

The background of the entire page is a close-up, high-angle photograph of a motor stator. It features multiple circular stator cores arranged in a grid-like pattern. Each core is densely wound with bright orange copper coils. The central part of each core is a dark, circular hub with some internal components visible. The lighting is dramatic, highlighting the texture of the copper and the geometric patterns of the stator.

BlackRock®

2024 Climate Report

Aligned with the
Taskforce on Climate-
related Financial
Disclosure Framework

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About this report

BlackRock's 2024 Climate Report ("Climate Report," this "report") is for BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, "BlackRock" or the "Company" or the "firm"). In October 2024, BlackRock completed the acquisition of Global Infrastructure Partners ("GIP"). Unless otherwise noted, this report does not include consideration of GIP. This report is aligned to recommendations provided by the Taskforce on Climate-related Financial Disclosure ("TCFD"),¹ an organization that was established by the Financial Stability Board ("FSB") to develop a framework to help public companies and other organizations disclose climate-related risks and opportunities. All data in this report is as of December 31, 2024, unless otherwise noted,² and dollar figures are shown in USD. The policies and practices referred to in this report, unless otherwise noted, are adopted by BlackRock on a group-wide basis and applied in relevant jurisdictions in which BlackRock operates.

BlackRock looks forward to feedback from its stakeholders on this report which can be provided by e-mailing Investor Relations at invrel@blackrock.com.

TCFD recommendations

The TCFD recommendations, first launched in 2017, are designed to encourage consistent and comparable reporting on climate-related risks and opportunities by companies to their stakeholders. The TCFD recommendations are structured around four content pillars: (i) Governance; (ii) Strategy; (iii) Risk Management; and (iv) Metrics and Targets; and 11 recommendations to support effective disclosure under each pillar which is accompanied by supplemental guidance for sectors, including asset managers. Throughout this report, BlackRock has sought to provide information on all four pillars and 11 recommendations.

In June 2023, the inaugural International Sustainability Standard Board's ("ISSB") sustainability disclosure standards were published. Having fully incorporated the four content pillars and 11 recommendations of the TCFD³ in the ISSB's climate disclosure standard (IFRS S2 climate-related disclosure, "S2"), the FSB disbanded the TCFD in October 2023.⁴ BlackRock is monitoring endorsement progress of the ISSB sustainability disclosure standards across the jurisdictions in which the firm operates and considering the impact on BlackRock's future climate-related disclosures. In the meantime, BlackRock has continued to align with the TCFD recommendations for its 2024 Climate Report.

Perspectives included in this report

BlackRock is a leading publicly traded investment management firm with \$11.6 trillion of assets under management ("AUM").⁵ With approximately 21,100 employees⁶ in more than 30 countries, BlackRock provides a broad range of investment management and technology services to institutional and retail clients in more than 100 countries across the globe. As an asset manager, BlackRock invests assets that belong to its clients, on its clients' behalf. BlackRock also offers technology services, including the Aladdin[®] investment and risk management platform, which combines comprehensive portfolio management, trading and risk reporting tools with sophisticated risk analytics.

BlackRock approaches material climate-related risks⁷ and opportunities from two main perspectives, which are reflected across this report:

- 1** As an **asset manager** striving to help interested clients benefit from investment opportunities arising from the low-carbon transition,⁸ while fulfilling a fiduciary duty to manage material risks — including climate-related risks — within the bounds of BlackRock's clients' guidelines and objectives; and
- 2** As a **corporate entity** whose business is affected by climate-related risks and opportunities and whose operations have both direct and indirect impacts on climate.

BlackRock's approach to other sustainability-related topics

BlackRock reports on other sustainability-related topics in its Sustainability Disclosure. BlackRock also makes sustainability-related disclosures in line with regulatory requirements in certain jurisdictions where it operates.

As sustainability-related disclosure frameworks, data and risk management methodologies evolve, BlackRock will continue to review its approach to sustainability-related disclosures.

Foreword

BlackRock's mission is to help more people invest better. The money BlackRock manages is not its own — it belongs to BlackRock's clients, many of whom make their own asset allocation and portfolio construction decisions. As a fiduciary, BlackRock invests on clients' behalf to help them meet their investment objectives. The firm does this by understanding clients' long-term investment objectives and offering choice on how and where they wish to invest their money. BlackRock then helps clients seek the best risk-adjusted returns based on those choices, underpinning this work with research, data and analytics.

BlackRock is focused on providing clients access to new opportunities across asset classes, regions, and themes while driving down costs to investors. BlackRock recognizes that different clients have different investment objectives and preferences. For clients interested in sustainability and the transition to a low-carbon economy, BlackRock offers a wide range of investment products, analytics and research to help them achieve their chosen investment objectives. BlackRock's sustainable and transition investing platform is driven by clients' needs, along with BlackRock's continued investment conviction that the energy transition is a mega force shaping economies and markets.

BlackRock's approach to the low-carbon transition is to help clients navigate investment risks and opportunities, seeking the best risk-adjusted returns within the mandates given by clients to help them meet their investment objectives. When seeking the best financial returns for clients, the firm relies on a research-based view of economic developments, including how the low-carbon transition is likely to unfold in practice over time and the extent to which such changes are priced into financial markets.

As a provider of technology services, BlackRock builds and delivers sophisticated transition and climate tools, analytics, and portfolio insights powered by Aladdin. BlackRock has developed Aladdin Climate™ to meet the demand from clients to measure climate risks and opportunities.

BlackRock manages its own corporate operations with a focus on sustainability. The firm focuses on reducing greenhouse gas ("GHG") emissions, increasing operational efficiency, and investing in market solutions to address emissions.

This report represents BlackRock's commitment to transparent reporting. BlackRock provides sustainability-related reporting on a voluntary basis, and in line with mandatory reporting requirements in various jurisdictions across the globe for relevant in-scope entities. The firm reports emissions that stem from BlackRock's corporate operations and separately reports estimates of GHG emissions associated with its AUM and continues to enhance transparency at the firm and fund level.

Key points in response to TCFD recommendations

Pillar/recommendation	Key points	Reference
Governance: Disclose the organization's governance around climate-related risks and opportunities.		
Describe the board's oversight of climate-related risks and opportunities.	<ul style="list-style-type: none"> • Oversight of near- and long-term business strategy (including sustainability) by BlackRock's Board of Directors (the "Board"). • Nominating and Governance Committee of the Board oversees investment stewardship, public policy, corporate sustainability and social impact activities. • Risk Committee of the Board assists the Board with its oversight of BlackRock's risk assessment and risk management, including with respect to climate and other sustainability risks. 	Page 7
Describe management's role in assessing and managing climate-related risks and opportunities.	<ul style="list-style-type: none"> • Global Executive Committee ("GEC") sets the strategic vision and priorities of the firm and drives accountability at all levels. • GEC Investment Sub-Committee oversees the firm's investment processes. 	Page 7
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.		
Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	<ul style="list-style-type: none"> • Opportunities: increased demand for sustainable and transition investment products and Aladdin, as well as operating efficiencies. • Risks: market, product, reputational, regulatory and physical risks. 	Page 15-16
Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Management of financially material climate-related risks and opportunities is embedded, where applicable, across investment processes, business strategy and operations.	Page 15-16
Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	BlackRock performs climate-related scenario analysis, leveraging Aladdin Climate analytics and data from a third-party vendor, to understand the potential implications of climate-related transition and physical risk under a variety of emission scenarios to BlackRock's business strategy and operations over the short, medium and long term.	Pages 17-20
Describe how risks and opportunities are factored into relevant products or investment strategies and describe related transition impact.*	Active investment teams incorporate climate-related risks and opportunities into firmwide processes where financially material and consistent with the relevant investment guidelines. Please refer to the BlackRock ESG Integration Statement for further information. Additionally, for an overview of investment stewardship at BlackRock, please see BlackRock Investment Stewardship .	Pages 10-13
Risk management: Disclose how the organization identifies, assesses and manages climate-related risks.		
Describe the organization's processes for identifying and assessing climate-related risks.	BlackRock employs a three-lines-of-defense approach to managing investment risks, including climate-related risks. For risks in client portfolios, investment teams are the primary risk owners, or first line of defense. BlackRock's risk management function, Risk & Quantitative Analysis ("RQA"), serves as the second line of defense in BlackRock's risk management framework along with BlackRock Legal & Compliance ("L&C"). RQA is responsible for BlackRock's Investment and Enterprise risk management framework which includes oversight of sustainability-related enterprise and investment risks. RQA evaluates investment risks, including financially material sustainability risks, as part of its regular investment risk management process and, where applicable, during regular reviews with portfolio managers. This helps to ensure that such risks are understood, deliberate and consistent with client objectives. Climate-related risks are also evaluated in operational processes, including, where applicable, in risk and control self-assessments, product development and incident management. Risks associated with climate-related investment and operational processes are represented in risk profiles shared with risk oversight committees. The third line of defense is BlackRock's Internal Audit function, which independently assesses the adequacy and effectiveness of BlackRock's internal control environment to improve risk management, control and governance processes.	Page 25
Describe the organization's processes for managing climate-related risks.		
Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.		
Describe how material climate-related risks are identified, assessed and managed for each product or investment strategy.*		

* Reflects recommendations that are included in the Supplemental Guidance for Asset Managers, which incorporates updates to the guidance for the financial sector released by the TCFD in 2021 (https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf).

Pillar/recommendation	Key points	Reference
Risk management: Disclose how the organization identifies, assesses and manages climate-related risks.		
Describe engagement activity with investee companies to encourage better disclosure and practices related to climate-related risks in order to improve data availability and asset managers' ability to assess climate-related risks.*	BlackRock Investment Stewardship ("BIS") has engaged with companies for several years on TCFD-aligned reporting, where appropriate. In the 2023-2024 proxy year, BIS held 1,254 engagements with 1,059 companies on climate and natural capital, globally, to better understand their approach to, and oversight of, material climate-related risks and opportunities, as well as how they manage material natural capital impacts and dependencies, in the context of their business model and sector. BIS observed steady improvements in the reporting published by companies for which a transition to a lower carbon economy is a material risk.	Page 14-15
Metrics and targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.		
Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Categories of metrics: Corporate GHG emissions, Firm-level climate metrics for BlackRock's AUM and Regulatory reporting.	Page 26
Describe metrics used to assess climate-related risks and opportunities in each product or investment strategy.*	Active investment teams develop views on materiality of specific sustainability-related topics by considering relevant metrics which may include BlackRock's proprietary climate-related research, as well as research from a variety of external sources. BlackRock has developed proprietary measurement tools to deepen portfolio manager understanding of material climate-related risks.	Page 12
Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions and the related risks.	BlackRock reports Scope 1, Scope 2, and relevant categories of Scope 3 emissions where source data is reliable.	Page 27-28
Asset managers should disclose GHG emissions for their AUM and Weighted Average Carbon Intensity for each product or investment strategy, where data and methodologies allow. Asset managers should consider providing other carbon foot printing metrics they believe are useful for decision-making.*	<p>Clients have different views on climate and the transition as drivers of risk and return. BlackRock enables clients to increase their exposure to the transition through thematic funds and broad exposures. Some clients may choose to align their portfolios with a net zero pathway or implied global temperature increases. The firm helps them do this through whole portfolio solutions, product choice, and transparency about a fund's alignment to such metrics.</p> <p>BlackRock reports estimates reflecting the absolute emissions associated with BlackRock's AUM in corporate securities, direct real estate and infrastructure equity assets, where the requisite data is available. BlackRock also reports estimates on the unadjusted and adjusted carbon footprint for corporate securities and emissions intensity metrics associated with BlackRock's AUM in sovereign debt assets.</p>	Page 29-34
Asset managers should describe the extent to which their assets under management and products and investment strategies, where relevant, are aligned with a well below 2°C scenario, using whichever approach or metrics best suit their organizational context or capabilities.*		
Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	In 2024, BlackRock continued to support clients in the global transition by providing them with choice, including investment solutions across active, index and private markets that may help them navigate the impact of the transition on their portfolios, consistent with their goals and objectives. Additionally, BlackRock continued to focus on transition investing on behalf of the firm's clients, and building and delivering transition tools, analytics and modelling capabilities powered by Aladdin. For its corporate operations, BlackRock maintains science-aligned emissions reduction goals focused on reducing GHG emissions associated with its facilities, data centers and upstream value chain.	Page 10-13 and 20-21

* Reflects recommendations that are included in the Supplemental Guidance for Asset Managers, which incorporates updates to the guidance for the financial sector released by the TCFD in 2021 (https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf).

Governance

Disclose the organization's governance around climate-related risks and opportunities.

Effective corporate governance is critical to executing on BlackRock's strategy, fulfilling its responsibilities to clients and creating long-term financial value for stakeholders.

BlackRock's governance with respect to climate and sustainability-related⁹ matters reflects the firm's commitment to strong leadership and oversight of such matters at the senior management and Board levels. At BlackRock, sustainability issues are integrated into and regularly part of Board-level discussions of firm and business line strategy, and responsibility for sustainability oversight is shared across the full Board and its committees. [BlackRock's Governance Overview](#) and [Corporate Governance Guidelines](#) provide more information on BlackRock's Corporate Governance framework, including the role and responsibilities of the Board.

Board oversight

BlackRock's Board engages with senior leaders on near- and long-term business strategy and reviews management's performance in delivering long-term financial value creation on behalf of clients. Helping clients meet their investment objectives and preferences, including for those clients focused on sustainability, is a critical component of the firm's overall business strategy and among one of several senior management responsibilities over which the Board has oversight.

The Board holds six regularly scheduled meetings per year during which the Board's committees also meet. In 2024, the full Board or its committees reviewed and discussed aspects of BlackRock's climate and sustainability-related strategy during four out of the six meetings.

The Nominating and Governance Committee of the Board oversees investment stewardship, public policy, corporate sustainability and social impact activities. The Committee periodically reviews corporate and investment stewardship-related policies and programs, as well as significant publications relating to environmental (including climate) and other sustainability matters. As appropriate, it makes recommendations on these matters to be reviewed by the full Board. The Committee also periodically reviews the firm's approach to public policy and advocacy activities, including public policy priorities

and memberships in trade associations, as well as the philanthropic programs of the firm and related strategies.

BlackRock's Board is responsible for overseeing risk management activities. The Risk Committee of the Board assists the Board with its oversight of BlackRock's risk assessment and risk management, including with respect to climate and other sustainability risks.

Management oversight

BlackRock's senior management oversees progress towards the firm's strategic objectives, including climate- and sustainability-related objectives. Exhibit G.1 provides an overview of the management committees that share responsibility for management of various climate and other sustainability-related risks and opportunities.

Exhibit G.1: Sustainability-related management committees

Global Executive Committee

Sustainability-related responsibilities

- Led by the Chief Executive Officer and consisting of BlackRock's senior leadership team, the GEC sets the strategic vision and priorities of the firm and drives accountability at all levels.
- Actively involved in the development of, and receives updates on, BlackRock's sustainability strategy.

Investment Sub-Committee of the GEC

Sustainability-related responsibilities

- Oversees investment process consistency across the firm's investment groups.
- Members include the Chief Risk Officer and the global heads or sponsors of all major investment divisions.
- Oversees environmental, social and/or governance integration in BlackRock's firmwide processes where financially material.

Functional groups

In practice, sustainability, including climate, is integrated into different business units across the firm. Several teams focus on sustainability, while others integrate sustainability into their broader functional responsibilities, as appropriate.

