuers differently based on their sector, geographic footprint, current readiness, and mitigation capabilities. To effectively integrate these considerations into our investment process, we utilize ESG research frameworks, spanning more than 25 corporate sectors and three securitized sectors.

Each framework is intended to help our investment professionals examine material long-term ESG issues that could affect their investment theses, including material transition and physical climate risks and opportunities (refer to Table 1 on next page).^{*} The identified risks and opportunities broadly align with the following TCFD-aligned categories:

- **Policy and legal** - risks and opportunities associated with the creation of new climate-related policies and regulatory regimes
- **Technology** - risks and opportunities associated with emerging or new technologies related to the energy transition
- **Market** - opportunities associated with asset-allocation shifts or market signals as a result of climate-related change
- **Products and services** - opportunities associated with new products and services linked to climate-related change
- **Resource efficiency** - opportunities associated with the move to more efficient processes
- **Reputation** - risks and opportunities associated with shifts in consumer preferences and company reputation
- **Physical: acute** - risks associated with the increased severity and frequency of extreme weather events
- **Physical: chronic** - risks associated with long-term changes in precipitation and weather patterns

^{*}Sectors included in this summary are those identified by the TCFD as most exposed to climate risks. For each of the risks, we have outlined the type of risk, associated time horizon, relevance to our investment thesis and the metric and data used to monitor this risk or opportunity. TCFD, "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures," October 2021.

Table 1 shows examples of the potentially material climate-related risks and opportunities for each sector identified by our investment professionals. We focus on the financial implications of the risks and opportunities faced by the companies and issuers in which we invest.

Table 1: Top climate-related risks and opportunities in selected sectors.

Sector	Time frame	Financial risk/opportunity	Metrics monitored
Energy	Short term	Emissions management is integral for operational efficiency. Regulatory and societal pressure to reduce emissions remains a challenge for energy companies and could lead to additional costs for high-emitting projects. Methane measurement and reduction programs provide opportunity to achieve greater efficiency.	GHG emissions (intensity & absolute) Methane targets and initiatives
	Short to medium term	Opportunities for those that transition to producing lower carbon or renewables/alternative energy sources potentially leading to increased market share from low-carbon products and services. There are risks related to policy, technology, skills and financing in executing on renewable and alternative energy projects. Water usage. Oil and gas companies use significant volumes of water in extraction and refining. Sustainable water use is therefore important in avoiding disruptions and maintaining license to operate.	Emissions-reduction targets, energy and carbon prices Water use metrics
	Medium to long term	Shifts in demand as electrification increases, potentially leading to decreased prices and reduced profitability for conventional energy sources. These impacts can affect not only industry, but also energy-producing countries where taxes on oil and gas are an important share of national budgets.	Energy and carbon prices
Utilities	Short term	Emissions management. Intensifying climate change concerns in Asia and ongoing EU decarbonization policies could lead to elevated regulatory and market risk. Market imbalances. The shift from stranded assets to renewable energy can contribute to energy price volatility, especially in times of grid, weather and fuel-supply disruptions. Upgrading electricity networks will be crucial to increase electrification and enhance grid stability. Threats to established business models occur as legacy industries face high costs to decarbonize, competition from new technologies and growing risk of climate-related litigation.	GHG emissions (intensity & absolute), emissions targets, energy and carbon prices
	Short to medium term	Water usage. Utilities companies are reliant on significant and stable quantities of water to operate. Sustainable water use is important in avoiding disruptions and maintaining license to operate. Opportunities for those that transition to renewables/alternative energy sources early, leading to potential for increased market share from low-carbon products and services, though there are risks associated with adopting new technologies.	Total water withdrawal and consumption intensity, freshwater withdrawal % Renewable energy capacity, energy and carbon prices
	Medium to long term	Opportunities from increased electrification leading to increases in electricity demand. Physical climate risk. Future climatic conditions are set to worsen, with acute and chronic physical risks, such as drought, heatwaves and wildfires increasing in frequency and intensity. Utilities may face reduced operating capacities, shutdowns or costly mitigation and/or management strategies to maintain supply.	Electricity demand, physical climate hazard metrics
Transportation	Short term	Regulatory and market demands to lower emissions. Transportation services with lower emissions may offer market share opportunities and pricing power, though new technologies may still struggle to gain traction even with regulatory mandates.	CO ₂ emissions intensity of vehicles/ fleets, GHG emissions (intensity & absolute)
	Short to medium term	Regulatory obligations to lower emissions lead to increased implementation of low-/zero-emission technologies and result in increased spending on R&D and capital expenditure. Companies that cannot compete with low- or zero-emissions options in some regions risk market share loss and increasing regulatory costs. Opportunity to optimize productivity through energy and resource efficiency, resulting in short-term increases in capital expenditure but potentially longer term savings on operating expenses.	CO ₂ emissions intensity of new vehicles sold Energy and resource intensity, carbon prices
	Medium to long term	Potential damage to transportation infrastructure assets by extreme weather events, leading to operational disruptions, repair costs or asset impairment from events such as flooding and fires.	Strategic response to assets at risk

Table 1: Top climate-related risks and opportunities in selected sectors (continued).

Sector	Time frame	Financial risk/opportunity	Metrics monitored
Metals and mining	Short term	<p>Market pressure on carbon-intensive and substitutable commodities, leading to changes in commodity portfolio mix and impairment of long-lived assets, resulting in a change in company valuation.</p> <p>Increased decarbonization requirements from regulators, leading to pressures to decarbonize operations and portfolio, and resulting in additional regulatory compliance costs.</p> <p>Opportunity to increase revenue through more low-carbon metals and energy-efficient products that help lower customers' carbon footprints.</p>	<p>GHG emissions (intensity & absolute), fossil and renewable energy consumption</p> <p>Emission reduction targets, regulatory controversies</p>
	Short to medium term	<p>Opportunity to optimize productivity through energy and resource efficiency, resulting in short-term increases in capital expenditure and longer term savings on operating expenses.</p> <p>Greater demand for metals that are relevant to the energy transition, including copper, rare-earth elements, lithium, cobalt and nickel used in wiring, electrical components and batteries.</p>	<p>Energy and resource intensity</p> <p>Commodity mix</p>
	Medium to long term	<p>Increased water scarcity in water-stress regions, leading to work stoppages and decreased production capacity, as well as decreased revenues.</p>	<p>Freshwater withdrawal and water-stress profile</p>
Construction materials	Short to long term	<p>Emissions management. Proactive management of emissions important to decrease growing regulatory risks. Materiality varies by geography.</p> <p>Opportunities for clean tech innovation. Buildings currently account for one-third of global GHG emissions, companies that can innovate to provide products with greater energy efficiency will benefit from regulatory tailwinds focused on the decarbonization of buildings.</p> <p>Resource management and material circularity. Efficient use of energy and resources (water, waste) at the production level can increase operating efficiency and contribute to lower emissions. Increasing the use of recycled raw materials can improve supply chain resiliency. Pressure to source less-carbon-intensive materials, which are typically more expensive, can create cost pressure on companies and impact profitability (e.g., green steel).</p>	<p>GHG emissions (intensity & absolute), emission-reductions target, fossil and renewable energy use</p> <p>Market share of products that reduce energy and water use, R&D/Sales, waste recycled</p>
Food and beverages	Short to long term	<p>Extreme weather events leading to reduced crop yields and resulting in increased costs and decreased revenue.</p> <p>Supply chain reconfigurations stemming from changes in raw materials, energy inputs and transportation networks driven by the need to decarbonize.</p> <p>Increased decarbonization requirements from regulators, resulting in increased costs for carbon-intensive producers.</p> <p>Changes in consumer preferences as consumers become more conscious of their environmental impact, affecting traditional industries.</p>	<p>Asset prices, strategic response to assets at risks</p> <p>Emission profile and reduction targets</p> <p>Carbon prices</p> <p>Consumer demand</p>
	Medium to long term	<p>Chronic water shortages and changing rainfall patterns, affecting commodity production and pricing, and resulting in increased costs and decreased revenue.</p>	<p>Water-stress profile</p>
Financials	Short term	<p>Regulatory risk from new requirements on sustainable investing, climate disclosures and climate risk management in some regions.</p>	<p>Environmental and social metrics, exposure to carbon-related assets</p> <p>New regulatory requirements</p>
	Short to medium term	<p>Stranded asset finance risk. Regulators are increasingly focusing on potential asset impairment from climate risk.</p> <p>Increased demand for financing the energy transition, leading to increased revenue from sustainable finance products and services.</p> <p>Shifting client and regulatory demands around environmental, social and governance (ESG) create a need for clear processes and disclosures on the topic.</p> <p>Physical climate risk. Insurers are exposed to climate change both directly via their exposure to natural catastrophe products and indirectly through their risk-transfer activities for carbon-intensive businesses. Some insurers may opt to withdraw from markets where they cannot make an adequate return, creating regulatory and reputational risks.</p>	<p>Exposure to stranded assets</p> <p>Green finance* products, e.g., ESG bond issuance</p> <p>Climate targets and commitments</p> <p>Monetary losses attributable to natural catastrophe by type/geography</p>

*Green financing is to increase the level of financial flows (from banking, micro-credit, insurance and investment) from the public, private and not-for-profit sectors to sustainable development priorities.

