2023 TCFD Report
BlackRock’s climate-related disclosures
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About this Report

BlackRock's 2023 Task Force on Climate-Related Financial Disclosures ("TCFD") Report (this "Report") is for BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, “BlackRock” or the “Company” or the “firm”). This Report is aligned to recommendations provided by the TCFD, an organization 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, 2023, and dollar figures are shown in USD, unless otherwise noted. 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.

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 supported by supplemental guidance for sectors, including asset managers. Throughout this Report, BlackRock has sought to provide information on all four pillars and 11 recommendations.

Following the publication of the International Sustainability Standard Board’s ("ISSB") inaugural disclosure standards in June 2023, the FSB confirmed the disbanding of the TCFD in October 2023. The disbanding of the TCFD reflects the ISSB’s climate disclosure standard (IFRS S2 Climate-related disclosure, “S2”) having fully incorporated the four content pillars and 11 recommendations of the TCFD. As such, and in light of the January 1, 2024 effective date for the S2 disclosure standard, BlackRock continues to align with the TCFD recommendations for its 2023 climate-related disclosure. BlackRock will continue to review this approach, including the incremental S2 disclosure requirements not contained in the TCFD, for the purpose of its future climate-related disclosures.

Perspectives included in this Report

BlackRock is a leading publicly traded investment management firm with $10.0 trillion of assets under management ("AUM"). With approximately 20,000 employees 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 risks 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, and with a responsibility to manage material risks to the firm’s clients’ portfolios, 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 the climate.

BlackRock’s approach to other sustainability-related topics

BlackRock also reports on other material sustainability-related topics in its 2022 Sustainability Disclosure.

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

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

BlackRock is a publicly traded investment management firm that provides a broad range of investment management and technology services to institutional and retail clients worldwide. The assets BlackRock manages belong to its clients which include public and private pension plans, insurers, official institutions, endowments, universities, charities, family offices, wealth managers, and, ultimately, the individual investors that they serve, many of whom are saving for retirement.

BlackRock’s approach to the low-carbon transition

The low-carbon transition is not proceeding in a straight line, it is moving in different ways and at different paces in different parts of the world. BlackRock’s job is to help clients navigate the big shifts in the low-carbon transition no matter where they are.

As an asset manager and fiduciary to its clients, BlackRock’s investment approach is informed by three principles: client choice, performance and research. BlackRock starts by understanding the client’s investment objectives and provides choice to meet their needs. It then seeks the best risk-adjusted financial returns within the mandate clients provide, considering relevant, material investment risks and opportunities, and including, depending on the client’s chosen investment mandate, ones created by the transition to a low-carbon economy. When seeking the best financial returns for its 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.

BlackRock’s role in the transition is as a fiduciary to its clients. The firm’s role is to help clients navigate investment risks and opportunities, not to engineer a specific decarbonization outcome in the real economy. 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 provider of technology services, BlackRock is also committed to building and delivering sophisticated transition and climate tools, analytics, and portfolio insights powered by Aladdin. BlackRock launched Aladdin Climate™ to meet the demand from clients to measure climate risks and opportunities.

In 2023, BlackRock continued to evolve its organization by establishing new teams that focus on sustainability-related matters, including:

- Transition Capital, part of the private markets platform, to source and accelerate the progress of global investment opportunities for clients at the intersection of energy, sustainability and infrastructure.
- Global Corporate Sustainability Controllers, within Finance & Strategy, to oversee the global coordination of both voluntary and mandatory corporate sustainability reporting to further support BlackRock’s goal of delivering transparency and rigor in corporate sustainability reporting.

These teams, along with existing capabilities across the firm, are focused on building the future of sustainable and transition investing and reporting at BlackRock.

<table>
<thead>
<tr>
<th>AUM in sustainable investing platform</th>
<th>$802 bn</th>
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<tbody>
<tr>
<td>(8% of total AUM)</td>
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</table>

<table>
<thead>
<tr>
<th>of net inflows into sustainable investing platform</th>
<th>$46 bn</th>
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<tr>
<td>(16% of firm’s total net inflows)</td>
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</table>

<table>
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<tr>
<th>AUM in transition investing platform</th>
<th>$138 bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1% of total AUM)</td>
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<table>
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<tr>
<th>of net inflows into transition investing platform</th>
<th>$11 bn</th>
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<tbody>
<tr>
<td>(4% of firm’s total net inflows)</td>
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Figures above are global metrics and as of, or for the fiscal year ended, December 31, 2023, unless otherwise specified.
Supporting client choice and delivering for their needs

BlackRock’s research suggests that the transition to a low-carbon economy, one of the five mega forces tracked by the firm’s investment institute along with demographic divergence, digital disruption and AI, a fragmenting world and the future of finance, is set to spur a massive reallocation of capital as energy systems are rewired. BlackRock sees the transition’s speed and shape driven by an interplay of policy, technology and consumer and investor preferences.