Exhibit G.2: Functional groups involved in sustainability-related (including climate) matters¹⁰

Team	Sustainability-related responsibilities	Management reporting line
Aladdin	<ul style="list-style-type: none"> Integrates third-party environmental, social and/or governance metrics on the Aladdin platform to support sustainability-related risk management, regulatory disclosures and reporting requirements. Develops proprietary climate risk analytics (Aladdin Climate) to support climate risk management and portfolio decarbonization analysis. 	Global Head of Aladdin is a GEC member
BlackRock Investment Institute (“BII”)	<ul style="list-style-type: none"> Produces macro and portfolio research, including BlackRock’s Capital Market Assumptions (“CMAs”). The Sustainable Investment Research and Analytics team produces sustainable investment insights, including thought leadership and research on investment implications of the low-carbon transition. 	Head of BII reports to a Vice Chairman (GEC member)
BlackRock Investment Stewardship	<ul style="list-style-type: none"> A dedicated function within BlackRock, which is responsible for stewardship activities on behalf of index equity strategies; engaging with companies, proxy voting on clients’ behalf, contributing to industry dialogue on stewardship, and reporting on its activities. 	Global Head of BIS is a GEC member
Corporate Sustainability	<ul style="list-style-type: none"> Leads efforts to drive operational sustainability, establish sustainable business programs and policies, and engage key stakeholders on BlackRock’s operational sustainability initiatives. 	Reporting line into Global Head of Corporate Affairs (GEC member)
Enterprise Services (“ES”)	<ul style="list-style-type: none"> Manages BlackRock’s owned and leased corporate footprint, including the energy efficiency and carbon reduction initiatives where BlackRock has operational control. Works alongside key stakeholders to plan and implement sustainability efforts in offices. Manages disaster recovery planning, strategy and crisis activities. Monitors adherence to local environmental regulations and manages the firm’s Environmental Management System. 	Global Head of ES reporting line to Global Head of Technology & Operations (GEC member)
Global Corporate Sustainability Controllers	<ul style="list-style-type: none"> Develops corporate climate- and sustainability-related disclosures globally, for both voluntary and mandatory reporting obligations. 	Global Controller reports into Chief Financial Officer (GEC member)

Team	Sustainability-related responsibilities	Management reporting line
Government Affairs & Public Policy (“GAPP”)	<ul style="list-style-type: none"> Engages in financial services public policy dialogue, including in relation to corporate disclosures, that include matters related to material risks and corporate sustainability, through engagement with policymakers and standard setters around the world, and through whitepapers, comment letters and consultation responses regularly published on BlackRock’s website. 	Heads of GAPP report to Global Head of Corporate Affairs (GEC member)
Global Product Solutions (“GPS”) /Sustainability and Transition Solutions (“STS”)	<ul style="list-style-type: none"> Drives commercial strategy, shapes the firm’s sustainability and transition product range and partners across the firm to deliver investment insights on topics such as the energy transition, physical climate risks and resilience. 	Chief Product Officer is a GEC member
Investment Divisions	<ul style="list-style-type: none"> BlackRock investment divisions include BlackRock Global Markets and Index Investments, Portfolio Management Group, Global Trading and Transition Management, Infrastructure and Equity Private Markets. Active portfolio teams manage exposure to financially material environmental, social and/or governance risks, and consider environmental, social and/or governance information in their investment processes, as applicable and consistent with client goals. Investment teams often have sustainability-focused units. 	Heads of major investment verticals are members of GEC and GEC Investment Sub-Committee
Legal & Compliance	<ul style="list-style-type: none"> Assists in development of sustainability-related disclosures and compliance with applicable sustainability-related regulatory and reporting requirements across the firm. 	General Counsel/Chief Legal Officer is a GEC member
Risk & Quantitative Analysis Group	<ul style="list-style-type: none"> Responsible for BlackRock’s Investment and Enterprise risk management framework which includes oversight of sustainability-related investment risks. Evaluates investment risks, including financially material sustainability risks, as part of regular investment risk management processes and, where applicable, during regular reviews with portfolio managers. This helps to ensure that such risks are understood, deliberate, and consistent with client objectives. Maintains a dedicated Sustainability Risk group that partners with risk managers and businesses to oversee sustainability risk across the platform. Consults with investors and sustainability experts across the firm to evaluate environmental, social and/or governance-related data, models, methodologies and/or analytics. 	Chief Risk Officer is a member of GEC and GEC Investment Sub-Committee

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.

BlackRock was founded with a commitment to understanding and managing investment risk, anticipating client needs, and working collaboratively to help clients achieve their investment goals. This dedication to making investing easier and more affordable is core to the firm's strategy.

Climate risk and the economic opportunities arising from the low-carbon transition are among the top priorities for many of BlackRock's clients. These clients ask BlackRock how to mitigate risk and capture opportunities associated with climate and the transition to a low-carbon economy. As a fiduciary, BlackRock considers relevant and material risks and opportunities that could impact portfolios, when consistent with investment guidelines. For clients interested in sustainability and the transition to a low-carbon economy, BlackRock offers a wide range of investment products, analytics and research to help them achieve their chosen investment objectives.

BlackRock recognizes that different clients have different investment preferences and objectives, and offers a wide range of investment products to help clients meet their investment goals, delivering on the instructions and guidelines that clients ultimately select. This section discusses how material climate-related risks and opportunities are managed by BlackRock with an emphasis on new developments in 2024.

Investment approach

As a fiduciary, BlackRock's investment approach is informed by three principles:

- 1** Understanding the client's investment objectives and then offering choice based on how and where clients wish to invest their money;
- 2** Helping clients seek the best risk-adjusted returns based on their choices; and
- 3** Underpinning its work with research, data and analytics.¹¹

As of January 2025, many of BlackRock's largest clients around the world, including 100% of the firm's largest client relationships in Europe, have made net zero commitments for their organizations.¹² In order to meet this client demand, BlackRock has created a leading sustainable and transition investment platform, described in more detail below.

Where relevant and consistent with the fund or account's investment objectives, BlackRock incorporates financially material climate data or information¹³ alongside other information, into firmwide processes, with the objective of enhancing the risk-adjusted returns of clients' portfolios. As with other investment risks and opportunities, the financial materiality of environmental, social and/or governance considerations may vary by issuer, sector, product, mandate and time horizon. Depending on the investment approach, this financially material environmental, social and/or governance data or information may help inform due diligence, portfolio construction, and/or monitoring processes of the portfolios, as well as the firm's approach to risk management.

Active investment teams may consider a range of sustainability metrics in the research, due diligence, portfolio construction and/or ongoing monitoring phases of the investment process. This information may include metrics such as emissions exposure per unit of output or investment (i.e., revenue, AUM, MWh), Science Based Targets initiative ("SBTi") alignment or transition directed capital expenditure, where applicable. In index portfolios, BlackRock's responsibility is to track a predetermined benchmark index. Therefore, index tracking investment approaches do not allow for consideration of sustainability metrics aside from those approaches where the underlying indices incorporate sustainability metrics in their explicit product design. Please refer to BlackRock's firm-level [ESG Integration Statement](#) for additional information.

Research is at the center of BlackRock's investment approach and processes. It informs the firm's investment decisions and product innovation. BlackRock researches major structural trends shaping the economy, markets and asset prices. BlackRock assesses how these trends could affect long-term value and how they could unfold over time. The transition to a low-carbon economy is one trend that the firm researches,¹⁴ because BlackRock sees it having implications on macroeconomic trends, company financial prospects and business models, and portfolios.

\$1tn

**in sustainable and transition investing
AUM¹⁵ (9% of total AUM)**

Sustainable and transition investment solutions.

To enable choice and meet client demand, BlackRock offers a wide range of sustainable and transition investment strategies to clients. As of December 31, 2024, BlackRock had over 500 sustainable funds globally

covering a spectrum of sustainable and transition solutions, as well as customized solutions to meet clients' objectives, and managed \$1 trillion of sustainable and transition investing AUM¹⁵ on behalf of clients.

BlackRock's sustainable and transition investment solutions provides clients with choice to invest in line with their specific investment goals and objectives. Across the available strategies, products use environmental, social and/or governance data as a portfolio construction input. A subset of those products also seek to achieve long-term sustainability outcomes, in line with each product's specific investment objective. These solutions include a variety of products and strategies that support the transition to a low-carbon economy.

Exhibit S.1: BlackRock sustainable and transition investing platform*

	Screened	Uplift	Thematic	Impact
Investment approach	Constrain investments by avoiding issuers or business activities with certain environmental, social and/or governance characteristics.	Commitment to investments with improved environmental, social and/or governance characteristics versus a stated universe or benchmark.	Targeted investments in issuers whose business models may not only benefit from but also may drive long-term sustainability outcomes .	Commitment to generate positive, measurable and additional sustainability outcomes .
Additional details	Includes use of screens and may be enhanced with active engagement with specific issuers.	Environmental, social and/or governance data drives portfolio construction and security selection with some strategies leveraging to target a specific objective.	Strategy construction determined by focused exposure to the specific environmental or social theme.	Investment process must showcase "intentionality" in line with Operating Principles for Impact Management.

* As of December 31, 2024.

Index investment strategies

Sustainable Exchange Traded Funds ("ETFs") remain one of the most dynamic segments within the ETF market. In 2024, iShares launched and/or converted over 30 sustainable index ETFs and mutual funds across the U.S., Europe, Asia-Pacific and Canada. As of December 31, 2024, BlackRock had over 200 sustainable index offerings globally.¹⁶

Examples of advancements made to the firm's sustainable index ETF landscape in 2024 include:

- iShares continued to expand its climate product offering, launching its Climate Transition Aware range — a suite of transition portfolio building blocks in EMEA, which allows investors to access companies with credible science-based targets and transition solution providers with sector neutrality.

- iShares also expanded and enhanced its U.S. climate product offering designed to be compatible with the objectives of the Paris Agreement by following a decarbonization trajectory, reducing exposure to climate-related transition and physical risks while pursuing opportunities arising from the transition to a low-carbon economy.

BlackRock engages with index providers and third-party vendors to promote the consistency and transparency of sustainability benchmark methodologies. Additionally, the firm advocates for clear metrics and methodologies to meet evolving regulations.

In index portfolios, BlackRock's responsibility is to track a predetermined benchmark index. Therefore, index tracking investment approaches do not allow for consideration of sustainability metrics aside from those approaches where the underlying indices incorporate sustainability metrics in their explicit product design.

Active investment strategies¹⁷

BlackRock manages active investment strategies across a range of asset classes including (i) equities; (ii) fixed income; and (iii) multi-asset strategies. In 2024, BlackRock continued to refine the active investment strategies available to clients to incorporate a greater range of sustainable and transition investment strategies. Below are some examples of the active investment strategies that incorporate climate-related considerations.

Fundamental equity. Fundamental equity investors construct high conviction, concentrated portfolios of listed equity names, which they believe have the best alpha potential. Selecting those companies is done through fundamental research, company meetings and a mosaic of information on industry, region and performance drivers, with the aim to deliver out-performance.

In fundamental active equities (“FE”), BlackRock’s approach to sustainable investing recognizes that a diverse range of investment strategies are necessary to tackle the significant sustainability goals of the firm’s broad client base. FE uses proprietary fundamental expert insights and leverages third party data, to construct portfolios and solutions to address clients’ needs, helping them achieve their sustainable or transition goals.

For clients who are seeking to invest in products or solutions aligned with sustainability or transition, the FE platform manages a range of funds with either advanced environmental, social and governance integration or dual objectives of alpha and sustainability/transition outcomes. These funds represent c. \$70 billion of client AUM, with exposures to specific regions, sectors or themes.

Dual objective funds include equity portfolios investing across the breadth of the market in companies capturing sustainable shifts as well as Thematic and Sector funds investing in specific sustainability and transition themes. Those funds have sustainable investment thresholds aligning company revenues to the United Nations Sustainable Development Goals, and in some cases, explicit climate objectives.

Active fixed income. BlackRock aims to give clients choice in how they invest, which includes providing sustainable fixed income products. Fixed income encompasses many different asset classes, with varying degrees of sustainability information available for each. BlackRock’s Fixed Income (“FI”) ESG team works with sector teams within BlackRock’s FI platform to identify relevant sustainability characteristics and develop tools to aid this process. The FI platform has developed a proprietary sustainability categorization that focuses on positive and negative externalities across fixed income asset classes. This framework drives several sustainability-focused strategies.

\$62bn
of investments in green bonds on
behalf of clients

The FI team has also developed investment strategies focused on certain fixed income impact opportunities. This currently includes strategies in U.S. municipal bonds and mortgages, as well as green and social bonds across developed and emerging markets. The FI ESG team has developed a proprietary shading taxonomy for green, social and sustainability bonds, which is utilized by active teams to understand the degree of impact inherent in a bond’s stated intended use of proceeds structure. From a data availability, issuer adoption, liquidity and standardization perspective, green bonds are the most mature. FI has been producing quantifiable green bond impact reports on green bond funds since 2018. Detailed and transparent reporting on the results of the funded projects is encouraged to help track whether green bond funds are delivering on their stated goals.

As of December 31, 2024, BlackRock invested \$62 billion, on behalf of clients, in green bonds across a range of portfolios¹⁸ and as a component of broader fixed income mandates. These bonds support a variety of green projects, including renewable energy, energy efficiency and clean transport, among other relevant project categories outlined by the International Capital Markets Association Green Bond Principles.

Systematic strategies. The BlackRock Systematic team (“BSYS”) specializes in harnessing vast datasets and technological innovation to uncover potential sources of alpha. The digital age has created a vast amount of sustainability and climate-related data, expanding the scope of traditional investment research to capture the link between sustainability and alpha generation. BSYS produces research on a variety of topics including employee and customer welfare, supply chain, and climate-related insights. As an example of a topic covered in these insights, BSYS found that companies operating buildings with Leadership in Energy and Environmental Design (“LEED”)¹⁹ certifications often demonstrate greater operational efficiency and can subsequently exhibit better financial performance. The LEED buildings themselves have resulted in better environmental outcomes for the communities in which they operate.²⁰ These types of sustainable alpha signals — which aim to deliver returns while also improving environmental and social outcomes — are a key focus of BSYS sustainable research.

The quantitative and innovation-focused investment process of systematic investing is well suited to incorporating sustainable considerations in portfolio construction, where clients choose to do so. BSYS can integrate sustainable investment considerations in three distinct ways. As a foundation, BSYS can align portfolios to match the preferences of BlackRock's clients. This can be done through a simple screening process to remove specific securities and/or activities from the investment universe based on client preferences. Next, BSYS can seek to uplift portfolios by targeting securities with enhanced sustainability metrics without materially altering the risk and return characteristics of the portfolio. Finally, BSYS can seek incremental risk-adjusted returns through these proprietary, forward-looking insights on sustainability, using the same scientific testing process developed over decades to uncover potential drivers of future security performance and sustainable outcomes.

Private markets

BlackRock's private markets encompasses both equity and debt capabilities, including direct private equity (venture and growth equity strategies), infrastructure, real estate, secondaries, corporate credit (direct lending, opportunistic and venture and growth strategies), and multi-debt solutions.