ESG integration informs investment decisions

Our ESG integration efforts incorporate information on material climate-related risks and opportunities into investment research to support long-term results. Over the past year, ESG sector analysts collaborated with investment analysts on climate-related research, joined several research trips focused on topics related to the energy transition and contributed to discussions on investment calls across our equity and fixed income units. Our integration leads continued to surface relevant insights from our ESG research to portfolio managers. In the Risk Management section (pages 15-25), we highlight some examples of our climate-related research on wildfire risks, data center decarbonization and tracking the energy transition.

Climate scenario analysis

Capital Group uses scenario analysis as part of its efforts to understand portfolio exposures to the physical and transition risks of climate change. We use macroeconomic, physical science and financial models to evaluate climate and policy scenarios and their implications on companies. These scenarios include:

1. **Orderly transition** to net zero by 2050 and below 2°C: Climate policies are deployed early and become gradually more stringent. Physical and transition risks are relatively subdued.
2. **Delayed transition:** Climate policies are delayed until the 2030s, requiring faster emissions reductions in later years at a higher cost, and with increased physical risks.
3. **Hothouse world scenario** (business as usual): Only currently implemented climate policies are preserved, and emissions continue to rise, with high physical risks and associated social and economic impacts.

Outputs from scenario analysis support our investment research. For example, it helps us understand how company assets might be impacted by extreme weather fueled by climate change, or how utilities need to deploy new technologies to decarbonize electricity generation.

By design, scenario analysis is an examination of a range of potential, broad outcomes. It doesn't account for day-to-day policy and technology developments, how companies adapt, or secondary impacts such as insurance costs and commodity prices. Therefore, we use it as one of many inputs to assess the risks and opportunities from climate change on companies and portfolios.

This year, we launched a new feature in carbon footprint reports for select clients. These reports now include Climate Value-at-Risk (Climate VaR), a forward-looking, return-based valuation assessment measuring climate-related risks and opportunities in an investment portfolio. Based on MSCI modeling, this metric provides insights into how climate change could affect company valuations.

Issuer reporting

We encourage climate and other ESG-related disclosure that is driven by materiality to the long-term value of the investment and based on widely adopted standards.* Capital Group has long supported SASB standards and the TCFD, which have both been merged into the ISSB. We believe it would be helpful and appropriate for issuers to make climate-related disclosures aligned to the ISSB-issued global sustainability reporting standards IFRS S1 and IFRS S2 and we recognize there will be a transition period for issuers to align to the new standards.

Ultimately, these disclosures should increase transparency and investor understanding of climate change and the induced risks and opportunities that companies face.

ESG adoption holds steady

Client trends

In 2024, Capital Group commissioned its annual ESG Global Study for the fourth year running. This comprehensive survey collects the views from more than 1,100 global investors and has become an important part of our engagement with clients on a broad range of ESG topics.

Among the key findings in the 2024 survey, it was clear that ESG adoption, as measured by the percentage of respondents that use ESG in their investment approach, had held steady at an all-time high of 90% on a global basis. According to the study, this commitment to ESG is driven primarily by the need for investors to comply with regulatory requirements and to manage financially material ESG risks.

Global ESG adoption remains at all-time high of 90%

Regional ESG adoption rate



75%

North America



94%

Europe, Africa &
the Middle East



93%

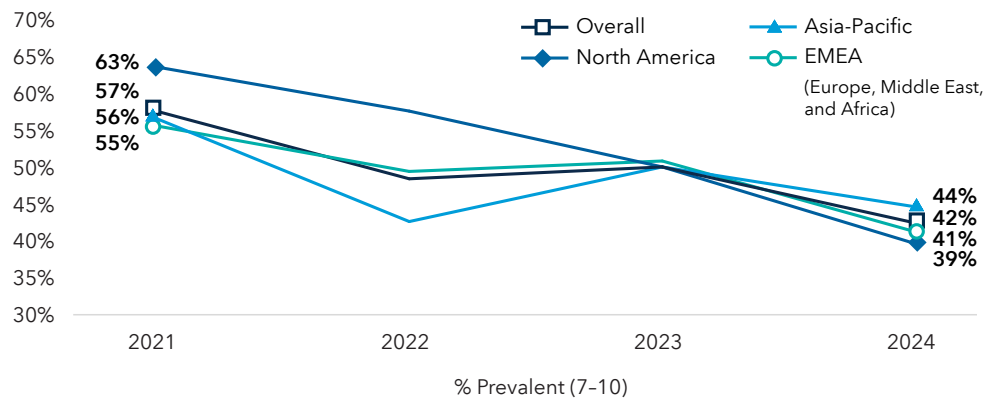
Asia-Pacific

Receding concerns about greenwashing[†] may also have contributed to the high ESG adoption level. In 2024, approximately four in 10 (42%) global investors thought greenwashing was prevalent within the asset management industry – the lowest level since our study started in 2021. Regulations and enforcement actions have helped allay concerns, according to respondents.

*Standards such as the International Sustainability Standards Board's (ISSB) sustainability disclosure standards and TCFD.

[†]Interpretations of what constitutes greenwashing can vary, but broadly the term relates to giving a misleading impression on the ESG or sustainability characteristics of a product, activity or organization.

Perceived prevalence of greenwashing within asset management since 2021

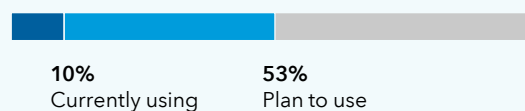


Share of respondents that perceive greenwashing as prevalent in the asset management industry. Rated on a scale of 0-10 where 0 = Not prevalent at all, and 10 = Extremely prevalent.

Artificial intelligence (AI) also featured prominently as a theme in the survey results, with more than half of respondents planning to use this emerging technology to enhance their analysis of ESG data. Automated reporting and synthesizing legislation changes across various jurisdictions were other areas identified where AI is expected to help professional investors.

Investors look to AI for help tackling ESG data challenges

Use of generative AI to analyze ESG data



49%

See AI as being most useful in collecting data from diverse sources

However, while AI offers potential data solutions, it also introduces new ESG investment risks.

Alongside social impacts around data protection and privacy, respondents identified AI's high electricity consumption as a concern, with more than half of respondents viewing energy consumption and greenhouse gas emissions from AI as material ESG investment risks over the next two to three years. About a quarter of respondents also point to AI-induced pollution and e-waste issues as key risks. Read about our research on investment opportunities in decarbonizing AI data centers on page 18.

Given the evolving complexity of the ESG landscape, it's perhaps not surprising that investors are opting for multi-thematic strategies that provide broad exposure to the ESG waterfront. Half of all respondents expect to increase allocations to multi-thematic ESG strategies over the next two to three years, compared to 42% who plan to increase exposure to single-thematic ESG strategies. Diversification and potential for better risk-adjusted returns were identified as core benefits of multi-thematic strategies, according to the study.

Policy outlook

Climate issues continue to receive regulatory focus around the globe. The extent and content of regulatory actions vary – in some cases substantially. We continue to monitor these developments closely. In the U.S., California's Climate Corporate Data Accountability Act (SB 253), Greenhouse Gases: Climate-related Financial Risk Act (SB 261) and Voluntary Carbon Market Disclosures Act (AB 1305) were signed into law in October 2023. SB 253 requires companies to publicly disclose Scopes 1 and 2 emissions annually beginning in 2026, and Scope 3 categories starting in 2027. SB 261 requires companies to biennially report climate-related financial risks and measures adopted to reduce such risks, which is expected to take effect in January 2026.

California's AB 1305 requires, among other things, companies that purchase or use voluntary carbon offsets and that make certain environmental claims to publicly disclose details of the carbon offsets project, including offset type and specific protocols used to estimate emissions reductions, among other details, beginning in 2024. Similar legislations are under consideration in other states.

In the European Union, the Corporate Sustainability Reporting Directive (CSRD) applies across all sectors, requiring disclosures of sustainability risks, impacts and opportunities – including the ones deriving from climate change – via a double-materiality lens, i.e., financial materiality and impact or negative externalities. This reporting regime captures a wide range of activities, from a company's own operations to its engagement with supply and value chains. CSRD is currently under review (Omnibus Bill) with the aim to simplify the reporting burden for reporting entities. The EU's Sustainable Finance Disclosure Regulation (SFDR) will be reviewed, with a consultation opening up later in 2025, and we anticipate being involved with this process. In the UK, the Financial Conduct Authority (FCA) has built upon existing TCFD requirements by creating the climate disclosure regime.

In Asia, key regulations include the Hong Kong Securities and Futures Commission's circular on the management and disclosure of climate-related risks by fund managers, and the Monetary Authority of Singapore (MAS) Guidelines on Environmental Risk Management. Australia has started requiring large entities (including asset managers and funds meeting certain thresholds) to make climate-related financial disclosures, starting on January 1, 2025. Australia is also looking to develop a labelling framework for sustainable investments. Several countries have adopted, or are in the process of adopting, the ISSB standards into their regulations. In the U.S., the Securities and Exchange Commission voted to cease legal efforts to defend its requirement for climate-related disclosures, as the Trump administration moved to undo many of the climate-related policies and regulations enacted by President Joe Biden.

As the regulatory landscape evolves around the globe, we have taken a considered and deliberate approach in our response in each market in which we operate. Our aim is to ensure that the decisions we make are in the best interests of our clients and in compliance with local regulations.

Enhancing our product offering for our client

In response to demand from our clients in Europe and Asia, we launched Capital Group Future Generations funds through our Luxembourg fund umbrella in 2024.¹ Powered by our proprietary bottom-up research and eligibility process, this range of three new funds offers a multi-thematic approach, covering sustainable investment themes, including the energy transition. Details on this approach can be found on our [website](#).

In 2024, we also continued to expand our range of Sustainable Finance Disclosure Regulation (SFDR) Article 8 funds. Two funds were converted to Article 8, bringing the total number of Article 8 funds in CG's Luxembourg fund umbrella to 13. In addition, we increased the number of our UK OEIC (open-ended investment company) funds to three, after launching two in 2024. Our Article 8 funds and UK OEIC funds apply specific ESG and norms-based exclusions² (including the exclusion of some thermal coal amongst other climate-related constraints). Some of our Article 8 funds and UK OEIC funds set targets for minimum reduction in carbon footprint (weighted average carbon intensity, or WACI) relative to a given fund's selected index.

Corporate sustainability strategy

We are taking steps to make our global operations more sustainable. Our corporate sustainability strategy strives to reduce operational emissions through renewable energy, energy-efficient site design and the reduction of travel-related emissions (where possible), while offsetting emissions we cannot reduce. Please refer to the Metrics section of our TCFD report for our GHG emissions reporting and to the Appendix for our voluntary carbon market disclosure.

¹Capital Group's Luxembourg funds are not offered to clients in the U.S.

²We use MSCI's Thermal Coal – Maximum Percentage of Revenue factor, which identifies the maximum percentage of revenue (either reported or estimated) that a company derives from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It does not account for revenue from metallurgical coal; coal mined for internal power generation (e.g., in the case of vertically integrated power producers); intracompany sales of mined thermal coal; and revenue from coal trading. We exclude companies that generate more than 10% of their revenue from these activities.

Arctic Oil – Maximum Percentage of Revenue: This factor identifies the maximum percentage of revenue (either reported or estimated) greater than 0% that a company derives from Arctic oil production. The definition of Arctic is geographical and includes production activities north of the 66.5 latitude. This factor includes offshore or onshore oil production.

Oil Sands – Maximum Percentage of Revenue: This factor identifies the maximum percentage of revenue (either reported or estimated) greater than 0% that a company derives from oil sands extraction for a set of companies that own oil sands reserves and disclose evidence of deriving revenue from oil sands extraction. This factor does not include revenue from non-extraction activities (e.g., exploration, surveying, processing, refining); ownership of oil sands reserves with no associated extraction revenues; revenue from intracompany sales.



Progress this year

- Invested further in our data and technology capabilities in 2024 to better integrate ESG data (including climate data) and insights into the investor workflow.
- Monitoring certain asset classes, based on available third-party data, for material ESG considerations, including climate risks.
- Conducted thematic climate engagement with issuers we've identified as exposed to high climate risks.

We look at the management of climate-related risks through our fiduciary role as an asset manager that seeks superior long-term investment results for our clients. We also highlight our enterprise risk management process.

Fundamental research: Climate considerations that have the potential to affect investment results are incorporated into fundamental research, which informs our investment decisions.

Research and investment frameworks: Our investment frameworks help us identify and monitor material climate considerations across sectors.

Monitoring process: Our monitoring process uses third-party data to flag a subset of investment in certain asset classes (corporate equity and bond, sovereign and select municipal bonds) for further research and review.

Engagement and proxy voting: We engage with issuers on material ESG risks and opportunities, including those related to climate, and vote proxies solely in the financial interests of our clients.

Data and technology: We have made significant investments in data and technology to help ensure the Investment Group has access to a variety of data sources, including those related to climate.

Enterprise risk management: Capital Group's risk-management process has three lines of defense to identify, monitor and manage risks. We also maintain risk and control registers for our European and Asian entities, through which physical and transitional elements of climate risk to Capital Group are documented and assessed.

Fundamental research

Our active investment process requires us to stay attuned to the risks and opportunities that come with the energy transition and to incorporate the latest developments in policy, science and technology in our investment theses. Both our ESG team and Investment Group conduct deep fundamental research on a range of material issues to help make informed investment decisions.

Select highlights from 2024 include research on wildfire risk to utilities in the U.S., secular trends impacting the pace of the energy transition and investment opportunities from data center decarbonization.



Case studies

The following case studies highlight some of our climate related research and how it helps our investment professionals better understand risks and opportunities in our investments.

Case study: U.S. utilities – the impacts of climate change on wildfire risks

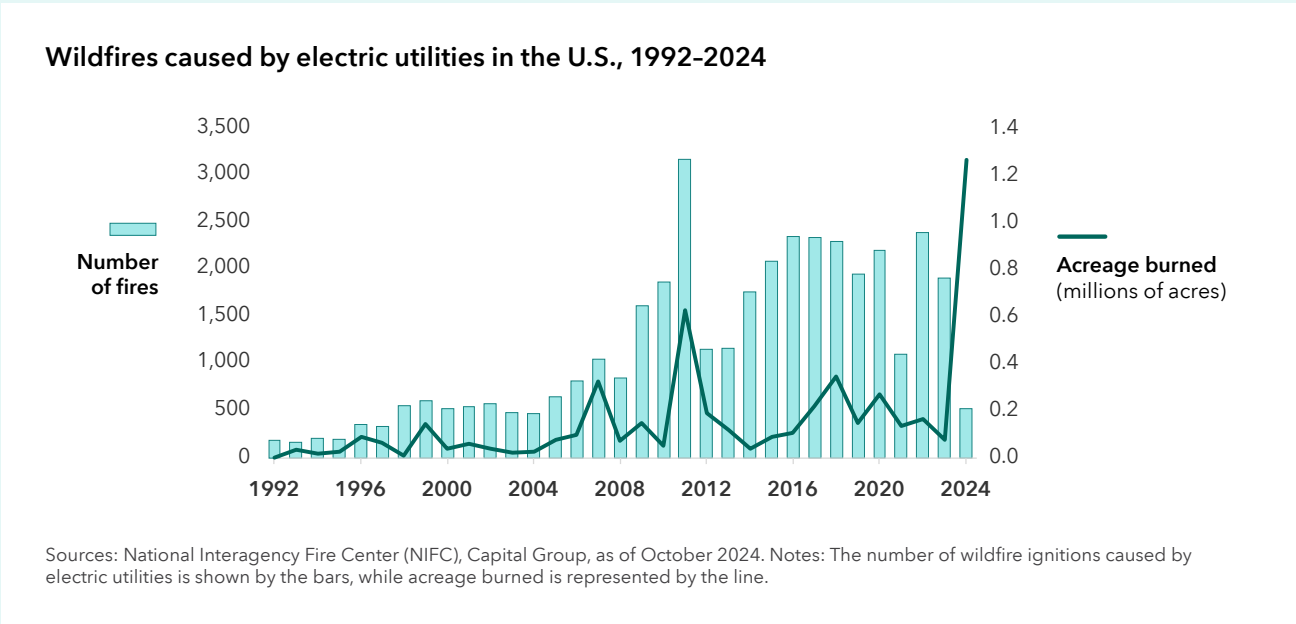
Wildfires are an important concern for utility investors, especially in the western U.S. As climate conditions become hotter and drier, wildfires are becoming more intense and destructive, with fire seasons in the Western U.S. now over a month longer than they were 35 years ago.

Wildfires caused by electric utility companies have increased four-fold from the 1990s to the 2020s. Around 40% of large fires (more than 100 acres) have occurred in the last decade. The financial impact is severe, as seen with Pacific Gas & Electric (PG&E), which filed for bankruptcy in 2019 due to more than \$30 billion in wildfire-related liabilities. Utilities also face high costs for wildfire mitigation. PG&E has planned to spend around \$18 billion from 2023 to 2025 on mitigation efforts.

To better understand the wildfire risk of utilities in our portfolios, we partnered with First Street, a climate risk modeling company, which developed a high-precision wildfire model. This model estimates wildfire risk on a property-by-property basis across the U.S. today and in the future. We apply this data to utility service areas to understand the exposure of individual utilities to wildfire risk.

Our findings showed that the probability of wildfires could increase by 60%, on average, across U.S. utility service territories over the next 30 years. While utilities in the West will likely continue to face high wildfire risks, most of the increase in expected losses is expected to occur in the South and Southeastern U.S. – areas where wildfire risks historically have not been a concern and populations have been growing rapidly.

This work led us to create a new monitoring dashboard, providing our investors with valuable data on historical fire trends, future wildfire probabilities, and potential liability exposure for utility investments.





Energy transition: Sidelined, stalled or stepping on the gas?