Private markets infrastructure

BlackRock's infrastructure investment teams have been at the forefront of investing in the low-carbon transition for over a decade for clients interested in those investments. Such transition infrastructure investments include those in wind, solar, electric vehicle infrastructure, battery energy storage systems, natural gas, energy efficiency, sustainable mobility, carbon capture, transmission and grid infrastructure, amongst others. BlackRock has built a suite of transition capabilities that enables its clients to access the multi-trillion-dollar investment opportunity²¹ in private markets through climate, diversified and evergreen infrastructure strategies, as well as infrastructure debt and solutions.

In 2024, BlackRock closed its acquisition of GIP. The combination of GIP with BlackRock's existing private markets infrastructure platform creates an industry leader in infrastructure across equity, debt and solutions — providing a diverse range of infrastructure sector expertise and exposure across developed and emerging markets. The acquisition of GIP created a \$170 billion infrastructure platform²² providing added capabilities to the firm's existing infrastructure offerings.

GIP is a leading investor in critical and transition investments, including renewables, with over \$27 billion of equity invested/committed (including co-investment) in renewable platforms and companies since inception²³ and a current portfolio of 37GW in operating assets with an additional 201GW in construction/development capacity.²⁴

Cash management

To give clients a choice in how to invest their cash, BlackRock offers a range of cash investment solutions that include strategies with a focus on sustainability considerations. The BlackRock Liquid Environmentally Aware funds (the "LEAF funds"), which seek to offer the stability, liquidity and yield potential of a money market fund while considering environmental criteria, are a suite of funds that were launched in 2019. With investors continuing to allocate to cash strategies amidst heightened market volatility in 2024, alongside money market yields, global assets in the LEAF funds increased to over \$28.8 billion.²⁵ These funds consider select environmental criteria alongside some exclusionary screens, in addition to BlackRock's standard credit risk assessment process for liquidity management portfolios.²⁶ The EUR, GBP and USD LEAF funds registered in Ireland are categorized as Article 8 under the European Union's Sustainable Finance Disclosures Regulation ("SFDR"). In addition to the LEAF funds, BlackRock manages a suite of Irish domiciled Low Volatility NAV and standard money market funds across EUR, GBP and USD currencies that are also categorized as Article 8 under the European Union's SFDR, with total assets in this category of funds increasing to \$252 billion in 2024.

Additionally, annually, BlackRock's Cash Management group purchases and retires Certified Emission Reduction ("CER") units via the World Bank, as trustee for the Adaptation Fund, an international fund that finances projects and programs aimed at helping developing countries adapt to the adverse effects of climate change.

Investment stewardship²⁷

Investment stewardship is one of the ways in which BlackRock fulfills its fiduciary responsibilities as an asset manager to its clients. BIS serves as a link between BlackRock's clients and the companies the firm invests in on their behalf. The team aims to build constructive relationships with companies and encourage corporate governance practices that can contribute to long-term financial value creation. BIS does this by engaging with investee companies and proxy voting on behalf of BlackRock's clients who have given the firm such authority.

Most of BlackRock's clients are investing to meet long-term goals, such as retirement. To that end, BIS takes a long-term approach to stewardship, focused on engaging with company boards and executive leadership to understand the drivers of risk and financial value creation in companies' business models. BIS' approach to stewardship is outlined in its benchmark global policies, which are comprised of the BIS [Global Principles](#), [regional voting guidelines](#), and [Engagement priorities](#).

Consistent with prior years, in 2024, BIS engaged with companies on five priorities that, in the team's experience, support long-term financial performance: Board quality and effectiveness; strategy, purpose and financial resilience; incentives aligned with financial value creation; climate and natural capital; and company impacts on people.

In the 2023-2024 proxy year, BIS held 3,599 engagements with 2,495 companies globally.²⁸ BIS held 1,254 engagements with 1,059 companies on climate and natural capital.²⁹ BIS engages directly with a company's board and management to listen to their perspectives on material business risks and opportunities they are facing to help make more informed voting decisions. BIS' approach on these issues is described in its engagement priorities available here: [BIS Engagement Priorities](#).

Companies determine the best approach for addressing their material climate-related risks and opportunities, if any, given their business models, sectors, and areas of operations. At companies where these risks are material, BIS finds it helpful when they publicly disclose, consistent with their business models and sectors, how they intend to deliver long-term financial performance through a transition to a low-carbon economy, including, where available, their transition plan.³⁰ BIS notes that climate-related financial disclosures will be mandatory in the near term in a number of jurisdictions.³¹

Long-term investors can make better informed investment decisions when they understand how a company's business model is resilient to material sustainability-related risks, such that the company can deliver durable, long-term financial returns. Such reporting is most useful to investors' understanding when it covers governance, strategy, risk management, and metrics and targets, including industry-specific metrics. In the context of climate-related reporting, the ISSB standards, specifically S2³² provide companies with a useful guide to prepare this disclosure. The standards build on the TCFD recommendations and the standards and metrics developed by the Sustainability Accounting Standards Board ("SASB"), which have converged under the ISSB.^{33,34}

In BIS' experience, disclosure consistent with the ISSB standards or the TCFD framework can help investors assess company-specific climate-related risks and opportunities, and inform investment decisions.³⁵ Such disclosures also provide investors with insights into how companies are managing the risks associated with climate change by managing their own carbon emissions or emissions intensities to the extent financially practicable. Recognizing the value of these disclosures, in some jurisdictions, like the UK, large companies must disclose such climate-related financial information on a mandatory basis, while in other jurisdictions these disclosures are viewed as best practice in the market.

Throughout the 2023-2024 proxy year, BIS continued to observe companies expand their climate-related reporting in alignment with the TCFD. With the absorption of TCFD by the IFRS Foundation, BIS will continue to discuss with companies whether and how they plan to align their reporting with the S2 climate-related disclosure standard.

BIS encourages boards to oversee management's approach to addressing material climate risk in a company's business model. Regarding shareholder proposals, BIS evaluates each shareholder proposal on its economic merit, considering the company's individual circumstances and maintaining a singular focus on the proposal's implications for long-term financial value creation.

BlackRock Voting Choice

While many asset owners have authorized BlackRock's stewardship team to cast proxy votes on their behalf, others want the choice to participate more actively in the proxy voting process. In January 2022, BlackRock launched BlackRock Voting Choice, a capability that gives eligible clients — who are the true owners of the assets the firm manages — the option to engage more directly in proxy voting where legally and operationally viable.

In 2024, BlackRock announced the addition of Egan-Jones as the third proxy advisor on BlackRock's Voting Choice platform beginning in July 2024.

In early 2024, BlackRock extended the Voting Choice program to its largest ETF for the 2024 proxy voting season. With this expansion, BlackRock is empowering millions of shareholder accounts in the U.S., which will enable around half of its global index equity AUM to be eligible to participate in Voting Choice.*

BlackRock also introduced a new stewardship option in July 2024 for clients focused on decarbonization investment objectives. The climate and decarbonization stewardship program applies only to funds that have climate and decarbonization objectives and that have been explicitly approved for inclusion in the program by the respective governing body of the fund. Separately managed account clients may also instruct BlackRock to apply the program to their holdings.

BlackRock is committed to providing clients with a range of choices to support their individual investment needs and preferences.

* Source: BlackRock. Client funds participating in BlackRock Voting Choice are as of December 31, 2024.

Risks, opportunities and scenario analysis

BlackRock recognizes the importance of effective identification, monitoring, and management of climate-related risks and opportunities across its global business and corporate operations.

BlackRock's exposure to climate-related risk is primarily indirect, with such risks having the potential to affect future revenues and expenses, as opposed to assets and liabilities. The assets that BlackRock manages belong to BlackRock's clients, not BlackRock. BlackRock typically earns investment management fees as a percentage of AUM. BlackRock also earns performance fees on certain portfolios relative to an agreed-upon benchmark or return hurdle. For some products, BlackRock also earns securities lending revenue.

BlackRock also offers technology services, including the Aladdin investment and risk management platform, as well as advisory services and solutions to a broad base of institutional and wealth management clients. Revenue for these services may be based on several criteria including value of positions, number of users or accomplishment of specific deliverables.

Although BlackRock's global offices could be impacted by adverse physical climate events, the direct financial impact to BlackRock is limited.

Exhibits S.2a and S.2b provide an overview of climate-related risks and opportunities that BlackRock has identified.

Exhibit S.2a: Summary of key climate-related opportunities

Opportunity	Description	Primary anticipated financial impact*
Products and services Investment solutions	BlackRock believes that its \$1 trillion in dedicated sustainable and transition investment strategies is well-positioned to meet the demand of clients who are seeking to invest in products aligned with sustainability. ¹⁵	Increased revenues
Products and services Aladdin	There is increasing demand from Aladdin clients to understand the exposure to climate-related risks and opportunities in their portfolios. Building on BlackRock's strength in risk management through the Aladdin platform, BlackRock launched Aladdin Climate to quantify climate-related risks and opportunities in financial terms by bridging climate science, policy scenarios, asset data and financial models to arrive at climate-adjusted valuations and risk metrics. ³⁶	Increased revenues
Resource efficiency Operations	As a corporate entity, BlackRock pursues a strategy that is focused on reducing GHG emissions and increasing the efficiency of the firm's operations, where possible. Finding innovative solutions to increase energy efficiency at BlackRock's facilities and data centers, and leveraging low-carbon energy sources such as renewable electricity, reduces the firm's corporate GHG emissions footprint.	Reduced expenses

* There is no guarantee that the primary anticipated financial impact referenced above will be achieved.

Exhibit S.2b: Summary of key climate-related risks**

Risk	Description	Primary anticipated financial impact
Market	Market-related risks are among the key risks to BlackRock's business. Fluctuations in asset value due to climate-related risks could affect client investment strategies or allocations in a manner that could impact BlackRock's business.	Reduced revenues
Product	Changes in client preferences and/or changes to regulation relating to climate considerations may impact product demand and in turn may impact BlackRock's revenue and earnings.	Increased expenses and/or reduced revenues
Reputation	BlackRock is subject to preferences from different stakeholder groups with various views on climate-related matters, which may present real or perceived reputational risks that could impact BlackRock's business.	Reduced revenues
Regulatory	New, extensive and/or divergent environmental and sustainability-related disclosure requirements, regulations, guidance or taxes that apply to BlackRock's products or other aspects of BlackRock's operations could increase compliance costs or require BlackRock to alter business or operating activities. New laws, regulations or guidance could affect client investment strategies or allocations in a manner that could impact BlackRock's business.	Increased expenses and/or reduced revenues
Physical	BlackRock's global offices could be impacted by adverse climate events, however, the direct financial impact is limited, as BlackRock leases most of its facilities ³⁷ and evaluates such sites for physical risks during the selection process. Further, BlackRock maintains insurance, which helps to mitigate the potential financial impact of physical climate-related risks. Additionally, BlackRock maintains business continuity plans to facilitate the continuity of business in the event of a business disruption, which can include disruptions related to physical climate-related risks.	Increased expenses

** The inclusion of climate-related risks in Exhibit S.2b should not be construed as a characterization regarding materiality or financial impact of these risks. For a discussion of risks that BlackRock has determined could be financially material, please see Item 1A. Risk Factors in BlackRock's Annual Report on Form 10-K, as well as the firm's subsequent Form 10-Q filings.

Climate scenario analysis

Climate scenario analysis allows an organization to develop insight into how the physical and transition risks and opportunities arising from climate change might impact its business and corporate operations over time. While climate scenario analysis is not meant to predict the future, it allows organizations to explore possible outcomes, the assumptions these outcomes depend upon, and the courses of action and/or events that could bring these outcomes about. The risks of climate change can be considered in two categories: transition and physical risks.

Transition risk. Climate-related transition risks arise as the economy moves from a reliance on carbon-based energy toward a low-carbon economy through policy, regulation, technology and market changes. Depending on the nature, speed and focus of these changes, the global climate transition is expected to create meaningful shifts within sectors and across the entire economy.

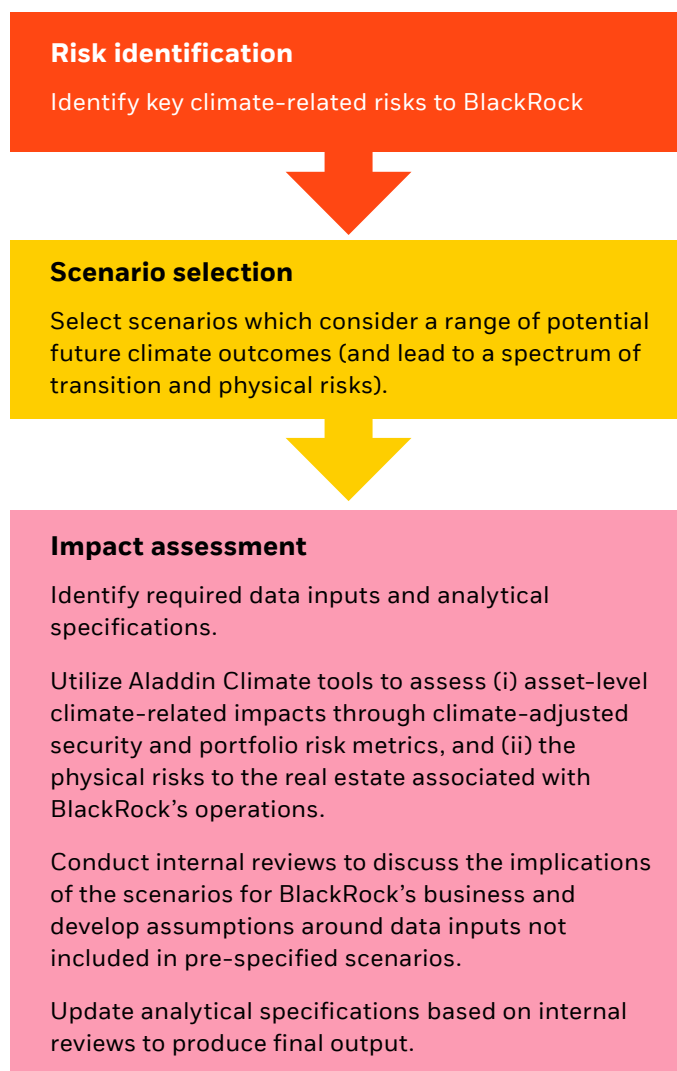
Physical risk. Physical climate-related risks may consist of acute impacts such as more extreme weather and climate events, or chronic impacts representing longer-term shifts in the climate such as temperature increases and sea level rises. Such risks may impact operations, leading to impairment of infrastructure and facilities, as well as disrupting supply chains.³⁸

2024 scenario analysis

In 2024, BlackRock conducted its analysis on the valuation of its AUM and the associated management fees generated from that AUM, and an assessment of the potential climate-related impacts on BlackRock's corporate operations. The firm utilized scenarios from the Network for Greening the Financial System ("NGFS")³⁹ and the Inter-governmental Panel on Climate Change ("IPCC").⁴⁰ The NGFS scenarios readily provide analytics to assess both physical and transition risks, while the IPCC scenarios are largely focused on assessing physical risks.

BlackRock's 2024 climate scenario analysis involved the key steps outlined in Exhibit S.3.

Exhibit S.3: Steps of BlackRock's climate scenario analysis



Note: Exhibit S.3 is intended for illustrative purposes only.