The global energy transition is experiencing a period of nonlinear progress, characterized by both advancements and setbacks. Companies are facing practical challenges that have led to recalibrations in their strategic plans. For example, some of the world's largest integrated energy firms have scaled back their renewable energy targets, and a major car rental company decided to sell one-third of its U.S. electric fleet. Despite setbacks, the energy transition still offers fertile ground for selective investors. Sectors such as electric vehicles (EVs), data center cooling, heat pumps, renewable energy and power grids present significant long-term investment opportunities, with substantial growth expected by 2030. The EV market is projected to generate \$1.7 trillion in revenues, while data center cooling and heat pumps are expected to reach \$30 billion and \$167 billion, respectively.

Balancing energy-transition goals with energy security, costs and shifting demand is reshaping industries. Companies are navigating these complexities, creating new opportunities and driving innovation. Our ESG analysts developed an energy-transition tracker that monitors metrics and development on key themes, including energy mix, grid and storage investment and nascent technologies, to evaluate the pace of energy transition in the U.S.

We have also published a [report](#) on the secular trends affecting the pace of the energy transition.

The global tilt toward cleaner energy powers attractive growth potential

Global growth forecast for 2030*

					
Source	Electric vehicles (EVs)	Data center cooling	Heat pumps	Renewables	Grid investment
2030 forecast estimates	US\$1.7T revenues	US\$30B revenues	US\$167B revenues	1,275 GW power generation (gigawatts)	US\$490B investment
Average annual growth rate (2024 to 2030, implied by 2030 forecast)	>14%	>12%	>9%	~12%	~9%

*2030 forecast estimates and growth rates: heat pump (Horizon Grand View Research), data center cooling and EV (Research and Markets), and renewables and power grid (International Energy Agency).

Sources: Capital Group, Horizon Grand View Research, International Energy Agency and Research and Markets.



Investment opportunities from data center decarbonization

Rapid development in artificial intelligence (AI) has brought data centers' increasing power demand front and center. Energy consumption and greenhouse gas emissions from AI are viewed as a material ESG risk in investing over the next two to three years, according to Capital Group's ESG Global Study.

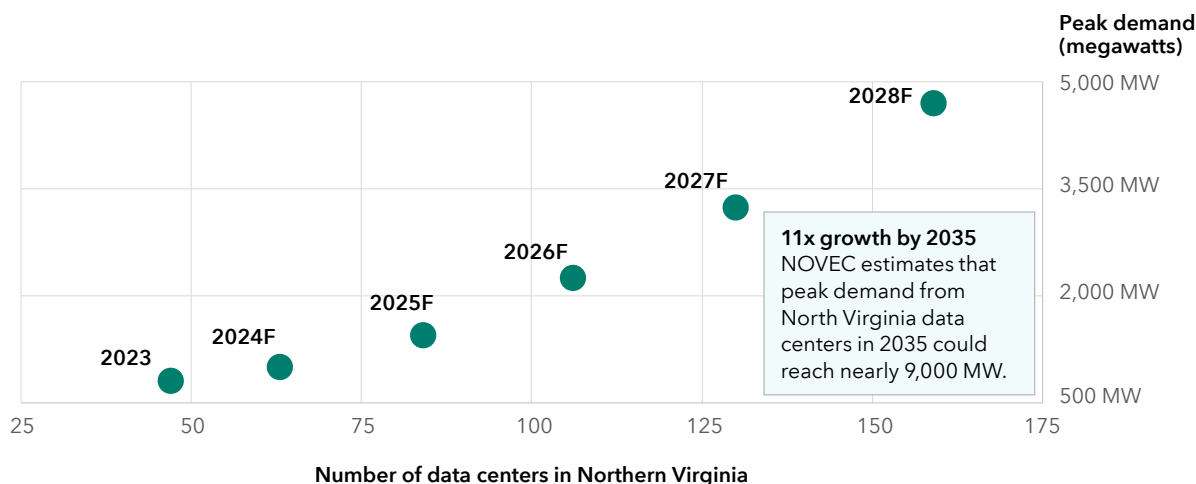
Our analysts dived into technologies and solutions that could help drive data center decarbonization efforts, including energy generation and storage, as well as cooling and building materials. They examined both decarbonization potential and feasibility of each technology or solution, and mapped companies in the data center value chain to their findings in order to assess potential benefit from data center decarbonization.

Our research showed that it will likely be a challenge for hyperscalers (large cloud service providers) to meet their emissions-reduction targets on time without a breakthrough in clean power generation or storage, but each company remains committed to their targets. Hyperscalers are looking for new ways to source renewable energy. For example, some of them have reached agreements to source nuclear power, which is considered a carbon-free and highly stable source of electricity.

Hyperscalers have also announced plans to heavily invest in improving the power efficiency of AI data centers, including more efficient chips, new designs for memory and networking, and liquid cooling. These technologies could help increase compute capacity without dramatically driving up electricity consumption of data centers. In aggregate, our research suggests that data centers can improve power efficiency by about 50% every 12 to 18 months.

Data with destiny: Power demand from data centers will likely skyrocket

Illustrative example: Potential growth trajectory for data centers in Northern Virginia



Northern Virginia Electric Cooperative (NOVEC) forecast developed as of August 2023, based on identified projects through the end of July 2023 and econometric models estimated with metered load data through the end of July 2023.

Source: NOVEC

Research and investment frameworks

Our equity and fixed income analysts, in partnership with our ESG team, have developed sector-specific, proprietary ESG investment frameworks. Spanning more than 25 corporate sectors and three securitized sectors, each framework is intended to help our investment professionals examine material long-term ESG issues that could affect their investment theses. External inputs such as the International Sustainability Standards Board's (ISSB) standards are valuable; however, our framework is based on our proprietary research and our analysts' and ESG team's extensive experience.

The frameworks are reviewed periodically to ensure they remain relevant. Our in-house ESG team facilitates this process, partnering with investment professionals to reflect emerging and evolving environmental, social and governance topics. ESG research and our corporate investment frameworks are also supported by monitoring, engagement and proxy voting.

The energy transition is a structural shift. To monitor this, we have included a set of standard data points for all sectors in Ethos, our in-house ESG research tool. This includes information on company emissions data and climate targets, including alignment to the Science Based Targets initiative. Our frameworks also include specific metrics for the sectors that are most exposed to the energy transition. For example, the investment framework for the automobile sector uses several metrics to help analysts evaluate electric vehicle (EV) uptake and how companies are managing EV lifecycle emissions in their operations and supply chains.

Monitoring process

We monitor our corporate equity, corporate bond and sovereign bond holdings against available data from third-party providers to surface external views of potentially material ESG risks, as well as corporate issuers that may be in violation of international norms. For a subset of our municipal bond holdings, we use third-party data to surface external views about potentially material physical climate risks. Monitoring our investments against third-party data helps us guard against confirmation bias. Our proprietary monitoring methodologies and thresholds use these external data to help us identify instances where our analysis and investment views differ from the market. Issuers that do not meet our thresholds are flagged for further analysis by our investment professionals.

Our in-house ESG research tool, Ethos, alerts the relevant investment professionals to the issues flagged by third parties. The investment professionals are required to resolve these flags in a timely manner. This will involve an assessment of the materiality of the identified flag, its impact on the investment thesis (if any) and an update on any engagement efforts. Responses are housed on Ethos, arranged by issuer, which is accessible to members of the Investment Group and the ESG team. On a regular basis, the ESG team conducts a review to assess where further insight and details may be needed. The Issuer Oversight Committee acts as an extension of our monitoring process for areas of elevated ESG risk that may affect portfolio holdings. Importantly, our perspectives are built on a long-term view, engagement and detailed analysis – never on monitoring results alone.

For example, we draw on the Notre Dame Global Adaptation Initiative's Climate Vulnerability Index to evaluate sovereigns' exposure, sensitivity and capacity to adapt to climate risks. This enables our sovereign debt analysts to evaluate a country's risk profile related to climate.

For municipal bonds, we leverage data from Intercontinental Exchange (ICE) Climate to surface external views about potentially material physical climate risks relating to a subset of our municipal bond holdings. Municipal obligors are flagged for having an elevated score in flood, hurricane, wildfire or overall climate risks.¹

Engagement and proxy voting

In 2024, we held more than 90 engagements² with companies on environmental-related issues. The investment in these companies collectively represented more than 50% of Capital Group's financed emissions.³ Objectives varied by company and included deepening our understanding of the companies' approach to physical and transition risks and opportunities, as well as encouraging greater disclosure on how they are managing their exposure to these risks and the energy transition. Climate-related risks are identified as potentially financially material in several of our sector investment frameworks, and we aim to focus our engagements on companies where such risks could be material to the long-term value of the investment.

When evaluating proxy proposals related to climate, we solely consider the financial materiality of the issue(s) raised to the company and the capacity for proposed actions to generate long-term value for the company's business model and specific operating context. We generally favor transparency as it allows our investment professionals to better understand a company's risks and opportunities and its long-term value drivers. Where appropriate, we may express this view through support of climate-related shareholder proposals that seek disclosure on topics we view as financially material.

Additionally, as a supporter of the Task Force on Climate-related Financial Disclosure (TCFD), we generally support proposals requesting that issuers start and/or continue to improve disclosures aligned with the TCFD framework, including in its new form within the ISSB standards.