Scenario selection

A key unknown within the context of the global climate transition is the degree of orderliness and the timing under which the transition will unfold. Exhibit S.4⁴¹ and Exhibit S.5⁴² illustrate a range of both NGFS and IPCC scenarios and highlight that the scenarios reflect a variety of outcomes⁴³ and provide a range of plausible climate transition pathways.

BlackRock leveraged the IPCC Shared Socioeconomic Pathway (“SSP”) scenario, SSP5-8.5, in addition to three NGFS scenarios,⁴⁴ Orderly – Net zero 2050, Disorderly – Delayed transition, and Hot House World – Current policies. BlackRock selected one scenario from each of the NGFS categories in its analysis.

Exhibit S.4: NGFS scenarios characterized by physical and transition risks*

Category	Scenario	Physical risk	Transition risk			
		Policy ambition	Policy reaction	Technology change	Carbon dioxide removal	Regional policy variation**
Orderly	Net zero 2050	1.4°C	Immediate and smooth	Fast change	Medium-high use	Medium variation
	Below 2°C	1.6°C	Immediate and smooth	Moderate change	Medium-high use	Low variation
Disorderly	Divergent net zero	1.4°C	Immediate but divergent across sectors	Fast change	Low-medium use	Medium variation
	Delayed transition	1.6°C	Delayed	Slow/fast change	Low-medium use	High variation
Hot House World	National Determined Contributions (“NDCs”)	2.6°C	NDCs	Slow change	Low-medium use	Medium variation
	Current policies	3°C+	None – current policies	Slow change	Low use	Low variation

The color coding in the chart indicates whether the characteristic makes the scenario more or less severe from a macro financial risk perspective:† ■ Lower risk ■ Moderate risk ■ Higher risk

* Adapted from NGFS Climate Scenarios for central banks and supervisors. Original figures and additional information available from the NGFS: “NGFS Climate Scenarios for central banks and supervisors,” available at: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors_.pdf.pdf

** According to the NGFS, “Risks will be higher in the countries and regions that have stronger policy. For example in Net Zero 2050, various countries and regions reach net zero GHGs by 2050, while many others have emissions of several Gt of CO² eq.” Please see additional information from the NGFS: “NGFS Climate Scenarios for central banks and supervisors,” available at: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors_.pdf.pdf

† According to the NGFS, “This assessment is based on expert judgement on how changing this assumption affects key drivers of physical and transition risk. For example, higher temperatures are correlated with higher impacts on physical assets and the economy. On the transition side, economic and financial impacts increase with: a) strong, sudden and/or divergent policy, b) fast technological change even if carbon price changes are modest, c) limited availability of carbon dioxide removal meaning the transition must be more abrupt in other parts of the economy, d) stronger policy in those particular countries and/or regions.” Please see additional information from the NGFS: “NGFS Climate Scenarios for central banks and supervisors,” available at: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors_.pdf.pdf

Exhibit S.5: Scenarios from the IPCC Sixth Assessment Report*

Global mean surface temperature rise by end-of-century		
Scenario	Best estimate	"Very likely" range
SSP1-1.9	1.4°C	1.0°C to 1.8°C
SSP1-2.6	1.8°C	1.3°C to 2.4°C
SSP2-4.5	2.7°C	2.1°C to 3.5°C
SSP3-7.0	3.6°C	2.8°C to 4.6°C
SSP5-8.5**	4.4°C	3.3°C to 5.7°C

* Adapted from IPCC's Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Additional information is available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf

** SSP stands for "Shared Socioeconomic Pathways," which describe the narratives of a range of plausible futures that underpin the global climate model simulations included in the IPCC Sixth Assessment Report. The "very likely" range is provided by the IPCC as outcomes with an associated probability of 90-100% for a given scenario. These scenarios cover a range of possible futures but there is no assessment of the likelihood of individual scenarios. Reference period for the temperature rise estimates is the period between 1850-1900.

Impact assessment on BlackRock's AUM

BlackRock developed analytical specifications to consider the potential impact to BlackRock's AUM and operating margin across the chosen scenarios. As BlackRock derives revenues from management fees earned on AUM, key elements of the specifications included:

- BlackRock's AUM broken down by asset class and investment style;
- Management fees, establishing the management fee level for each analyzed asset class and investment style;
- Aladdin Climate analytics to assess asset class level climate-related impacts to BlackRock's AUM through climate-adjusted security and portfolio risk metrics;
- Market return assumptions based on BlackRock's CMAs; and
- Assumptions around client behavior in response to the respective scenarios derived from internal reviews with subject-matter experts across the firm.

Impact assessment on BlackRock's operations

BlackRock produced an impact assessment of physical risks on the firm's operations by carrying out the following steps:

- Compiled a list of all real estate and data centers associated with BlackRock operations;
- Identified a set of climate-driven hazard metrics of interest (e.g., 1-in-100-year flood event, 1-in-100-year wildfire event, probability of an asset being located below mean sea-level) under the same set of climate scenarios included in the AUM impact assessment;
- Incorporated Aladdin Climate data to calculate the values of these climate-driven hazard metrics at each facility location through 2050, and flagged facilities with high exposure (e.g., present within the 1-in-100-year flood zone);
- Compared Aladdin Climate analysis with third party data used by BlackRock's Enterprise Resilience and Safety team to assess the risk of climate-related incidents; and
- Reviewed results in detail with the Aladdin Climate and Enterprise Resilience and Safety teams as well as other stakeholders within the firm to assess potential impacts of climate-related risks to the firm's operations.

Conclusions

Scenario analysis is a dynamic exercise and an iterative process that is meant to help envision potential future outcomes, rather than predict the future. The climate scenario analysis exercise conducted by BlackRock provides a structured way to evaluate climate-related risks and opportunities and it opens a wider discussion as to how transition and physical risks could affect BlackRock's AUM and operations.

The results of the analysis indicate that BlackRock's diversified platform and commitment to providing choice to its clients creates flexibility in its business model that is likely to support the firm's resilience as it adapts to the impacts of both transition and physical climate-related risks.

While BlackRock's AUM and associated revenues and profit margin have the potential to be impacted by climate change, each scenario reviewed presented different plausible challenges, risks, and opportunities that may occur through 2050.

Over the long-term through 2050, if significant acceleration in the low-carbon transition occurs, the potential magnitude of physical climate-related risks may be reduced. However, in the short- and medium-term, delayed transition scenarios create risks that would need to be managed, including through continued efforts to adapt BlackRock's business to account for the global transition to a low-carbon economy.

In assessing the physical climate impacts to BlackRock's owned and leased real estate, the impact was found to be limited across the firm's global footprint. BlackRock leases most of its facilities and the Enterprise Resilience and Safety team within Enterprise Services have developed global emergency action and business continuity plans that account for possible physical climate-related risks. These plans are reviewed on an annual basis and updated as needed. BlackRock also maintains insurance which helps to mitigate the potential financial impact of physical climate-related risk to its real estate footprint.

BlackRock's existing business continuity strategies go beyond direct impacts to offices and data centers and also address impacts of critical infrastructure that may cause business interruption. BlackRock can exercise work transfer and remote work scenarios to address issues such as the inability to commute to the office or power disruption. Overall, the Enterprise Resilience and Safety team has the necessary monitoring and tools to facilitate early-warning procedures and actions that can be operationalized for any BlackRock facility worldwide.

Limitations

As with any scenario analysis, there are limiting factors worth highlighting.

First, assessing and quantifying the impact of climate change is inherently complex — in how climate change will impact asset values and facility locations, how companies will react to regulatory and market pressures, as well as how BlackRock's clients will react and adapt to those impacts.

With that, there are uncertainties that arise from the climate scenarios formulated by NGFS itself, as these scenarios also partly rely on assumptions on policy, technology, and society. Furthermore, the NGFS has self-identified several gaps in its approach relating to scope, coherence, and uncertainty, which can further limit BlackRock's climate scenario analysis.⁴⁵ Similarly, there are also uncertainties associated with the scenario development carried out for the IPCC Sixth Assessment Report, including on the assumptions on policy, technology, and society included in the narratives of each scenario.⁴⁶

As such, BlackRock reiterates that this discussion is intended to highlight the tools and analytical specifications the firm established to refine its understanding of potential climate-related risks and opportunities; it is not meant to predict future outcomes.

Operations

In operating its own business, BlackRock pursues a sustainability strategy that is focused on reducing GHG emissions associated with its facilities, data centers, and upstream value chain and addressing emissions it otherwise cannot yet reduce through market solutions such as renewable energy, Sustainable Aviation Fuel ("SAF"), and carbon credits.

In 2024, BlackRock made progress in its operational sustainability strategy by employing energy efficiency strategies, achieving its 100% renewable electricity match goal,⁴⁷ building upon its SAF and carbon credit procurement processes, and driving forward BlackRock's Supplier Sustainability Program.

BlackRock set science-aligned emissions reduction goals in 2020 to underpin its operational sustainability strategy. Since then, both the global transition and business environment have evolved creating uncertainty regarding the pace of the transition. BlackRock also underwent significant inorganic growth in 2024, prompting the firm to review its GHG emission reporting and its corporate sustainability goals. This review ensures the firm's strategy, including reporting and goals, aligns with the latest best practices while remaining feasible. BlackRock's strategy is subject to change based on the needs of the firm's stakeholders, including clients and shareholders, as well as the size and shape of the firm's business. Furthermore, these goals and BlackRock's ability to make progress, and the pace at which progress is made, are influenced by technological advancements, public policies, legal and regulatory obligations and market conditions. They are set with the intention to drive the long-term success of BlackRock and the success of its clients. As such, BlackRock is reassessing its GHG emissions reporting and goals to reflect the growth its business has experienced and the pace of the low-carbon transition. These updates will be addressed in future reports.

Below is a discussion of the efforts and initiatives that BlackRock is pursuing to embed sustainable business practices with the goal of reducing operational emissions and addressing its remaining emissions over time in line with its strategy.

Energy efficiency

Some of the largest sources of BlackRock's operational emissions footprint come from the use of its facilities through energy consumption (e.g., electricity and heating). As BlackRock is primarily a tenant in multi-tenant buildings globally, energy efficiency initiatives are undertaken at an individual office level, where possible. In 2024, BlackRock continued to engage landlords and advocate for sustainable choices, such as procuring renewable energy and obtaining or updating sustainability building certifications. Most notably, in 2024 BlackRock conducted energy audits at several offices in the U.S. to identify operational energy conservation measures.

Clean energy

Along with energy efficiency in operations, BlackRock also continues to procure energy from clean sources, where possible. In 2024, several of BlackRock's landlords switched to procuring renewable energy in certain office locations in Asia-Pacific and Europe. Where direct renewable energy contracts are not available due to limited operational control as a tenant, BlackRock purchases energy attribute certificates ("EAC") and green tariffs. Using this multi-faceted approach, BlackRock has achieved its 100% renewable energy match goal since 2020.

Offices and facilities

In 2024, BlackRock continued renovating a 140,000 square foot office in Edinburgh, UK. Building on BlackRock's past work in establishing sustainable design standards, this office will deploy energy efficient equipment and recycled building materials. BlackRock made additional progress in 2024 towards its operational sustainability strategy by embedding sustainable practices throughout global offices. Actions taken include the elimination of single use plastics at certain local offices, conducting waste audits, and implementing sustainable design standards. To drive these efforts, BlackRock has expanded its dedicated Global Sustainable Operations team within Critical Site Operations to implement strategic GHG emissions reduction initiatives, enhance reporting practices and manage clean energy procurement.

Business travel

BlackRock recognizes the environmental footprint of travel but also acknowledges that travel is a critical component of conducting business with its clients and employees.

BlackRock is exploring ways to reduce travel emissions through operational changes and through mechanisms such as SAFc.⁴⁸ In 2024, BlackRock expanded its procurement and engagement in the SAF market by pursuing SAF initiatives that address the firm's commercial aviation emissions associated with employee business travel. In doing so, BlackRock joined the Sustainable Aviation Buyers Alliance⁴⁹ ("SABA") as a corporate buyer and procured SAFc, which represent certified emissions reductions from cleanly-fueled air travel, through Watershed, who is an aggregator partner of SABA helping to accelerate investment in and adoption of SAF.

Supplier engagement

BlackRock continued to drive progress through the firm's Supplier Sustainability Program. To date, BlackRock has engaged with suppliers representing 58% of the firm's emissions⁵⁰ (based on spend) to better understand their sustainability efforts including their GHG emissions measurement, goals, and reduction strategies, if any, and improve the accuracy and granularity of BlackRock's supplier emissions data.

Through these engagements, suppliers are able to verify information on their sustainable commitments. Suppliers representing approximately 37%⁵¹ of the firm's emissions have committed to setting or have set science-based targets validated by the SBTi.

Market solutions

As a part of its operational sustainability strategy, BlackRock supports nascent market solutions and emerging technologies, such as SAF and carbon dioxide removal, to enable them to scale while also acknowledging that these purchases do not replace reducing the firm's operational emissions. BlackRock does not solely rely on purchases of these market solutions to achieve emissions reduction but recognizes that investment in these solutions is supplemental to its strategy, which is focused on avoiding and reducing operational emissions first.

SAF

In 2024, in addition to joining SABA, BlackRock expanded its efforts to work with certain airlines, fuel producers, and aviation partners to identify procurement opportunities for book-and-claim⁵² and physical SAF uplift. Building upon its book-and-claim program which began in 2022, BlackRock purchased 125,000 gallons of neat SAFc in 2024. In doing so, BlackRock supports the development of SAF as a near-term lever and leading decarbonization solution for aviation emissions.

Carbon credits

As part of BlackRock's efforts to address emissions outside of its value chain, BlackRock purchases what it considers to be high-quality carbon removal credits to invest in projects with greater climate impact, advance deployment of carbon removal technologies, and to address the emissions from its operations that cannot currently be avoided or reduced. Building upon the selection criteria and due diligence process BlackRock established in 2023, the firm enhanced its carbon credit portfolio⁵³ in 2024 by investing in all technology vectors (of nature-based, hybrid-based, and engineered-based removal credits with higher durability. BlackRock will continue to explore and evaluate projects and emerging technologies that may contribute to or benefit from the low-carbon transition.

Social impact

Social impact represents the firm's charitable arm and consists of two distinct pillars: (i) The Foundation, which funds and partners with organizations that elevate the voices and experiences of low- to moderate-income households; and (ii) Social Impact employee engagement programs, which enable employees to drive local impact.

Below are examples of the **Foundation's philanthropic efforts** that support the low-carbon transition:

- **Breakthrough Energy Catalyst.** Since September 2021, the Foundation has championed clean technology innovations through its 5-year \$100 million grant to Breakthrough Energy Catalyst. Founded by Bill Gates in 2015, Breakthrough Energy aims to accelerate the transition to a low-carbon economy, through investment vehicles, philanthropic programs, policy advocacy and other activities. The Catalyst program is a unique model to finance new solutions for a low-carbon economy, focusing on five technology areas: SAF, long-duration energy storage, green hydrogen, direct air capture and green manufacturing. As of November 2024, Catalyst had announced five projects funded with philanthropic capital, including a new investment in Rondo Energy. In June 2024, Breakthrough Energy Catalyst, alongside the European Commission and the European Investment Bank, committed €75 million to Rondo Energy to develop industrial decarbonization projects across Europe.⁵⁴

With this funding, Rondo will expand its European presence and build three projects delivering low-cost clean energy:

- 1 Decarbonizing Chemical Production in Germany:** Rondo will provide clean energy services for Covestro, a leading specialty chemical company, at a facility in Northern Germany. A Rondo Heat Battery (“RHB”) 100 will deliver continuous steam powered by intermittent wind energy, supporting Covestro’s commitment to circularity and decarbonization.
- 2 Decarbonizing Manufacturing Processes in Denmark:** Rondo will build a “Clean Utilities Core” for GreenLab’s Industrial Park in Skive, Denmark. An RHB100 powered by renewables will generate high-pressure steam to drive a CHP steam turbine generator cycle, translating intermittent electricity into baseload heat and power for multiple clients.
- 3 Decarbonizing Food and Beverage Production:** Rondo will build a project that charges from on-site and off-site solar, delivering deep decarbonization for a European producer in the food and beverage sector. Further details will be announced soon.

Below are examples of **Social Impact’s employee engagement programs** that support local communities:

- **Supporting climate-focused charities.** In 2024, employee donations and BlackRock-matched contributions to climate-focused charities totaled \$628,039.⁵⁵
- **Responding to natural disasters.** The BlackRock Foundation responded to multiple natural disasters in 2024 with corporate grants to several organizations. The Foundation supported the American Red Cross with two grants of \$100,000 each, one for spring storms and floods relief in the American Midwest and Southeast and one for disaster relief efforts in the wake of Hurricane Helene. Additional disaster relief grants were made to support Hurricane Helene recovery efforts including \$100,000 to Team Rubicon USA and \$25,000 to United Way of the Piedmont. The Foundation also made a direct contribution of \$500,000 to Volunteer Florida Foundation to support Hurricane Milton response efforts, and a EUR 100,000 contribution to Cruz Roja in support of recovery efforts after the floods in Valencia. In addition, The Foundation has also made a \$100,000 grant to Team Rubicon for general disaster-preparedness.
- **Employee-driven grantmaking.** Social Impact runs a community grantmaking program (“Gives”) and a network grant program (“Network Grants”), which enable employees to champion a range of cause areas and organizations, including climate and environment-focused nonprofits. In 2024, Gives

directed approximately \$3.1 million to 232 organizations in over 100 communities which included \$120,691 in funding to 8 nonprofit organizations dedicated to environmental conservation in the UK, the U.S., India, and Singapore. In addition, the Network Grants program has also directed \$200,000 in funding to support various BlackRock Green Team Network (“GTN”) initiatives and programs.

- **Employee volunteering.** 39% of BlackRock’s employees volunteered in their communities in 2024, including park, forest and water clean-ups, tree plantings, wildlife and pet shelters support and recycling projects. The Global Tree Planting Campaign continued into its fifth year with over 59,000 trees planted since 2019. The employee-run GTN launched its global Sustainability Chronicles video series, as part of a broader project to continue to educate employees on sustainable living and achieving sustainable offices across BlackRock’s global offices in cooperation with the Corporate Sustainability Team. As part of GTN’s Earth Month, two expert global panels provided educational information on biodiversity and carbon credits. In addition, GTN ran its annual 2:1 matching program, during which the grantees for 2024, EarthWatch, One Tree Planted and Wildlife Conservation Society, were invited to present at a GTN townhall and subsequently raised over \$12,000.

Industry engagement and public policy

BlackRock advocates for public policies that it believes are in the long-term financial best interests of the firm’s clients and shareholders. In doing so, BlackRock supports the creation of regulatory regimes that increase financial market transparency, protect investors, and facilitate the responsible growth of capital markets, while preserving consumer choice and properly balancing benefits versus implementation costs. BlackRock’s Government Affairs and Public Policy team contributes to financial services public policy discourse. The team comments on public policy topics through, among other things, its published *ViewPoints* series of whitepapers,⁵⁶ which examine public policy issues and assess their implications for investors, and through comment letters and consultation responses that BlackRock submits to policy makers and publishes on the firm’s website.⁵⁷

As it relates to climate and sustainability disclosure related policy matters, BlackRock strives to engage constructively in the global dialogue through participation in industry trade associations as well as through engagement with policymakers and standard setters around the world.

Industry initiatives

In order to better serve the firm's clients, BlackRock participates in hundreds of organizations and trade groups relevant to clients across different issues, sectors, and regions, and participates in dialogue that may impact client portfolios.

Participation in these groups helps the firm provide insights to clients interested in ways to mitigate risk and capture opportunities associated with, among other things, sustainability and the transition to a low-carbon economy.⁵⁸

BlackRock's investment decisions and its stewardship engagement and voting are governed strictly by its fiduciary duty to clients. As such, BlackRock does not make any commitments or pledges that would interfere with its independent determination on how to engage with issuers and vote proxies on behalf of its clients.

BlackRock serves on the Principals Group for the Glasgow Financial Alliance for Net Zero ("GFANZ") and is a member of the Sustainable Markets Initiative ("SMI"), as well as various other relevant global, regional or sectoral sustainability-related initiatives. BlackRock has been a member of the Taskforce on Nature-related financial disclosures since its launch in 2020.

In early 2024, BlackRock transferred its Climate Action 100+ membership to its international business, BlackRock International.⁵⁹ In early January 2025, BlackRock also announced it formally withdrew from the Net Zero Asset Managers ("NZAM") initiative.⁶⁰

Public policy

In BlackRock's view, companies, investors, and others can benefit from greater transparency and consistency in publishing financially material sustainability-related data and information. Since sustainability-related material investment risk is a global issue and many investors allocate funds globally, BlackRock supports a coordinated approach by regulators and standard-setting bodies across jurisdictions, to facilitate high quality, comparable disclosures. BlackRock acknowledges the significant contributions already made in this area by initiatives, such as the TCFD, the Sustainability Accounting Standards Board (both of which have been merged into the ISSB), the Global Reporting Initiative, and the SBTi, amongst others which bring together public entities and private sector firms, and believes that coordinated regulatory action is required across markets to ensure a level playing field for companies and investors.

BlackRock has contributed comments on several policy efforts to heighten the quality of sustainability-related, including climate, reporting globally, which has included submitting direct responses to consultations by the U.S. Securities and Exchange Commission ("SEC"), the ISSB on their IFRS Sustainability Disclosure Standards, the European Financial Reporting Advisory Group on their European Sustainability Reporting Standards ("ESRS"), the Monetary Authority of Singapore, the Hong Kong Stock Exchange and the UK Financial Conduct Authority ("FCA").⁵⁷ BlackRock's responses to these consultations are guided by and build on the firm's principles for high quality sustainability-related disclosures based on financial materiality. BlackRock views the work of these institutions as an important contribution to a multi-jurisdictional effort towards a set of interoperable sustainability reporting standards, that will improve the availability, quality, comparability, and timeliness of sustainability-related disclosures, where material, globally.

Companies, investors, and others can benefit from greater transparency and consistency in publishing financially material sustainability-related data and information.

As well as providing reporting frameworks, the inaugural ISSB standards, building on the TCFD, and the first set of ESRS include a baseline of sector-neutral disclosures that help companies embed the consideration of material sustainability-related risks and opportunities into their governance, strategy and risk management. In addition to direct submissions, BlackRock continues to engage with regulators and seeks to serve as a resource to them by responding to consultations via industry associations globally on existing or proposed regulations on the implementation of standards. These include consultations on implementation of the ISSB's standards in various geographies, including the UK, Hong Kong, Singapore and Australia — and on broader consultations that contribute to the dialogue on the governance of material sustainability — related risks and opportunities at regulated firms.

Risk management

Disclose how the organization identifies, assesses and manages climate-related risks.

BlackRock's approach to managing investment risks in client portfolios

An integral part of BlackRock's identity is the core belief that rigorous risk management is critical to the delivery of high-quality asset management services. BlackRock employs a three-lines of defense approach to managing investment risks in client portfolios. BlackRock's investment teams and business management are the primary risk owners, or first line of defense. Portfolio managers and research analysts are responsible for evaluating the financially material environmental (as well as social and governance) risks and opportunities for an industry or company consistent with the portfolio's investment guidelines, just as they consider other potentially material economic issues related to their investments. Examples of climate-related risks taken into account may include risks from regulatory change or litigation and exposure to physical impacts such as flooding or other extreme weather events or changes in temperature. In addition, BlackRock has developed a framework to monitor exposure to carbon intensive assets to support the understanding and management of potential climate-related risks.

BlackRock's risk management function, RQA, serves as the second line of defense in BlackRock's risk management framework along with BlackRock L&C. RQA is responsible for BlackRock's Investment and Enterprise risk management framework, which includes oversight of sustainability-related investment risks. RQA evaluates investment risks, including financially material sustainability-related risks, as part of regular investment risk management processes and, where applicable, during regular reviews with portfolio managers. This helps to ensure that such risks are understood, deliberate, and consistent with client objectives. RQA also has a dedicated Sustainability Risk group that partners with risk managers and businesses to oversee sustainability risk across the platform.

The third line of defense, BlackRock's Internal Audit function, operates as an assurance function. The mandate of Internal Audit is to independently assess the adequacy and effectiveness of BlackRock's internal control environment to improve risk management, control, and governance processes.

Business continuity risk management

BlackRock is committed to providing high-quality, resilient services to its clients. Significant resources and effort are dedicated to Business Continuity Management ("BCM") and technology Disaster Recovery programs, which are designed to meet or exceed legal and regulatory obligations in the locations in which BlackRock operates.

BlackRock maintains business continuity plans to facilitate the continuity of business in the event of a business disruption. BlackRock's executive management provides oversight and governance to the firm's BCM program, supported by the BCM team, which manages the program.

BlackRock's Enterprise Resilience and Safety team conducts assessments of physical locations to create individual site risk models and plans for BlackRock offices and data centers that are then incorporated into BlackRock's risk management framework and reported on a monthly basis to the firm's risk management committees. These risk models consider acute climate-related risks, including severe weather, wildfires, and flooding, as well as chronic climate-related risks, such as rising global temperatures.

BlackRock uses weather modeling to assess risks from natural disasters across multiple phases, including site selection, facility design processes, and routine facility management operations. Evaluation criteria includes scale and type of energy use, GHG emissions, local climate, facility type, location, occupancy status, and potential financial impact.

To manage regulatory risk related to corporate operations, BlackRock's Health and Safety team performs forecasting to monitor emerging environmental regulations that may impact facility infrastructure and operations. The implementation of new requirements is tracked to ensure compliance.

Metrics and targets

The metrics provided in this section are presented for the period ending December 31, 2023 and therefore excludes GIP data, unless otherwise stated.

Metrics included within report

- **Corporate GHG emissions.** BlackRock reports Scope 1, Scope 2 and relevant categories of Scope 3 emissions. BlackRock obtains third-party assurance for specified Scope 1 and 2 emissions, and for a portion of Scope 3 categories.⁶¹ Exhibit M.1 provides BlackRock's corporate GHG emissions, in addition to select intensity and energy metrics.
- **Firm-level climate metrics for BlackRock's AUM.** BlackRock reports estimates reflecting the absolute emissions associated with BlackRock's AUM in corporate securities, direct real estate and infrastructure equity assets, where data is available. In addition, BlackRock reports both the adjusted and unadjusted carbon footprint⁶² figures for corporate securities to account for enterprise value including cash ("EVIC") volatility. Estimates of these metrics are provided in Exhibit M.3. BlackRock also reports estimates for emissions intensity metrics associated with BlackRock's AUM for sovereign debt assets, where data is available, in Exhibit M.4.

Other publicly available metrics

- **Regulatory reporting.** A number of BlackRock's subsidiaries are subject to jurisdiction-specific mandatory sustainability reporting requirements. In some instances, these disclosures will include sustainability-related metrics.

Scope 3 (investments)

For Category 15 of Scope 3 "Investments," ("S3C15"), the GHG Protocol distinguishes asset owners from asset managers in that it requires asset owners to report emissions associated with their investments, whereas asset managers are not required to report emissions associated with investments managed on behalf of clients.⁶³

While the GHG Protocol draws this distinction, it does not fully address S3C15 reporting for asset managers. If an asset manager opts to report emissions associated with investments managed on behalf of clients, the same emissions would be accounted for in the S3C15 reporting of both the asset manager and the asset owner. In the absence of an industry wide disclosure standard that expressly rationalizes such an approach, BlackRock's 2024 Climate Report adopts the following approach:

- The S3C15 emissions in Exhibit M.1 reflect estimated emissions associated with the subset of BlackRock's own (on balance sheet) investments for which emissions data and corresponding emissions calculation methodologies are available.
- Exhibits M.3 and M.4 disclose estimated emission metrics relating to the assets that BlackRock manages on behalf of clients, to the extent that data and emission calculation methodologies are available.

Exhibit M.2 clarifies the scope of emissions disclosed for each of the asset classes referenced above and should be considered together with the Methodology, Results and Discussion, and Limitations sections below.

Exhibit M.1: Corporate GHG emissions^{a,b,c}

In metric tons of CO ₂ e		2019 (baseline)	2020	2021	2022	2023	% change from 2019 ^d
Scope 1 and 2							
Scope 1 ^e		6,386	4,090	5,308	6,401	6,689	5%
Scope 2 (location-based) ^{f,g,h,i}		21,419	18,753	18,041	21,514	23,500	10%
Scope 2 (market-based) ^{f,h,j,k,l}		2,747	1,646	1,611	2,382	1,568	(43%)
Total Scope 1 and Scope 2 (location-based) ^g		27,805	22,843	23,349	27,915	30,189	9%
Total Scope 1 and Scope 2 (market-based) ^j		9,133	5,736	6,919	8,783	8,257	(10%)
Scope 3							
Upstream	1. Purchased goods and services	249,356	214,957	241,526	250,345	234,645	(6%)
	2. Capital goods ^m	8,015	2,337	29,410	49,097	34,620	332%
	3. Fuel- and energy-related activities (location-based) ^{g,n}	7,981	6,760	9,281	11,068	11,109	39%
	Fuel- and energy-related activities (market-based) ^{j,n}	3,209	2,400	2,904	4,418	4,262	33%
	4. Transportation and distribution ^o	1,709	973	1,313	1,450	1,046	(39%)
	5. Waste generated in operations ^p	1,162	379	146	396	556	(52%)
	6. Business travel ^q	47,246	7,879	3,737	22,194	46,720	(1%)
	7. Employee commuting (employee shuttles in India) ^r	1,161	26	30	65	1,619	39%
	8. Leased assets (location-based) ^{g,s}	777	928	937	1,223	1,697	118%
	Leased assets (market-based) ^{j,t}	0	0	334	647	359	0
Downstream	9. Transportation and distribution	Not relevant					
	10. Processing of sold products	Not relevant					
	11. Use of sold products	Not relevant					
	12. End-of-life treatment of sold products	Not relevant					
	13. Leased assets	Not relevant					
	14. Franchises	Not relevant					
	15. Investments Scope 1 + Scope 2 (BlackRock balance sheet only – see Exhibit M.3 for AUM-related metrics) ^{u,v}	0	116,015	80,868	53,774	94,362	0
	Investments Scope 3 (BlackRock balance sheet only – see Exhibit M.3 for AUM-related metrics) ^{u,v,w}	N/A	N/A	N/A	N/A	438,604	0
Emissions intensity metrics							
Scope 1 and Scope 2 location-based tCO ₂ e/\$1 million revenue ^x		1.9	1.4	1.2	1.6	1.7	(11%)
Scope 1 and Scope 2 location-based tCO ₂ e per employee ^{x,y}		1.7	1.3	1.3	1.4	1.5	(12%)
Scope 3 business travel per employee ^{x,y}		2.9	0.5	0.2	1.1	2.3	(21%)
Electricity							
Total electricity consumed (MWh) ^z		70,605	64,225	65,616	75,760	75,203	7%
Percent renewable electricity ^{aa}		100%	100%	100%	100%	100%	0