¹Our monitoring process applies to obligors in select sectors (excluding tobacco, corporates, housing and gas, as well as escrowed bonds) that exceed 0.25% of the assets of certain American Funds, which are Capital Group's U.S.-based mutual funds.

²Reporting period: Calendar year 2024.

³Greenhouse gas (GHG) emissions are attributed to Capital Group by multiplying issuer GHG emissions by the current value of all CG investments in that issuer relative to the issuer's enterprise value including cash (EVIC).



Case studies

The following company case study examples demonstrate how we have managed climate-related risks through company-level analysis and engagement.

Case study: Pacific Gas and Electric (PG&E) Corporation

Prioritizing long-term wildfire mitigation efforts

PG&E is a regulated investor-owned utility. It is one of the largest utility companies in the U.S. and provides natural gas and electricity to approximately 16 million people across northern and central California. With the frequency and severity of wildfires in the state expected to increase, PG&E and its peers are exposed to heightened fire risks. They are also subject to increasing risk of potential litigations, as utility-owned power lines are common ignitors of wildfires. Capital Group analysts have been engaging with PG&E on this topic for several years, discussing both evolving wildfire risks and the company's mitigation efforts. U.S. utility companies' long-term infrastructural efforts, such as undergrounding power lines, can help to limit the risk of equipment starting a fire and the utilities incurring liability expenses as a result.

In July 2024, a Capital Group ESG analyst and an equity investment analyst engaged with PG&E to get an update on progress in its wildfire mitigation efforts. PG&E noted the progress it has made toward its long-term target to underground 10,000 miles of power lines in areas where there is a high risk of fire. It has also reduced the cost of undergrounding since this program started in 2021. PG&E also shared that the long-term nature of the company's undergrounding plan allows its on-the-ground teams to have sufficient time to obtain permits, which could help to keep work on schedule. In addition, PG&E has implemented safety programs, including PSPS and EPSS,* which the company highlighted as having been effective in reducing fire risks.

Our analysts believe PG&E has made significant operational and physical improvements to reduce wildfire risk and that the company is ahead of schedule in terms of its overall mitigation plan. Capital Group analysts have also developed a Wildfire Risk Dashboard, an in-house tool to assess current and future wildfire risks, which could be material for investment in U.S. utilities.

As of November 2024. Sources: Capital Group, PG&E.

*PSPS: Public Safety Power Shutoff (shutting off power to prevent a wildfire when risk is high); EPSS: Enhanced Powerline Safety Settings (automatically turning off power when there is a hazard, like a tree branch falling onto a power line).



Case study: Microsoft

Balancing AI rollout with a continued commitment to emissions goals

Microsoft is a U.S.-based multinational technology company with business lines spanning software, services, devices and solutions. Our ESG investment framework for software identifies energy use and emissions as potentially material issues. Microsoft has committed to becoming carbon negative by 2030 through reducing carbon emissions, increasing its use of carbon-free electricity, and carbon removal.* Microsoft's material investment in artificial intelligence (AI) has raised questions about the company's ability to meet its decarbonization target, as AI's transformative potential is powered by high electricity consumption.

In August 2024, an investment analyst and ESG analysts engaged with Microsoft to discuss the company's emissions in the context of generative AI power consumption. Our analysts asked how the electricity demand of AI may challenge the company's "carbon negative" goal. Microsoft shared that its energy use has been rising sharply with the expansion of AI (+120% over the past three years), but that incremental growth could be met by zero-carbon electricity. The company reaffirmed its goal to reach 100% renewable energy by 2025. Microsoft highlighted that nuclear energy is also expected to be part of its zero-carbon energy target. The company has recently announced a significant power purchase agreement that would involve restarting a dormant U.S. nuclear power plant.

Microsoft confirmed to our analysts that it remains fully committed both to its decarbonization goals and its generative AI investments. Greater use of nuclear energy – among other initiatives – will play a critical role in achieving both goals, our analysts believe. Our analysts will continue to monitor the company's progress toward its decarbonization target.

As of November 2024. Sources: Capital Group, Microsoft.

*Microsoft, 2024 Environmental Sustainability Report. Microsoft defines carbon-free electricity as a broad suite of technologies compatible with a fully decarbonized electricity system, including solar, geothermal, sustainable biomass, hydropower, nuclear, carbon capture, utilization and storage, and others with zero direct emissions. Renewable energy refers to wind, solar, geothermal, sustainable biomass and sustainable hydropower.

Data and technology

In 2024, we streamlined some of our climate data, which involved removing sources with duplicative data to ensure that investment analysts and portfolio managers have access to the latest and most consistent data across metrics and AI-driven insights. We still have multiple sources of data on climate for our investment professionals and continue to explore the market for best-in-class sources, particularly for geospatial and biodiversity data.

One example of a climate-related dataset is the Science Based Targets initiative's company participation data, which shows whether a company has set or committed to set science-based targets. Additional examples include CDP's* indication of whether a company has conducted climate scenario analysis and MSCI's company data on share of revenue derived from oil and gas.

*CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts.



Case study: MSCI

Improving data accuracy helps drive better investment decision-making

In 2024, we continued to advance our ESG data governance efforts with MSCI. We use MSCI's Business Involvement Screening Research (BISR) data in screens in certain products that have fossil fuel exclusions. We have encountered accuracy issues with the data. In several in-depth conversations with MSCI's research team, we highlighted our use-cases of the BISR data and emphasized the importance of more clarity and accuracy of data, including that related to fossil fuel revenues and activities.

As a result of these discussions, MSCI agreed to enhance the QA protocol and implemented an additional layer of review. The improvement has been well received within our team, as it improves data reliability, which helps drive better decision-making and foster greater confidence in our data resources.

Enterprise risk management

Capital Group has a risk-management process whereby business areas, as the first line of defense, are responsible for identifying significant risks inherent in the business cycle and implementing appropriate measures to monitor and manage these risks. Risk Management and Compliance teams support the business areas as the second line of defense through ongoing monitoring of the regulatory environment, as well as monitoring and oversight of identified risks and through various other risk assessment activities. Capital Group seeks to address and mitigate identified risks through its compliance policies and other internal controls that make up its control environment. As the third line of defense, Internal Audit provides further assurance on the design and operating effectiveness of internal systems and controls.

Capital Group maintains risk and control registers for each of its European and Asian subsidiary entities, through which the risks and associated controls related to physical and transitional elements of climate risk are documented and assessed. Capital Group has also established a risk-appetite statement and a key risk indicator monitoring process at the Europe and Asia regional levels. Climate and Sustainability risks are considered key risks under this framework and are monitored and reported to Risk Management at least annually. In Europe and Asia, clients, regulators and accounting standard setters (e.g., IFRS) may increasingly demand or expect companies like Capital Group to measure and monitor their GHG emissions and other impacts and to achieve carbon reduction and other environmental goals. Capital Group tracks and reports its progress on operational GHG emissions through regular key risk indicator reporting. Risk Management monitors the risk and control registers, risk-appetite statement and progress on key risk indicators that are associated with climate and sustainability activities, and it reports to the relevant regional risk committee, executive leadership and the boards and governance committees of Capital Groups European and Asian subsidiary entities.



Progress this year

- This year we analyzed the emissions performance of our global holdings by applying WACI to our listed equity and publicly traded corporate debt investments.
- Our 2024 operational emissions are nearly 25% below our 2019 baseline.¹
- In 2024, two additional Capital Group office sites – London and Tokyo – earned Leadership in Energy and Environmental Design (LEED) Gold ratings.

This section covers how we disclose climate-related metrics associated with our investment portfolios. Additionally, it includes detailed reporting on our corporate GHG emissions and energy metrics, including our progress towards the goal of reducing operational emissions by 25% from our 2019 baseline by 2025.

Investment management climate-related metrics and targets

We monitor climate metrics at the issuer level and at fund or account levels, and we produce quarterly carbon footprint reports for financial professionals and institutional clients upon request.

Climate metrics applied to our global holdings

In 2024, we looked at the emissions performance of our global holdings by applying weighted average carbon intensity (WACI) to our total investments in listed equity and publicly traded corporate debt.

We have chosen to apply WACI as it provides a measure of a portfolio's exposure to carbon-intensive companies and is applicable across asset classes. With the exception of certain SFDR Article 8 funds, our funds are not managed to a carbon-emissions target, and we do not have a firm-wide carbon-emissions target with respect to our portfolio holdings.

WACI is an intensity metric and, as such, does not solely measure carbon emissions but is also impacted by the changes in revenue of companies.² Movements year-on-year are therefore a product of changes in carbon emissions and revenues of companies. Refer to Figure 3 for further detail on the methodology.

Figure 3: WACI methodology

Weighted average carbon intensity is measured using the following equation provided by TCFD in the 2021 implementation report:

$$\sum_n^i \left(\frac{\text{current value of investment}_i}{\text{current portfolio value}} \times \frac{\text{issuer's Scope 1 and Scope 2 GHG emissions}_i}{\text{issuer's \$M revenue}_i} \right)$$

¹Operational emissions include Scope 1, Scope 2 and Scope 3 (business travel) emissions. Progress compared to 2019 baseline, location-based values. (The Scope 2 location-based value reflects emissions from actual use of electricity at each of Capital Group's sites using grid average emission factors tied to each location.)