- a COVID-19 had a significant impact on BlackRock's operating model, this should be considered when reviewing year-on-year trends.
- b BlackRock engaged Deloitte & Touche LLP ("Deloitte") to perform a review engagement on management's assertion that the [BlackRock Inc. 2023 GHG Emissions Report](#) is presented in accordance with the GHG Protocol. Deloitte previously performed a similar review engagement for the years ended December 31, 2022 and 2021, however any emissions recalculations for methodology changes made to these years, as described in the footnotes to this table, have not been subject to Deloitte's review and, accordingly, Deloitte does not express a conclusion or any form of assurance on such information. Any information relating to periods prior to the year-ended December 31, 2021, including the 2019 baseline, was not subject to Deloitte's review and, accordingly, Deloitte does not express a conclusion or any form of assurance on such information. The 2019 and 2020 GHG emissions information (excluding recalculations) was subject to limited assurance by Lloyd's Register Quality Assurance, Inc. Deloitte's Independent Accountant's Review Report for the year-ended December 31, 2023 can be found on page 10 at [BlackRock Inc. 2023 GHG Emissions Report](#).
- c For details on methodologies and recalculations used to calculate Scope 1, Scope 2 and Scope 3 (excluding Scope 3 Category 15 Investments), see the [BlackRock Inc. 2023 GHG Emissions Report](#).
- d One factor that could impact emissions are employee numbers. BlackRock employees increased from ~16,200 as at December 31, 2019 to ~19,800 as at December 31, 2023.
- e Emissions have been recalculated using an updated methodology to estimate emissions from refrigerants. Previously reported figures were 5,882, 3,569, 4,766, and 5,765 in 2019-2022 respectively.
- f Emissions include indirect emissions arising from purchased electricity and purchased heat.
- g Per the GHG protocol: "A location-based method reflects the average emissions intensity of grids on which energy consumption occurs."
- h Emissions have been recalculated due to a change in purchased heat emissions estimation methodology. Previously, location-based figures were 23,126, 19,363, 18,637, and 22,372 and market-based figures were 4,454, 2,256, 2,207, and 3,239 for 2019-2022 respectively.
- i Emissions have primarily increased from 2019 due to the opening of BlackRock's new headquarters in New York in 2023. During office transition there was a period where BlackRock was operating both locations.
- j A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice). It derives emissions factors from contractual instruments, which include any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims. When EACs are used, BlackRock seeks to match the country in which the electricity was generated to the country in which the EAC is issued. In some cases, country-by-country matching is not possible; for example, where EACs are not available or cost prohibitive. In those cases, BlackRock will cover electricity usage with EACs from a neighboring region. BlackRock applies zero emissions only when the EAC matches the country or market-boundary (e.g., U.S. or EU) of usage.
- k Emissions have decreased mainly due to the purchase of more EACs that match the country in which the electricity was generated.
- l For 2019-2021, BlackRock had a renewable energy contract with Calpine for its New York offices, that included the purchase of wind power energy on behalf of BlackRock. BlackRock considers this wind power electricity contract to allow for zero market-based emissions reporting. BlackRock did not receive the associated EACs from the wind asset as they are used and retired by NYSEDA to meet its compliance obligations under the State renewable energy standards.
- m Emissions in 2021-2023 increased primarily due to construction of BlackRock's new headquarters in New York City which completed in Q1 2023.
- n Fuel- and energy-related activities ("FERA") increases reflects the addition of well-to-tank ("WTT") added to this category in 2022. In 2023 FERA figures have been recalculated due to updated methodology for estimating purchased heat. Previously location-based figures were 7,865, 6,825, 9,396, and 11,291 and market-based figures were 3,093, 2,465, 3,019, and 4,641 for 2019-2022 respectively.
- o Upstream Transportation and Distribution emissions have decreased from 2019 mainly due to the reassessment of spend source data which resulted in certain reallocations between Purchased Goods & Services, Capital Goods and Upstream Transportation and Distribution categories. No recalculation of prior years has been performed as the overall change is below the significance threshold per BlackRock's Recalculation Policy.
- p Emissions have not increased to pre-COVID levels partly due to BlackRock implementing a hybrid working model, reducing the number of in-office days for employees.
- q Emissions relate to employees traveling for business and include commercial air and rail, car rentals, car services and chartered vehicles, and personal vehicle use. Emissions have been recalculated to add WTT. Previously, figures were 39,116, 6,606, 3,079, and 18,363 for 2019-2022 respectively.
- r Employee commuting emissions relate to a shuttle service in India where BlackRock provides transport for employees commuting between employees' homes and BlackRock's offices. Emissions have increased compared to 2019 mainly due the addition of WTT in 2023. No recalculation of prior years has been performed as the change is below the significance threshold per BlackRock's recalculation policy.
- s Upstream leased assets emissions are for unmanned co-located data centers and executive suites. Emission increases in 2022 reflect the addition of WTT. The prior years (2019-2021) were not recalculated due to not breaching the Recalculation Policy significance threshold.
- t Reduction from 2022 is mainly due to the purchase of more EACs that match the country in which the electricity was generated in 2023.
- u Reported emissions for S3C15 is limited to BlackRock investments excluding minority investments and carried interest. The 2024 data coverage represents approximately 56% of BlackRock's investments excluding minority investments and carried interest.
- v BlackRock's analysis of the emissions associated with BlackRock investments (excluding minority investments and carried interest) for 2022 and 2023 indicated that the increase in emissions could be associated with, but not limited to, changes in BlackRock's investments, changes in investments held by BlackRock where emissions data is available, or changes in the emissions of the investments themselves.
- w For the first time, BlackRock is reporting 2023 Scope 3 emissions in relation to S3C15.
- x Intensity metrics have been recalculated due to the recalculations of Scope 1, Scope 2 and Scope 3 Business Travel emissions discussed in other footnotes. Previously Scope 1 and Scope 2 location-based tCO₂e/\$1 million revenue was 2.0 for 2019 and Scope 1 and Scope 2 location-based tCO₂e per Employee was 1.8 for 2019 (2020-2022 recalculations did not result in a change in intensity metrics). Previously Scope 3 Business Travel per employee was 2.4, 0.4, 0.2 and 0.9 for 2019-2022 respectively.
- y Denominator consists of full-time equivalent employees.
- z Electricity consumed represents electricity under BlackRock's operational control (Scope 2). Additional electricity consumed by upstream leased assets in 2023 was 2,917 MWh.
- aa 100% renewable energy metric covers electricity loads from facilities, data centers, and upstream leased assets. Where BlackRock does not have operational control to procure its own renewable electricity, the firm purchases EACs as a means to achieve the 100% renewable electricity goal.

Firm-level climate metrics for BlackRock's AUM

As an asset manager, BlackRock acts as an agent investing assets that belong to its clients on its clients' behalf.⁶⁴ Consistent with prior years, BlackRock's 2024 Climate Report includes disclosure of estimated absolute Scope 1 and Scope 2 emissions (to the extent that data is available) associated with investments in corporate securities and direct real estate assets managed on behalf of clients.

For the first time, BlackRock's 2024 Climate Report also reflects, to the extent that data is available:

- estimated absolute Scope 3 emissions in respect of investments in corporate securities that BlackRock manages on behalf of clients, and
- estimated absolute Scope 1 and Scope 2 emissions in respect of infrastructure equity assets that BlackRock manages on behalf of its clients.

Absolute emissions in this context refers to the proportionate exposure to an investee company/asset's emissions based on the percentage value of the investee company/assets held in portfolios managed by BlackRock on behalf of its clients. While the absolute emissions metric has the benefit of intellectual consistency with other GHG emissions metrics reported at the corporate level,⁶⁵ a drawback of absolute emissions reporting in relation to AUM is that it does not account for changes in the size of investments across the reporting period. Specifically, absolute emissions are likely to increase if the total value of assets for which emissions data is collected increases, and vice versa if the total value of assets for which emissions data is collected decreases.

To account for this limitation, carbon footprint, which refers to absolute emissions divided by the value of assets (rounded to the nearest million) to which the emissions relate, was also estimated in respect of investments in corporate securities that BlackRock manages on behalf of its clients. Carbon footprint normalizes emission metrics for the size of the investment.

In addition to the limitation noted above in relation to absolute emission metrics, absolute emissions and carbon footprint metrics are also sensitive to fluctuations in asset values – particularly, though not exclusively, due to changes in EVIC from one period to the next. This volatility reduces the comparability of absolute emissions and carbon footprint metrics from one year to the next. To address this, in addition to the disclosure of an unadjusted carbon footprint, BlackRock also reports an adjusted carbon footprint in relation to investments in corporate securities managed on behalf of its clients, where data available. The adjusted carbon footprint is intended to account for the influence of market value fluctuations.⁶⁶

BlackRock also discloses emissions intensity for sovereign debt assets managed on behalf of its clients, to the extent that the requisite data is available.

Exhibit M.2 summarizes the scope of emissions that have been accounted for in respect of each of the asset classes referenced above. As of year-end 2023, collectively, estimated absolute emissions for investments in corporate securities, direct real estate and infrastructure equity assets included in this analysis represent approximately 55% of BlackRock's AUM.

Exhibit M.2: GHG emissions from AUM – Asset class emissions scope

Asset classes included	Scope 1 emissions	Scope 2 emissions	Scope 3 emissions	Data source
Listed equities, corporate bonds and associated derivatives	✓	✓	✓	MSCI
Direct real estate and infrastructure equity	✓	✓		Directly from investments
Sovereigns	✓			MSCI

It should be noted that the following asset classes are excluded from BlackRock's disclosure of emissions associated with investments managed on behalf of clients: non-corporate fixed income, commodities, alternatives other than real estate and infrastructure equity (as noted above), and derivatives not linked to corporate issuers.

Methodology

BlackRock referenced the Partnership for Carbon Accounting Financials (“PCAF”)⁶⁷ developed Global GHG Accounting and Reporting Standard for the Financial Industry (“PCAF Standard”), as a starting point for estimating absolute emissions associated with BlackRock’s AUM.⁶⁸ However, the PCAF Standard does not address all asset classes and presents a number of methodological challenges which reflect the PCAF Standard having been developed primarily for use by banks and, therefore, not yet fully addressing the asset management and portfolio context. As such, BlackRock makes several methodological decisions that are not included in the PCAF Standard, which are discussed below.

Corporate securities

For corporate securities (listed equity, corporate bonds and associated derivatives), emissions were apportioned based on the proportion of the company’s EVIC held in portfolios managed by BlackRock on behalf of its clients. Issuer-level Scope 1, 2 and 3 emissions data was obtained from MSCI,⁶⁹ as was issuer-level EVIC data.

The treatment of derivatives and short positions when calculating exposure to each issuer was an important consideration for a subset of portfolios. Neither derivatives nor short positions are addressed by the PCAF Standard. Further, there are different views within the industry as to the application of derivatives and short positions in the emissions context. On the one hand, long exposures through physical securities are the most direct representation of engagement rights with companies. On the other hand, omitting derivatives and short positions could misrepresent the economic exposure of the portfolio to a given issuer. After reviewing the pros and cons of each approach, BlackRock concluded that metrics that best approximate economic exposure are most appropriate because they align more closely to how financial metrics are reported. As such, the estimates reported herein reflect net exposure to each corporate issuer including exposure obtained through derivatives. These methodological choices had a minimal impact on absolute emissions and carbon footprint estimates for the firm given that the majority of BlackRock’s AUM is held in long-only index portfolios where short positions and derivatives are not a significant component of the investment strategy. For individual portfolios with more significant use of derivatives or short positions, it may be appropriate to report long and short positions separately.

Another consideration was the treatment of emissions associated with green bonds. Green bonds provide funding exclusively to projects that are aligned with the International Capital Markets Association Green Bond Principles.⁷⁰ For the purpose of the metrics disclosed in this report, BlackRock believes that qualifying green bonds should not carry the emissions of the issuer when calculating portfolio emissions, which would appropriately recognize their emissions impact and provide suitable incentives for their acquisition. In this report, under BlackRock’s proprietary shading taxonomy for green bonds, the firm considered green bonds that are “medium” or “dark” green bonds only, thereby not categorizing “light” and “very light” green bonds as having zero emissions. As such, emissions associated with holdings that are classified as medium and dark green bond holdings were excluded when calculating exposure to each issuer across both corporates and sovereigns. However, all other exposures to those issuers were included.

Another key challenge to estimating absolute emissions was obtaining emissions data that is contemporaneous with holdings data. This issue arises because companies typically report their emissions for a given year well after year-end. In addition, there is typically a lag between the date when emissions data is reported and the date that data is incorporated into the MSCI dataset. As such, holdings values measured at year-end will not be contemporaneous with emissions data that is available at that time. To mitigate the impact of this timing mismatch to the extent possible, this analysis utilizes different dates for: (i) the date at which exposure to each issuer is measured (“holdings value analysis date”); and (ii) the date on which the latest available emissions data is provisioned by a third-party data provider (“emissions effective date”). For the most recent reporting year, the holdings analysis date is December 31 and the emissions effective date is December 17 of the following year. As discussed in the limitations section on the next page, while this approach is unlikely to address all instances of lagged emissions data, it increases the likelihood that emissions and holdings are aligned.

Real estate and Infrastructure equity

For directly invested real estate and infrastructure equity investments, BlackRock has established engagement and data collation programs to gather, measure and report sustainability metrics, including GHG emissions, at the individual investment-level and aggregated portfolio-level. Operational Scope 1 and 2 emissions for each investment were apportioned to BlackRock based on the proportion of the investment represented by BlackRock’s clients’ assets.

Results and discussion – corporate securities, direct real estate and infrastructure equity

Exhibit M.3 provides estimates of absolute emissions for BlackRock's AUM in corporate securities, direct real estate and infrastructure equity assets, where data was available. The following matters should be considered when reviewing the metrics disclosed in Exhibit M.3:

- The scope of emissions that are reflected in the metrics disclosed vary according to asset class. This is summarized in Exhibit M.2.
- For the first time, BlackRock's 2024 Climate Report includes estimated Scope 1 and Scope 2 emissions associated with infrastructure equity assets that BlackRock manages on behalf of its clients. This is reflected, exclusively, in the emission metrics for the reporting reference period ending December 31, 2023. As a result, readers should be cautious when drawing conclusions based on year-on-year changes.
- For the first time, BlackRock's 2024 Climate Report includes estimated Scope 3 emissions in respect of investments in corporate securities that BlackRock manages on behalf of its clients. This is also reflected in the addition of an unadjusted carbon footprint metric for Scope 1, 2 and 3. These metrics are presented, exclusively, for the reporting reference period ending December 31, 2023.

Estimated absolute Scope 1 and Scope 2 emissions were 330.5 million tons CO₂e in 2023, down from 332.2 million tons of CO₂e in 2022. Among other elements, one of the drivers in the reduction of emissions from 2022 to 2023 was the change in the mix of underlying assets, influenced by the relative changes in the size of different portfolios. Estimated absolute Scope 3 emissions in corporate securities that BlackRock manages on behalf of clients were 2,178.8 million tons CO₂e in 2023.