²Generally, a lower weighted average carbon intensity indicates a lower level of greenhouse gas emissions for a given portfolio.

³The Scope 1 and 2 emissions revenue intensity for each investment is adjusted for its relative weight in the portfolio. Individual weighted carbon intensities are then added to find the weighted average carbon intensity of the portfolio.

Annual WACI for the period ending on December 31, 2024, is shown in Table 2. WACI decreased in our listed equity holdings and public corporate debt holdings between 2023 and 2024.¹ For listed equity, these values are below index level while corporate debt is above the index.

The MSCI All Country World Index (ACWI) and the Bloomberg Global Aggregate Corporate Index both provide a relative proxy for global exposure to each asset class and are used as benchmarks for some, but not all, of our funds. Other similar indexes may be associated with lower WACI.

Table 2: Weighted average carbon intensity (WACI) as of December 31, 2024.¹

Weighted average carbon intensity (WACI) (Metric tons of CO ₂ per million USD revenue, Scopes 1 and 2)				
Portfolio	2023	2024	Data coverage (%) ³ 2023	Data coverage (%) ³ 2024
Capital Group total listed equity ²	117	97	99.03%	99.39%
Equity index: MSCI ACWI	129	114	99.65%	99.84%
Capital Group total public corporate debt	261	230	93.08%	91.72%
Corporate debt index: Bloomberg Global Aggregate Corporate Index	209	192	96.42%	97.29%

A note on data quality: The figures provided represent our best estimates. Emissions accounting and reporting by companies are still largely voluntary and unregulated. As such, there are significant data gaps. Companies report emissions at irregular intervals and with long lag times. To provide a complete data set we may use data from the latest reporting year available for each company and there may be differences in the reporting year amongst companies. In cases where no data are available for specific metrics, MSCI may use modeled estimates based on industry averages or historical trends. Emissions data are subject to large margins of error and companies frequently revise reporting.

¹WACI calculation was built on the Scopes 1 and 2 emissions of the companies in which we invest. We rely on carbon emissions data from MSCI to estimate the carbon emissions and revenue of issuers. Such data may include estimates based on the third-party data provider's own methodologies for certain issuers where there are no reported, reliable carbon-emissions data. If there are no MSCI data for an issuer (reported or estimated), then we exclude such issuer from our WACI calculations.

²Capital Group listed equity refers to equity holdings that are publicly traded on a stock exchange.

³Data coverage shows the total portfolio weight of investments for which we have been able to match carbon information.

Equity investments in 2024 show greater levels of holdings in low-emitting sectors, such as health care and consumer discretionary, when compared to the MSCI ACWI (refer to Figure 4). Conversely, corporate debt, is invested in higher emitting sectors than the Bloomberg Global Aggregate Corporate Index benchmark, including energy, utilities and materials (refer to Figure 5).

Figure 4: Portfolio emissions for 2024 listed equity alongside portfolio value of the sector.* These are compared to the index weightings.

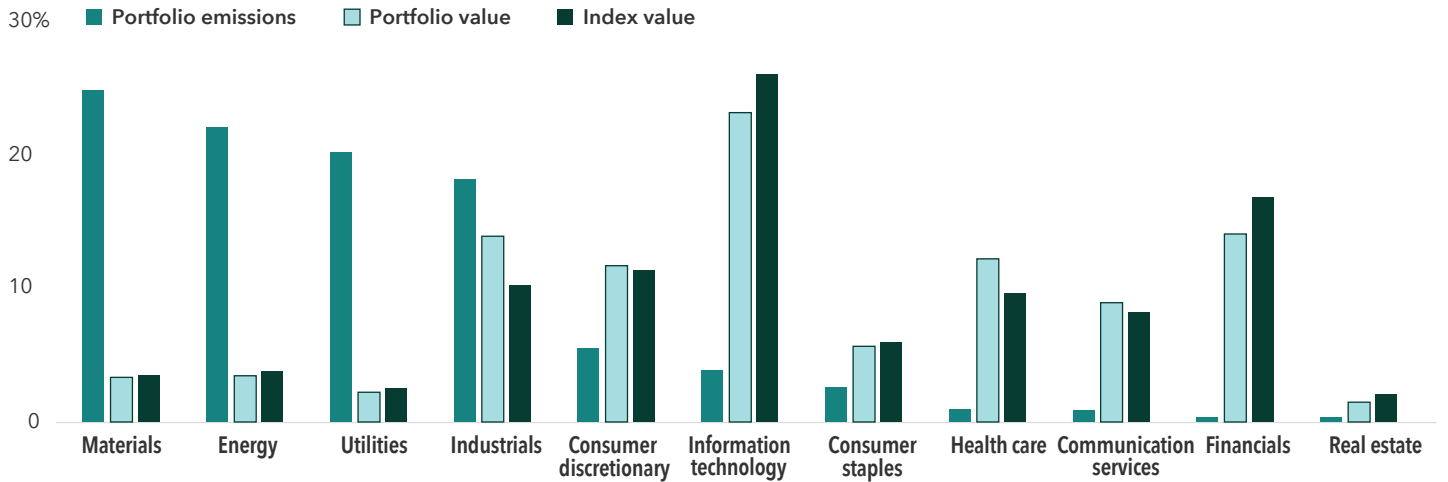
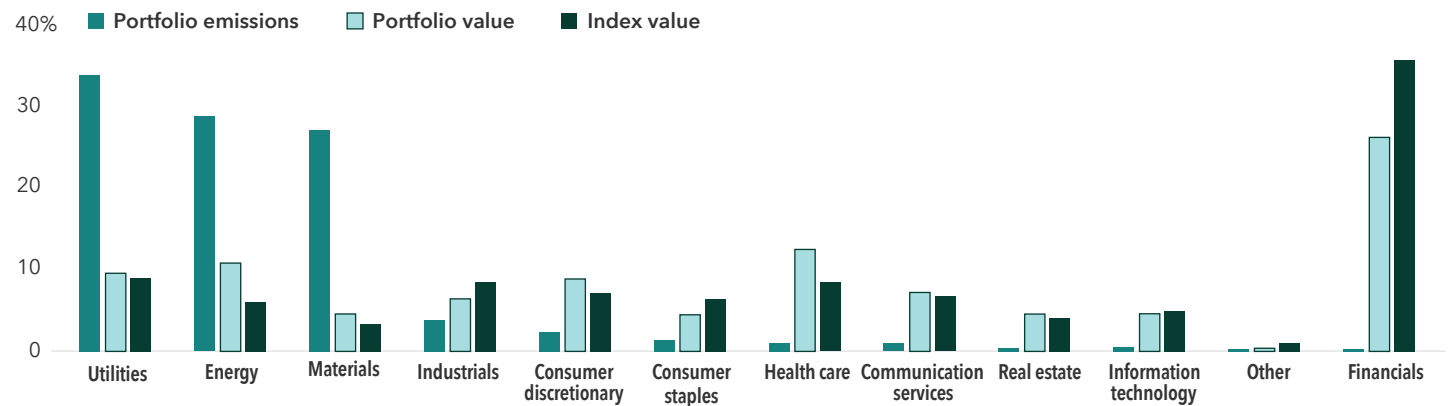


Figure 5: Portfolio emissions for corporate debt in 2024 alongside portfolio value of the sector.* These are compared to the index weightings.



*Portfolio emissions are attributed using portfolio value/adjusted enterprise value for equities and fixed income. Portfolio value is as of December 31, 2024. All emissions data are provided by MSCI and are as of December 31, 2024. The benchmark indexes used are MSCI All Country World Index for equities and Bloomberg Global Aggregate Corporate Index for fixed income.

While we have shared this sector view, carbon intensity is also an output of the individual companies in which we invest. Our bottom-up investment process means we are well-placed to assess not only current emissions but also the trajectory for emissions and the contribution of individual products and services. We continue to engage with the companies that are most exposed to the energy transition to better understand their resilience.

We are closely monitoring the developments of calculation methodologies and data availability for sovereigns and Scope 3 emissions. In December 2022, the Partnership for Carbon Accounting Financials (PCAF) released new methodologies for the calculation of sovereign emissions. Meanwhile, data on issuer Scope 3 emissions are increasingly being made available, supported by enhanced disclosures at the issuer level and improved modelling capabilities at ESG data providers. At this time, we have not included sovereigns or issuer Scope 3 emissions in our entity carbon calculations, although we do make these available at the portfolio level and on demand for clients.

We acknowledge the importance of forward-looking metrics in understanding climate-related risks and opportunities. In 2024 we included Climate VaR metrics in on-demand client reporting. Further detail can be found on page 10 of this report.

Climate metrics applied to our five largest funds

We produce quarterly carbon footprint reports for financial professionals and institutional clients upon request. These reports disclose several climate metrics, including WACI.

Table 3 shows a breakdown of the WACI for our five largest funds by assets under management (AUM).¹ This additional transparency is intended to drive a richer conversation with clients on how climate risks are being managed.