As previously discussed, BlackRock also reports the unadjusted and adjusted carbon footprint for BlackRock's AUM in corporate securities. The unadjusted carbon footprint for Scope 1 and Scope 2 emissions in 2023 was 53 tons of CO₂e per million dollars of AUM, down from 59 tons per million dollars of AUM in 2022. Based on the established methodology for adjusted carbon footprint, an adjustment is only relevant for the years 2021 to 2023, inclusive, since the adjustment factor is calculated relative to an unadjusted base carbon footprint,

which, for the purpose of this report, is 2020. As such, the 2023 adjusted carbon footprint for Scope 1 and Scope 2 emissions, which adjusts for the 2021-2023 market volatility, was 59 tons of CO₂e per million dollars of AUM, down from 62 tons of CO₂e per million dollars of AUM in 2022. When comparing the unadjusted numbers, BlackRock observed that over this time period markets had risen and exaggerated the decrease in carbon footprint, and with the adjusted carbon footprint figure it identifies a less dramatic decrease after removing the effect of market volatility.

BlackRock believes that the adjusted carbon footprint numbers for the years 2021 to 2023, inclusive, serve as a better point of comparison to the unadjusted carbon footprint, since changes should be largely driven by asset allocation decisions and changes in reported investee company emissions, rather than by market volatility over the time period. These estimates are based on the portion of BlackRock's AUM for which emissions data and methodologies are available to calculate the emissions attributable to BlackRock's AUM. This portion reflects approximately \$5.5 trillion in 2023, representing approximately 55% of BlackRock's total AUM.

The limitations of the estimates should be reviewed carefully (see the discussion of Limitations below). The analysis indicates that, in line with previous years, the emissions associated with the investments that BlackRock makes on behalf of its clients are generally aligned with the state of global emissions. The scope of this analysis was corporate securities, direct real estate and infrastructure equity assets (where data was available), representing approximately \$5.5 trillion of BlackRock's AUM, which equates to approximately 1% of global financial assets.⁷¹ Similarly, the emissions associated with the investments in the analysis represent under 1% of total annual global emissions.⁷² These results align with BlackRock's intuition about its business given that the majority of the investments BlackRock makes on behalf of its clients are held in index funds. Index funds, by their very nature, are meant to reflect the underlying markets in which they invest, which would suggest that the magnitude of emissions from BlackRock's investments on behalf of clients would be consistent with its proportionate market share of global financial assets.

Exhibit M.3: GHG emissions associated with BlackRock's assets under management*

	Scope	2020**	2021†	2022‡	2023§
Absolute emissions (million tCO ₂ e)	Scope 1 + 2	320.4	340.8	332.3	330.5
	Scope 3	N/A	N/A	N/A	2,178.8
Unadjusted carbon footprint (tCO ₂ e/\$m AUM)	Scope 1 + 2	57	50	59	53
	Scope 1 + 2 + 3	N/A	N/A	N/A	378
Adjusted carbon footprint (tCO ₂ e/\$m AUM)	Scope 1 + 2	N/A	55	62	59

Data above represents unaudited estimates. Not comprehensive — figures reflect coverage of approximately 55% of AUM. Changes in reported AUM coverage from previous reports can be attributed to shifts in list of portfolios and positions in scope of the analysis. There are several limitations associated with these figures. Please review results in conjunction with the limitations section below.

* Absolute Emissions includes corporate securities (listed equity, corporate bonds, associated derivatives) direct real estate and infrastructure equity assets (where data was available) and excludes all other AUM. Unadjusted and Adjusted Carbon Footprint metrics includes corporate securities (where data was available) and excludes all other AUM. Estimate absolute Scope 3 emissions in respect of investments in corporate securities have only been included for the reporting reference period ending December 31, 2023; as such, in the absence of a base/prior year estimate Scope 3 emission metric against which to perform an adjustment, an adjusted carbon footprint indicator for Scope 1, 2 and 3 has not been disclosed for 2023.

** Holdings value analysis date is as of December 31, 2020. The emissions effective date, on which emissions and EVIC data is reported and provisioned by third party data providers is September 30, 2021.

† Holdings value analysis date is as of December 31, 2021. The emissions effective date, on which emissions and EVIC data is reported and provisioned by third party data providers is September 30, 2022.

‡ Holdings value analysis date is as of December 30, 2022. The emissions effective date, on which emissions and EVIC data is reported and provisioned by third party data providers is September 29, 2023.

§ Holdings value analysis date is as of December 29, 2023. The third-party emissions and EVIC data was extracted on December 17, 2024.

Sovereigns

BlackRock reports emission intensity metrics for sovereign debt assets, where data is available, in this report. While there is not yet consensus on which intensity metrics to use when determining emissions intensity for sovereign assets, BlackRock believes it is important to provide a preliminary view to support the firm's commitment to transparency.

Metrics selection

BlackRock has continued to select GHG intensity per GDP Purchasing Power Parity ("PPP") to represent the emissions intensity for sovereign bond investments. GHG intensity per GDP PPP represents the carbon efficiency of an economy's production of goods and services, which is a representation of the carbon intensity of the economy and how exposed it is to changes in emissions regulations. PPP adjusted GDP is used as the denominator because it represents the relative size of different economies while adjusting for price-level changes over time. This gives GDP PPP an advantage over nominal or real GDP metrics, which would make GHG intensity highly dependent on inflation and price-level changes as opposed to fundamental changes. Exhibit M.4 identifies the GHG intensity per GDP PPP for sovereign assets included in BlackRock's AUM, where data was available.

Methodology

Due to fundamental differences between sovereign and corporate securities, emissions reporting for sovereign

debt assets is reported separately. One of the issues that arises when comparing sovereign and corporate emissions footprints is the double counting of emissions. Sovereign emission levels are calculated by summing all emissions produced within that sovereign territory — this includes emissions produced by individual private entities, which are already counted in a corporate portfolio's attributed emissions, where relevant. This means that any accounting of sovereign emissions should be done separately from other securities to avoid double counting emissions across asset types.

Another, more fundamental difference in sovereign emission attribution is a breakdown in the concept of ownership when it comes to sovereign issuers. Corporate emissions exposure is calculated based on the percentage value of the issuer held in portfolios managed by BlackRock on behalf of its clients; however, there is no analogous concept of ownership of sovereign nations resulting from investments in sovereign assets. Therefore, reporting of a sovereign portfolio's exposure to emissions is done based on average emissions intensity, instead of percent ownership of the issuer.

BlackRock reports GHG intensity per GDP PPP which was produced utilizing MSCI data. The GHG intensity per GDP PPP was aggregated as a weighted average, with weights proportional to the investment into each sovereign represented by investments managed by BlackRock on behalf of its clients.

Results

Sovereign emissions intensity is a metric which represents the nation's carbon efficiency, or how dependent its economic activity is on carbon emissions. A higher emissions intensity indicates a relatively higher exposure to transition risks associated with emissions regulations, as well as a greater contribution of global GHG levels and the associated impact on warming.

Exhibit M.4 outlines the GHG intensity per GDP PPP. The metrics were derived from an analysis of sovereign assets as a portion of BlackRock's AUM which represents approximately 11% in 2023.

Exhibit M.4: BlackRock GHG emissions intensity metric for sovereigns included in BlackRock's AUM*

	2020**	2021†	2022†	2023§
GHG intensity per GDP PPP (tons per \$m)[§]	203.6	193.6	201.6	205.79

Data above represents unaudited estimates.

* GHG intensity per GDP PPP includes sovereign assets and excludes all other AUM. The above metrics were derived from an analysis of sovereign assets as a portion of BlackRock's AUM which represents approximately 11% in 2020, 10% in 2021, 10% in 2022 and 11% in 2023.

** Holdings value analysis date is as of December 31, 2020. The emissions effective date, on which emissions and EVIC data is reported and provisioned by third party data providers is September 30, 2021.

† Holdings value analysis date is as of December 31, 2021. The emissions effective date, on which emissions and EVIC data is reported and provisioned by third party data providers is September 30, 2022.

‡ Holdings value analysis date is as of December 30, 2022. The emissions effective date, on which emissions and EVIC data is reported and provisioned by third party data providers is September 29, 2023.

§ GDP PPP data represents the CO₂ intensity (kg per 2017 PPP USD of GDP). Figures in the table have been converted into tons per \$m.

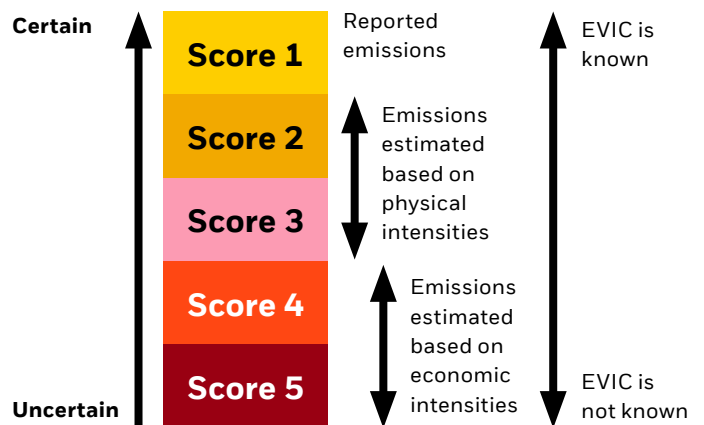
¶ Holdings value analysis date is as of December 29, 2023. The third-party emissions and EVIC data was pulled from Aladdin on December 17, 2024.

Limitations

Data quality

Accurate computation of climate-related metrics in investment portfolios requires high quality security-level data including GHG emissions data for underlying investee companies. Many companies are measuring and publicly reporting their GHG emissions, which facilitates the type of high-quality data that investors need to effectively calculate climate-related portfolio metrics. However, many companies have not yet begun or are still early in their emissions reporting journey. Recognizing that deferring measurement and reporting until 100% reported data is available would impede the progress BlackRock could make in the near-term in providing transparency to stakeholders, estimates were used to fill data gaps, when necessary and appropriate. Estimated data reduces the reliability of the metrics since estimated emissions may not accurately reflect the actual emissions of any given company.

Exhibit M.5: PCAF data quality scores overview



Note: The Exhibit above is oversimplified for illustrative purposes. Please refer to PCAF Standard for additional detail.

The PCAF Standard recognizes that data availability is a challenge for GHG emissions reporting by financial institutions and provides a methodology for computing a Data Quality Score (ranging from “1” – highest quality to “5” – lowest quality). The PCAF Data Quality Score is designed to provide insight on the level of estimation involved with the disclosure of financed emissions. An overview of the PCAF Data Quality scores is provided in Exhibit M.5.

As discussed in the methodology section, BlackRock leveraged MSCI data for emissions and EVIC data for the corporate securities included in the analysis. In the case that companies in MSCI’s dataset have not reported their emissions, MSCI uses proprietary methods to estimate the company’s emissions.

To derive a PCAF Data Quality Score, PCAF recommends calculating an average of data scores for individual securities weighted by assets invested in each security. BlackRock sought to estimate a PCAF Data Quality Score for this analysis by mapping fields provided by MSCI that reflect the methodology used for producing emissions data as well as mapping the firm’s own data on physical real estate to the PCAF categories. Based on this approach, the PCAF Data Quality Score is approximately 2 to 3. This means that a significant portion of the underlying data used in the analysis is reported, but a portion is estimated. Increasing regulatory and voluntary climate-related reporting by companies will likely increase the availability of reported data over time, which should improve data quality. It should be noted that the PCAF Data Quality Score disclosed here is relevant only to absolute Scope 1 and Scope 2 emissions in respect of investments in corporate securities managed by BlackRock on behalf of its clients. The PCAF Data Quality Score is not relevant to absolute Scope 3 emissions in respect of corporate securities, nor is it relevant to absolute Scope 1 and Scope 2 emissions in respect of direct real estate and infrastructure equity assets.

Lagged data

Environmental, social and/or governance data reporting by companies is often produced on a lag relative to financial data as most sustainability data disclosure and reporting takes place on an annual basis and requires significant time to produce. In addition, there may be a lag between the time when data is disclosed by companies and when it is incorporated into the dataset produced by MSCI. While BlackRock sought to mitigate the impact of lagged data on the estimates by varying the holdings analysis date and the emissions data collection date, emissions data included in the analysis for a given holding each year may reflect GHG emissions from prior year(s) for at least a subset of holdings included in the analysis.

AUM coverage

Several asset classes in which BlackRock makes investments on behalf of its clients are not included in the estimates in this report, either because insufficient data was available or because methodologies to compute GHG emissions associated with an asset class have not yet been established. Due to this, the metrics outlined in Exhibit M.3 were derived from an analysis of corporate securities, direct real estate and infrastructure equity assets as a portion of BlackRock’s AUM which represents approximately 55% for 2023. The metrics outlined in Exhibit M.4 were derived from an analysis of sovereign assets as a portion of BlackRock’s AUM which represents approximately 11% for 2023.

Sensitivity to market volatility

As discussed above, absolute emissions and carbon footprint metrics are sensitive to fluctuations in asset value, particularly, though not exclusively, due to changes in EVIC from one period to the next. Market volatility can, therefore, reduce the comparability of absolute emissions and carbon footprint metrics from one year to the next. Other factors that drive changes in absolute emissions are: (i) changes in the emissions profile of the underlying investee companies/assets, and (ii) changes to the asset allocation in portfolios managed by BlackRock on behalf of its clients.

Sensitivity to market volatility can obscure which of these factors is driving the changes in the metric year-over-year. As such, the absolute emissions and carbon footprint figures provided are not directly comparable. Users should be cautious when drawing conclusions based on changes from one year to the next.

Backward-looking

While BlackRock believes that absolute emissions and carbon footprint metrics are an appropriate starting point for its Climate Report, it is worth noting that these metrics are backward-looking in that they only consider past emissions of investee companies/assets. They do not provide an assessment of how the emissions profile of underlying investee companies/assets may evolve over time in response to, for example, the adoption by an investee company of a climate transition plans, and/or emission reduction targets.