Table 3: Climate-related metrics for the Capital Group organization's five largest funds by AUM.

Portfolio	Fund WACI	Benchmark WACI ²	Difference against benchmark	% Data coverage
The Growth Fund of America®	54	92	-41%	98%
American Balanced Fund®	95	92	4%	77%
Washington Mutual Investors Fund	109	92	19%	99%
Investment Company of America®	99	92	9%	97%
New Perspective Fund®	62	114	-45%	98%

¹American Funds are intended only for persons eligible to purchase U.S.-registered mutual funds. The funds represented in the table are not available to investors outside of the United States. All emissions data are provided by MSCI and are as of December 31, 2024.

²Relevant benchmarks: S&P 500 Index for The Growth Fund of America, American Balanced Fund, Washington Mutual Investors Fund and Investment Company of America; MSCI All Country World Index for New Perspective Fund. Due to system limitations, we are not able to compare the WACI for American Balanced Fund to its primary benchmarks, the 60%/40% S&P 500 Index/Bloomberg U.S. Aggregate Index.

Corporate sustainability metrics and targets

This section provides detailed information on the GHG emissions that arise from Capital Group's corporate operations in addition to data on energy consumption and intensity in reference to relevant GRI Standards. Please refer to the Appendix for information on our approach to measuring our emissions and computation methodology.

Operational emissions target

Our operational emissions comprise Scopes 1 and 2 emissions, mostly from energy use at our sites globally, and Scope 3 emissions from business travel. We have set a target of reducing operational emissions by 25% by 2025 relative to our 2019 baseline.

Compared to 2019, we reduced operational emissions (location-based) by nearly 25% driven primarily by improved energy efficiency and increased onsite solar. Our Scope 2 (location-based and market-based) emissions* were lower in 2024. Our Scope 2 (location-based) emissions decreased through design and implementation of operational efficiencies and additional onsite solar generation in 2024. For example, our San Antonio, Texas, site saw the benefit of its first full year of onsite solar generation and our Carmel, Indiana, site completed its solar installation in December. In addition, two more sites, London and Tokyo, achieved LEED Gold certification. We reduced our Scope 2 (market-based) emissions in 2024 through a combination of opting for renewable energy options and purchasing renewable energy certificates (RECs) or their equivalents in the same markets where the electricity was consumed. Our Scope 3 (business travel) emissions were down 22% compared to our 2019 baseline, but did increase relative to 2023. We believe that, in addition to virtual meetings, in-person interactions are an essential part of our ability to make informed investment decisions to better serve our clients.

*Scope 2 emissions are calculated in two ways: location-based (emissions from electricity consumed at the location) and market-based (incorporating procurement of electricity from specific sources, such as renewable sources).

GHG emissions metrics

We have broken out our GHG emissions reporting into two components. The first table provides data related to our operational emissions, which we define as Scope 1, Scope 2 and Scope 3 (business travel). The second table covers other Scope 3 emissions, which are estimated. These emissions are related to the procurement and transportation of goods, services and equipment.

Approach to reported values

Figures in the tables have been rounded to the nearest whole number. The percentage figures may not total 100 due to rounding. The GRI codes (GRI 305-1-5, 302-1-4) reference metrics included in the GRI standards. The headlines for tables 4-9 indicate the relevant disclosures for each associated metric.

Table 4: GHG emissions related to business operations – GRI 305-1, 305-2, 305-3 and 305-5

Metric tons of CO ₂ equivalents (MTCO ₂ e)	2019	2023	2024	% Change from 2019
Scope 1	1,004	1,034	1,899	89%
Scope 2 (location-based)	18,123	12,790	11,760	-35%
Scope 2 (market-based)	18,123	5	0	-100%
Scope 3 (business travel)	24,268	12,348	18,937	-22%
Total (location-based)	43,395	26,172	32,595	-25%
Total (market-based)	43,395	13,387	20,835	-52%

Table 5: Other Scope 3 categories (estimated)

MTCO ₂ e	2024
Scope 3 purchased goods & services	170,308
Scope 3 capital goods	3,970
Scope 3 upstream transportation & distribution	786
Scope 3 upstream leased assets	779

Energy

Capital Group consumed 45,069 megawatt hours (MWh) of energy in 2024 inclusive of electricity, cooling, natural gas and diesel. This is a 22% reduction in energy use by our global facilities in 2024 relative to the baseline year. Most of the energy consumption by our global operations was related to electricity, as shown below. Table 7 includes information on our progress, incorporating renewable electricity into our operations, including onsite solar generation from our offices in Irvine, California, and San Antonio, Texas.

Table 6: Energy consumption - GRI 302-1 and GRI 302-4

% of energy consumption	2019	2024
Electricity	91%	91%
Purchased electricity*	89%	79%
Onsite solar consumption	2%	12%
Natural gas and diesel	9%	9%
Total energy consumed (MWh)	57,558	45,069

*This includes purchased cooling, which is <1% of the total.
The percentage figures may not total 100 due to rounding.
2019 total energy value has been updated due to rounding.

Table 7: Renewable electricity - GRI 302-1

MWh	2019	2024
Onsite solar – electricity generated	1,578	6,525
Onsite solar – electricity consumed	1,235	5,498
Onsite solar – electricity returned to the grid	343	1,026
Purchased RECs (or equivalent)	0	35,686
Renewable electricity from the grid	9,963	7,263

Intensity metrics

The following intensity metrics are calculated using location-based values and therefore do not incorporate our purchase of renewable energy certificates (RECs). The square footage reflects occupied square footage for all sites that were occupied in the reporting year, excluding co-working spaces that are outside of our operational control boundary. "Associate" reflects average headcount over the course of the calendar year that ended December 31, 2024.

Table 8: GHG emissions intensity - GRI 305-4

	2019	2024	Units
Facilities GHG emissions per square foot (Scopes 1 & 2)	0.007	0.005	MTCO ₂ e/sq. ft.
Business travel-related GHG emissions per associate	2.95	2.05	MTCO ₂ e/associate

Table 9: Energy intensity - GRI 302-3

	2019	2024	Units
Facilities energy intensity per square foot	0.020	0.015	MWh/sq. ft.

Appendix

GHG emission reporting approach and methodology

Capital Group's corporate GHG emissions metrics are reported in accordance with the expectations of the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition* (GHG Protocol). Following is information regarding our approach to measuring our corporate GHG emissions and computation methodology.

Inventory boundary

Capital Group applies an operational control boundary for purposes of GHG emissions reporting. GHG emissions reporting is for Capital Group and its subsidiaries, including all owned and leased facilities that were active during the reporting period and where Capital Group has operational control.

Base year

Capital Group has chosen 2019 as the baseline year against which we measure our progress toward our emissions-reduction goals. It was the last full year before the COVID-19 pandemic and therefore best reflects normal operations.

GHG emissions methodology

Capital Group measures Scope 1, Scope 2 and select categories of Scope 3 emissions, namely: business travel, purchased goods and services, capital goods, upstream transportation and distribution, and upstream leased assets.

GHGs included in this report are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) emissions from electricity and fuel consumption, as well as hydrofluorocarbon (HFC) and hydrochlorofluorocarbon (HCFC) emissions from refrigerants.

Scope 1

Scope 1 emissions include direct emissions arising from stationary combustion of natural gas and diesel fuel, as well as refrigerant losses. Usage data from utility bills or landlord bills are the primary source of data for natural gas. Emissions from diesel and refrigerant losses are calculated based on primary data from use logs and invoices. Emissions factors for Scope 1 emissions were sourced from the UK Department for Environment, Food and Rural Affairs (DEFRA) (IPCC AR5 2014). Onsite solar is tracked through smart meters and utility bills to understand total generation, total Capital Group consumption and what is returned to the electricity grid. This falls under Scope 1 as it is onsite generation with a carbon footprint of zero.

Scope 2

Scope 2 emissions include indirect emissions arising from purchased electricity and purchased cooling. Purchased electricity and cooling activity data are sourced from utility bills or information provided by landlords in leased facilities. Where data are not available, estimates based on square footage are applied. Estimated data were used when computing 0.3% of Scope 2 emissions for the 2024 calendar year.

In accordance with the GHG Protocol, Capital Group calculates Scope 2 emissions from purchased electricity using both location-based and market-based methods. The location-based method reflects emissions calculated using average emissions factors for the electricity grids at each of Capital Group's sites. The market-based method incorporates contractual instruments in which the organization, or the landlord, on behalf of the organization, procures electricity from specific suppliers or sources, such as the purchase of RECs.

Emission factors used for electricity consumption in the U.S. are sourced from the EPA Emissions and Generation Resource Integrated Database (eGRID 2022 (IPCC AR4 2007)). For UK emissions we use DEFRA 2024 (IPCC AR5 2014). For all other sites, we use the emission factors from the International Energy Agency (IEA 2024) (IPCC AR6 2017). For the market-based method, emission factors are derived from contractual instruments, which, for the calendar year ended 2024, included RECs or their equivalents outside the U.S.

Scope 3

Capital Group's GHG emissions reporting includes relevant categories of upstream Scope 3 emissions. Approaches used to calculate each category of Scope 3 emissions are discussed below.

Business travel

Business travel-related emissions include business air travel, hotel stays, rental cars, personal mile reimbursements, rail and other ground transportation. Emissions are calculated based on booked reservations for air and hotel. Air travel emissions account for cabin class and haul length. The majority of rental car emissions are supplied by the vendors. Emissions related to personal vehicle miles, rail, taxi, small amount of rental car and other ground transportation apply appropriate emission factors to spend data for each category. Air travel and hotel emissions are calculated using DEFRA/Department for Business, Energy & Industrial Strategy (BEIS) 2022 emissions factors. Rail and other ground transportation emissions are calculated using EPA factors 2024. Personal vehicle miles use U.S. EPA emissions factors 2024 for North America, DEFRA 2024 for Europe and the Middle East, and DEFRA/BEIS 2018 factors for the Asia-Pacific region.

Other Scope 3 emissions categories

Capital Group is providing estimates of Scope 3 categories: purchased goods and services, capital goods, upstream transportation and distribution, and upstream leased assets. These categories reflect emissions associated with the procurement of goods, services and equipment by Capital Group for use in business operations. Purchased goods and services comprise most of the transactions for services such as consulting and consumable goods. Indirect business travel-related spend, such as expensed meals and travel booking fees, are reported under purchased goods and services. Capital goods include the purchase of furniture and major IT equipment. Transportation and distribution include shipping and employee relocation. Upstream leased assets include equipment rental. These categories of emissions are estimated using the U.S. EEIO Supply Chain GHG Emission Factors for U.S. Commodities and Industries v1.3 by NAICS-6 2024 and Capital Group's annual procurement spend data. Direct emissions data from vendors were included where made available.

Global warming potentials (GWPs)

Capital Group is using the GWPs available in Salesforce Net Zero Cloud platform for this calendar year. These are for a 100-year time horizon and come from IPCC AR5 (2014). U.S. EPA uses IPCC AR4 2007 values and IEA uses AR6 2017 for electricity. Those are also documented below for reference.

Greenhouse gas	Symbol/blend	GWP (AR4)	GWP (AR5)	GWP (AR6)
Carbon dioxide	CO ₂	1	1	1
Methane	CH ₄	25	28	27
Nitrous oxide	N ₂ O	298	265	273
HCFC-22	CHClF ₂	Not used	1,760	Not used
R404A	R-125/R-143a/R-134a	Not used	3,942.80	Not used
R407C	R-32/R-125/R-134a	Not used	1,624.21	Not used
R410A	R-32/R-125	Not used	1,923.50	Not used

Exclusions

Co-working spaces are outside of our operational boundary and are excluded from the carbon footprint as the associated emissions are considered de minimis (less than 1% of total emissions and square footage).

Capital Group voluntary carbon market disclosure

This disclosure is provided by Capital Group in accordance with California AB 1305. The activities of Capital Group that are in scope of California AB 1305 relate solely to our corporate operations and not to our investment advisory or management services. This disclosure is made as of June 18, 2025.

Overview

Capital Group annually reports its corporate greenhouse gas (GHG) emissions and strategies employed to achieve its emissions reduction goals associated with its operational carbon footprint. Detailed information about our GHG emissions and methodology can be found on pages 30–35 of this report.

Emissions reduction goals

Capital Group has established a goal of reducing GHG emissions in our business operations by 25% by 2025, compared to a 2019 baseline. Our goals include Scope 1, Scope 2 and Scope 3 (business travel) emissions.

Reporting corporate greenhouse gas emissions and progress toward goals

Capital Group measures and reports its GHG emissions and associated progress toward emissions reduction goals in alignment with the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition* (GHG Protocol). Capital Group maintains internal controls and methodology documentation to support accurate disclosures regarding our GHG emissions and progress toward our goals. Our methodology is summarized in the Appendix on pages 34–35 of this report. Our goals have not been verified by the Science Based Targets initiative or any other industry standard. We continue to evaluate and work to advance our corporate sustainability strategy. We have not obtained independent third-party verification of reported GHG emissions data or associated progress toward our emissions reduction goals.

Voluntary carbon offsets

The following table provides details on the projects associated with voluntary carbon offsets purchased or used by Capital Group in the calendar year 2024.

Voluntary carbon offsets purchased or used in calendar year 2024

Project name	Rooftop solar energy, East Africa	Tradewater U.S. - ODS #3, #4 and #8	Rainforest Conservation, Malaysia
Name of business selling offset	Climate Impact Partners LLC	Carbon Financial Services, LLC	Rubicon Carbon Services, LLC
Registry name	Gold Standard	American Carbon Registry	Verra
Project ID number	5304	875, 936 and 1107	2609
Offset project type and site location	Avoidance, Uganda	Avoidance, USA	Removal, Malaysia
Protocol to estimate emissions reductions	AMS-III.AR v5.0 Substituting fossil fuel-based lighting with LED/CFL lighting systems	The Destruction of Ozone Depleting Substances and High-GWP Foam, v2.0, February 2023	VM0010 Methodology for Improved Forest Management: Conversion from Logged to Protected Forest Version 1.3
Year(s) in which carbon offsets were purchased	2023 and 2024	2024 and 2025	2025
Year(s) for which carbon offsets were used	2022, 2023 and 2024	2024	2024

The carbon offsets Capital Group purchased were retired (i.e., removed from the carbon market) on our behalf in the year they were purchased. Capital Group does not sell carbon offsets. No voluntary carbon offsets were used to make claims of emissions reductions for calendar year 2024. As noted above, we have not obtained independent third-party verification of reported GHG emissions data or associated progress toward our emissions reduction goals.

Investors should carefully consider investment objectives, risks, charges and expenses. This and other important information is contained in the fund prospectuses and summary prospectuses, which can be obtained from a financial professional and should be read carefully before investing.

This report includes metrics that are subject to uncertainties resulting from limitations inherent to available data and methodologies. The application of different but acceptable methodological choices can result in different measurements. Capital Group reserves the right to update its data and methodologies in future reports.

Investing outside the United States involves risks, such as currency fluctuations, periods of illiquidity and price volatility. These risks may be heightened in connection with investments in developing countries.

Capital Group manages equity assets through three investment groups. These groups make investment and proxy voting decisions independently. Fixed income investment professionals provide fixed income research and investment management across the Capital organization; however, for securities with equity characteristics, they act solely on behalf of one of the three equity investment groups.

This content, developed by Capital Group, home of American Funds, should not be used as a primary basis for investment decisions and is not intended to serve as impartial investment or fiduciary advice.

Statements attributed to an individual represent the opinions of that individual as of the date published and do not necessarily reflect the opinions of Capital Group or its affiliates.

This information is intended to highlight issues and should not be considered advice, an endorsement or a recommendation.

All Capital Group trademarks mentioned are owned by The Capital Group Companies, Inc., an affiliated company or fund. All other company and product names mentioned are the property of their respective companies.

The MSCI information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used as a basis for or a component of any financial instruments or products or indices. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each other person involved in or related to compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties (including, without limitation, any warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including, without limitation, lost profits) or any other damages. (www.msci.com).

BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Neither Bloomberg nor Bloomberg's licensors approves or endorses this material, or guarantees the accuracy or completeness of any information herein, or makes any warranty, express or implied, as to the results to be obtained therefrom and, to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

MSCI All Country World Index is a free float-adjusted market capitalization-weighted index that is designed to measure equity market results in the global developed and emerging markets, consisting of more than 40 developed and emerging market country indexes. Results reflect dividends gross of withholding taxes through December 31, 2000, and dividends net of withholding taxes thereafter.

MSCI All Country World ex USA Index is a free float-adjusted market capitalization weighted index that is designed to measure equity market results in the global developed and emerging markets, excluding the United States. The index consists of more than 40 developed and emerging market country indexes. Results reflect dividends gross of withholding taxes through December 31, 2000, and dividends net of withholding taxes thereafter.

Each S&P Index ("Index") shown is a product of S&P Dow Jones Indices LLC and/or its affiliates and has been licensed for use by Capital Group. Copyright © 2025 S&P Dow Jones Indices LLC, a division of S&P Global, and/or its affiliates. All rights reserved. Redistribution or reproduction in whole or in part is prohibited without written permission of S&P Dow Jones Indices LLC.

S&P 500 Index is a market capitalization-weighted index based on the results of approximately 500 widely held common stocks.

The Bloomberg Global Aggregate Corporate Index is a flagship measure of global investment grade, fixed-rate corporate debt. This multi-currency benchmark includes bonds from developed and emerging markets issuers within the industrial, utility and financial sectors. The Global Aggregate Corporate Index is a component of the Global Aggregate and Multiverse Indices. Index history is available through January 2001.

Bloomberg U.S. Aggregate Index represents the U.S. investment-grade fixed-rate bond market.

The indexes are unmanaged, and results include reinvested dividends and/or distributions but do not reflect the effect of sales charges, commissions, account fees, expenses or U.S. federal income taxes.

Lit. No. ITGEOT-002-0625O CGD/10695-S108600 © 2025 Capital Group. All rights reserved.