Endnotes

- 1 Please see additional information about the TCFD Recommendations at: https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf.
- 2 In select instances information relating to 2023 has been included in this report. Each instance is clearly identifiable as such.
- 3 Please see additional information about S2 incorporating the TCFD pillars and recommendations at: [ifrs-s2-comparison-tcfd.pdf](https://www.fsb-tcfd.org/).
- 4 Please see additional information about the TCFD disbanding at: <https://www.fsb-tcfd.org/>.
- 5 AUM figure is inclusive of GIP.
- 6 Employee figures are inclusive of GIP.
- 7 The inclusion of information contained in this report should not be construed as a characterization regarding the materiality or financial impact of that information. Please also see BlackRock's Annual Report on Form 10-K filed on February 25, 2025 ("2024 Annual Report") and other publicly filed documents for additional information at: <https://ir.blackrock.com/>.
- 8 In this report, the firm makes frequent reference to terminology pertaining to the transition to a low-carbon economy. These references include, but are not limited to, terminology such as "transition to a low-carbon economy," "low-carbon transition" and "the transition."
- 9 Sustainability-related matters, for the purposes of this report, include the integration of environmental, social and/or governance data or information into firmwide processes (where relevant), sustainable investment strategies, investment stewardship engagement on material climate-related matters, corporate sustainability strategy and disclosures, public policy and philanthropic activities.
- 10 As of December 31, 2024.
- 11 Please see [Our approach to sustainability](#).
- 12 Includes a select group of BlackRock's largest client relationships; net zero commitments are sourced from the GFANZ website and respective company websites, as of January 2025.
- 13 Any data or information around climate issues that could impact a company's ability to perform over time.
- 14 Please see [Transition to a low-carbon economy](#) on BlackRock's Investment Institute website.
- 15 This includes some transition-focused strategies that also meet the firm's Sustainable Investing Platform criteria. The BlackRock Sustainable Investing Platform includes: 1) "Screened" strategies that constrain investments by avoiding specific issuers or business activities with certain environmental, social and/or governance characteristics, 2) "Uplift" strategies with a commitment to investments with improved environmental, social and/or governance characteristics versus a stated universe or benchmark, 3) "Thematic" strategies with targeted investments in issuers whose business models may not only benefit from but also may drive long-term sustainability outcomes and 4) "Impact" strategies with a commitment to generate positive, measurable and additional sustainability outcomes.
- 16 Fund count does not include all available share classes.
- 17 The term "Active" is used to refer to investment strategies that seek to achieve returns that are greater than an index return, as well as absolute return strategies. This terminology is meant to distinguish this subset of products from index investment strategies, which seek to match the return of an index.
- 18 These portfolios may include active and index portfolio approaches.
- 19 Please see more information on LEED at: <https://www.usgbc.org/help/what-leed>.
- 20 See J. Kazdin, K. Schwaiger, V.-S. Wendt, and A. Ang, Climate Alpha with Predictors.
- 21 Data sourced from IEA Bloomberg New Energy Finance, New Energy Outlook 2022. Please see additional information available at: <https://about.bnef.com/new-energy-outlook/>.
- 22 BlackRock as of October 2024: <https://ir.blackrock.com/news-and-events/press-releases/press-releases-details/2024/BlackRock-Completes-Acquisition-of-Global-Infrastructure-Partners/default.aspx>.
- 23 Invested and committed capital in renewables investments from all GIP's Flagship Funds (GIP II, III, IV and V), GIPA I and II, GIP Core, GIP EM, SMAs and Continuation Funds, as well as BlackRock Infrastructure Investments for BGIF, GRP and CFP as of June 30, 2024.
- 24 Reflects capital invested and/or committed to investments in the renewable energy sector (in operation, construction and development) across the GIP platform, pre-syndication and including co-investments, and BlackRock Infrastructure Investments for BGIF, GRP and CFP Funds, as of June 30, 2024.
- 25 As of December 31, 2024.
- 26 Please see the LEAF fund prospectus for additional details, available at <https://www.blackrock.com/cash/literature/prospectus/pro-weleaf-inv-us.pdf>.
- 27 The information outlined in this section highlights BIS' activities in 2024. BIS is responsible for engagement and voting in relation to clients' assets managed by certain index equity portfolio managers. Approximately 90% of BlackRock clients' public equity assets under management are held in index strategies, as of December 31, 2024. In October 2024, BlackRock announced the creation of BAIS, a dedicated stewardship team for active portfolios. Starting in 2025, BAIS will support BlackRock's active investment teams and build upon the ability they have always had to engage and exercise votes consistent with their portfolio objectives. While the two teams operate independently, their general approach is grounded in widely recognized norms of corporate governance and shareholder rights and responsibilities. In December 2024, BIS published updated Global Principles and regional voting guidelines for 2025. Please refer to BlackRock's investment stewardship website to learn more: <https://www.blackrock.com/corporate/insights/investment-stewardship>.
- 28 Source: BlackRock. Sourced on August 5, 2024, reflecting data from July 1, 2023, through June 30, 2024.

29 Source: BlackRock. Sourced on August 5, 2024, reflecting data from July 1, 2023, through June 30, 2024. Most engagement conversations cover multiple topics. Engagement statistics reflect the primary topics discussed during the meeting.

30 BIS has observed that more companies are developing such plans, and policymakers in a number of markets already have requirements for transition plans in place or noted their plans to introduce them, such as Australia, Brazil, and the European Union. In response to and anticipation of regulatory requirements, BIS views transition plans as a method for a company to both internally assess and externally communicate long-term strategy, ambition, objectives, and actions to create financial value through the global transition towards a low-carbon economy. While many initiatives across jurisdictions outline a framework for transition plans, there is no consensus on the key elements these plans should contain. BIS views useful disclosure as that which communicates a company's approach to managing financially material, business relevant risks and opportunities – including climate-related risks – to deliver long-term financial performance, thus enabling investors to make more informed decisions.

31 For example, climate-related disclosure requirements have been finalized in the EU, Singapore, Hong Kong and Canada, and other markets, including the UK, Australia, Japan, and Canada, are consulting, have recently completed consultations, or have proposed draft legislation on their proposals to introduce disclosure requirements.

32 The objective of IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information is to require an entity to disclose information about its sustainability-related risks and opportunities that is useful to primary users of general-purpose financial reports in making decisions relating to providing resources to the entity. The objective of IFRS S2 Climate-related Disclosures is to require an entity to disclose information about its climate-related risks and opportunities that is useful to primary users of general-purpose financial reports in making decisions relating to providing resources to the entity.

33 The IFRS has assumed responsibility for monitoring companies' climate-related financial disclosures from the TCFD, which was disbanded in October 2023. The IFRS S2 Climate-related Disclosure standard builds on the four pillars and 11 recommendations of the TCFD, but has additional requirements. For more information, please see [FRS S2 comparison with the TCFD recommendations Nov 2024.pdf](#).

34 For more information, please see, IFRS, "Comparison IFRS S2 Climate-related Disclosures with the TCFD Recommendations," July 2023.

35 BlackRock, "Global perspectives on investing in the low-carbon transition," June 2023. BIS recognizes that companies may phase in reporting aligned with the ISSB standards over several years, depending on local requirements. BIS also recognizes and respects that some companies may report using different local standards, which may be required by regulation, or one of a number of voluntary standards. In such cases, BIS asks that companies disclose their rationale for reporting in line with the specific disclosure framework chosen and highlight the metrics that are industry- or company-specific.

36 Aladdin Climate provides a framework to measure climate-related risk and portfolio decarbonization based on client inputs. It does not provide ratings or express any professional opinion or judgment on the suitability of any investment for inclusion or exclusion in a portfolio with respect to climate transition objectives.

37 BlackRock's principal office, which is leased, is located at 50 Hudson Yards, New York. BlackRock also leases office space throughout the world, including Atlanta (Georgia), Belgrade (Serbia), Budapest (Hungary), Edinburgh (UK), Gurgaon (India), Hong Kong (China), London (UK), Mumbai (India), Princeton (New Jersey), San Francisco (California), and Singapore (Singapore). BlackRock also owns an 84,500 square foot office building in Wilmington, Delaware and a 43,000 square foot data center in Amherst, New York.

38 The Intergovernmental Panel on Climate Change ("IPCC") defines physical risk as risk to facilities and infrastructure, impact on operations, water and raw material availability and supply chain disruptions. See more in the concept of risk in the IPCC Sixth Assessment Report: A summary of cross Working Group discussions (September 2020). Available at: https://www.ipcc.ch/site/assets/uploads/2021/02/Risk-guidance-FINAL_15Feb2021.pdf.

39 The analysis used the same NGFS Scenarios, updated from NGFS Phase II to NGFS Phase III. Aladdin Climate plans to implement the latest NGFS Phase V scenario suite in 2025.

40 Source: IPCC's Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Original figures and additional information are available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.

41 Exhibit S.4 was developed by the NGFS and derived from their NGFS Phase III climate scenarios materials. BlackRock recreated this chart and respective legend in its own color scheme for the purposes of this report. Please see the original chart and additional information available at: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors_.pdf.pdf.

42 Exhibit S.5 was developed by the IPCC and derived from IPCC's Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. BlackRock recreated this chart and respective legend in its own color scheme for the purposes of this report. Please see the original chart and additional information available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.

43 Baseline socio-economic assumptions are assumed to be the same across scenarios. As of now, NGFS does not model where some of the current policies are regressed.

44 BlackRock utilized phase III of the NGFS scenarios to conduct its 2024 scenario analysis.

45 Please see additional information from the NGFS "NGFS Climate Scenarios for central banks and supervisors," available at: https://www.ngfs.net/sites/default/files/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors_.pdf.pdf.

46 Source: IPCC's Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Original figures and additional information are available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.

47 BlackRock achieved its 100% renewable electricity match goal to match the same amount of renewable electricity as the electricity that BlackRock's global operations (including facilities, data centers, and upstream leased assets) consume annually. BlackRock is a tenant of multi-tenant buildings and contracts directly for renewable electricity wherever possible. Where BlackRock does not have operational control to procure its own electricity, or where renewable electricity is not available, BlackRock purchases EACs as a means of achieving this goal. While BlackRock matches its global electricity load with 100% renewable energy, BlackRock has some residual Scope 2 market-based emissions. BlackRock seeks to match the country in which the electricity was generated to the country in which the EACs are issued. In some cases, country-by-country matching is not possible; for example, where EACs are not available or cost prohibitive, which results in residual Scope 2 market-based emissions according to the GHG Protocol.

- 48** SAFc represents the environmental attributes of one metric ton of neat (unblended) SAF. SAFc is not yet accepted by sustainability standard setting bodies, and therefore, is not applied as an emission reduction against BlackRock's operational GHG emissions inventory.
- 49** SABA is a collaborative initiative that brings together aviation customers, airlines, and sustainability-related organizations to accelerate investment in SAF. SABA aims to drive investment in SAF, which is a leading low-carbon technology in the aviation industry.
- 50** As of November 2024.
- 51** As of December 2024.
- 52** Book-and-claim is an approach to purchasing SAFc whereby the environmental attributes associated with the fuel are decoupled from the physical fuel.
- 53** For its 2023 operational GHG emissions, BlackRock purchased carbon credits to apply toward its Scope 1, Scope 2, and a portion of Scope 3 Business Travel. BlackRock's portfolio consisted of both nature-based (reforestation), hybrid (biochar and biomass burial), and engineered (concrete mineralization) carbon dioxide removal credits.
- 54** Please see [Breakthrough Energy Catalyst and the European Investment Bank Announce €75 Million of Funding for Rondo Energy to Develop Industrial Decarbonization Projects Across Europe | Breakthrough Energy](#).
- 55** Categorized by CECF as "Environmental Quality, Protection, and Beautification" or relevant charities within "Public Safety, Disaster Preparedness, and Relief."
- 56** Please see additional information on BlackRock Public Policy ViewPoints, at: <https://www.blackrock.com/corporate/insights/public-policy/viewpoints-letters-consultations>.
- 57** Please see additional information on BlackRock Public Policy letters and consultations, at: <https://www.blackrock.com/corporate/insights/public-policy/viewpoints-letters-consultations#letters-and-consultations>.
- 58** In joining various industry groups, BlackRock does not make any commitments or pledges that may interfere with the firm's fiduciary duty to clients. BlackRock's investment decisions are governed strictly by the firm's fiduciary duty to clients, and that duty requires BlackRock to prioritize their financial interests above any commitments or pledges not required by law.
- 59** Please see BlackRock's 2024 letter to Climate Action 100+ regarding the transfer of membership to BlackRock International at: <https://www.blackrock.com/corporate/literature/publication/2024-our-participation-in-climate-action-100.pdf>.
- 60** The firm's memberships in some climate finance organizations have caused confusion regarding BlackRock's practices and subjected the firm to legal inquiries from various public officials in the United States. Following a routine review of the firm's continued participation in these groups, BlackRock decided to withdrawal from the NZAM initiative in January 2025. This will not change products or solutions for clients or how their portfolios are managed. BlackRock's active portfolio managers continue to assess material climate-related risks, alongside other investment risks, in delivering for clients.
- 61** Please see the Independent Accountant's Review Report relating to BlackRock Inc.'s Corporate GHG Emissions at: [BlackRock Inc. 2023 GHG Emissions Report](#).
- 62** Consistency in terminology is a key challenge in sustainability. The term "carbon footprint" in this report refers to absolute emissions financed by BlackRock's clients' investments in corporate and real estate securities divided by BlackRock's AUM (rounded to \$ millions) in those securities. This aligns with the terminology used in the European Union's SFDR.
- 63** Please see additional information available at: https://ghgprotocol.org/sites/default/files/standards_supporting/Chapter15.pdf.
- 64** Please see additional information about BlackRock's fiduciary approach at: <https://www.blackrock.com/corporate/insights/our-approach-to-sustainability>.
- 65** A significant majority of the investments BlackRock makes on behalf of its clients are in publicly traded equity and debt securities. Unlike emissions associated with real economy activities, the buying and holding of equity or fixed income securities does not cause the release of GHG emissions into the atmosphere. In that sense, GHG emissions for AUM are decidedly different than Scope 1 and 2 emissions (as well as many categories of Scope 3 emissions) reported by companies, where the metric reflects activities that directly result in the release of emissions into the atmosphere.
- 66** While EVIC is a factor in driving fluctuation in asset values there are other factors that drive changes in absolute emissions and carbon footprint. Please see the limitations section for further information.
- 67** About PCAF. Available at: <https://carbonaccountingfinancials.com/about>.
- 68** BlackRock also consulted the GHG Protocol and the EU SFDR Regulatory Technical Standards.
- 69** MSCI utilizes reported data from companies where emissions are disclosed. Where companies do not disclose their emissions, MSCI applies proprietary methods to estimate emissions.
- 70** International Capital Markets Association. *The Green Bond Principles*. Please see additional information available at: <https://www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Green-Bond-Principles-June-2022-060623.pdf>.
- 71** Global financial assets totaled \$537 trillion in 2023, according to Global Wealth 2024: The GenAI Era Unfolds, a Report by Boston Consulting Group (July 2024). Available at: [2024 Global Wealth Report July 2024](#).
- 72** UN Environment Programme (2024). Emissions Gap Report. Available at: [Emissions Gap Report 2024 | UNEP – UN Environment Programme](#).

Disclosures

This report contains information about BlackRock and may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act. All statements, other than statements of historical facts, may be forward-looking statements, including statements related to BlackRock's climate and other sustainability-related strategies, plans, developments, targets and goals. The forward-looking strategies, plans, developments, initiatives, estimates, targets and goals described in this report are not guarantees or promises.

BlackRock cautions that forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Forward-looking statements speak only as of the date they are made, and BlackRock assumes no duty to and does not undertake to update forward-looking statements. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

Factors that can cause results to differ, as well as additional factors that can affect forward-looking statements, are discussed in BlackRock's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, accessible on the SEC's website at www.sec.gov and on BlackRock's website at www.blackrock.com. The inclusion of information contained in this report should not be construed as a characterization regarding the materiality or financial impact of that information.

The information provided herein is based in part on information from third-party sources that BlackRock believes to be reliable, but which has not been independently verified by BlackRock, and BlackRock does not represent that the information is accurate or complete. The inclusion of information contained in this report should not be construed as a characterization regarding the materiality or financial impact of that information.

Important notes: This document includes non-financial metrics that are subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary. The information set forth herein is expressed as of December 2024 and BlackRock reserves the right to update its measurement techniques and methodologies in the future.

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