BlackRock has developed the BlackRock Investment Institute Transition Scenario (“BIITS”) to inform an assessment, on behalf of clients, of how the low-carbon transition is most likely to play out based on what is known and expected today — and the potential portfolio impact. BlackRock aims to track its evolution over time, similar to how the firm plans to track other mega forces.

To help inform the choices BlackRock offers its clients, in June 2023, the firm commissioned iResearch Services, an independent third-party research consultancy, to conduct a market survey on its behalf. The results offered a lens into how institutional investors globally think about investing in the low-carbon transition, with 56% of investors who took the survey indicating that they planned to increase transition allocations in the next 1-3 years, and 46% saying that navigating the transition was their most important investment priority in the next 1-3 years.

In order to meet this client demand, in 2023, BlackRock provided clients a choice of over 400 sustainable funds globally covering a spectrum of sustainable solutions, as well as customized solutions to help meet clients’ objectives. The firm continued to offer clients choice with the launch and/or conversion of over 20 iShares® sustainable exchange-traded funds (“ETFs”) and index mutual funds (“IMFs”) across the U.S., Europe, Asia-Pacific and Canada. BlackRock also launched several investment offerings in diversified infrastructure globally, with a central focus on the transition and energy security, helping give clients the opportunity to invest in solutions that are meant to capture opportunities related to the transition to a low-carbon economy.

Investment stewardship and engagement

Investment stewardship is one of the ways in which BlackRock fulfills its fiduciary responsibilities as an asset manager to its clients. The BlackRock Investment Stewardship (“BIS”) team serves as a link between clients and the public companies they invest in.

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.
Public disclosures allow investors to evaluate how a company considers risks and opportunities material to their business model and to track progress against management’s stated goals, including climate-related risks and opportunities, as well as how they manage material natural capital impacts and dependencies, where appropriate. In their engagements during the 2022-2023 proxy year, the BIS team encouraged companies to provide disclosures aligned with the reporting framework developed by the TCFD to support investors’ ability to assess these risks. In BIS’ experience, better quality information leads to better investment alignment and decision-making by investors.

In 2022-2023 proxy year, BIS held 4,000 engagements with 2,642 companies globally. Amongst other topics, climate and natural capital risks were discussed in 1,662 of the engagements with 1,302 of the companies. BIS observed steady improvements in the reporting published by companies for which a transition to a lower carbon economy is a material risk. Regarding shareholder proposals, globally, BIS voted on 164 shareholder proposals addressing climate and natural capital issues in the 2022-2023 proxy year and supported 14 of such proposals.

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 early 2024, BlackRock extended the Voting Choice program to its largest ETF through a pilot program for the 2024 proxy voting season. With this expansion, BlackRock is empowering millions of shareholder accounts in the U.S., which will enable more than half of its global index equity AUM to be eligible to participate in Voting Choice. This expansion reflects the firm’s commitment to providing clients with a broad range of choices across strategies, products and services.

**Managing BlackRock’s operations sustainably**

As a corporate entity, BlackRock pursues a strategy that is focused on reducing greenhouse gas (“GHG”) emissions and increasing the efficiency of BlackRock’s operations, where possible.

To achieve these goals, BlackRock focuses on finding ways to leverage lower carbon energies like renewable electricity and Sustainable Aviation Fuel (“SAF”), increase energy efficiency in facilities and data centers and invest in high quality and durable projects that remove carbon from the atmosphere.

In 2023, BlackRock’s Corporate Sustainability team established and enhanced its programming, specifically its Supplier Sustainability Program, operational initiatives in SAF and approach to procuring carbon credits. These initiatives support BlackRock’s corporate sustainability strategy to measure, manage and mitigate the firm’s operational GHG emissions footprint. In 2023, BlackRock expanded its focus with support of its GHG measurement provider, Watershed, to include capabilities that support efforts on supplier engagement and evaluating reduction solutions.

**Philanthropy**

Separate from the firm’s fiduciary role as an asset manager on behalf of clients, BlackRock’s Social Impact team, the firm’s philanthropic arm, helps to drive impact in communities through direct engagement and grants from The BlackRock Foundation (the “Foundation”). In 2021, the Foundation announced a 5-year, $100 million grant to Breakthrough Energy Catalyst (“Catalyst”) to accelerate the development of climate solutions needed to transition to a low-carbon economy. This philanthropic capital aims to reduce the “Green Premium” embedded in current clean energy technologies by investing in projects across SAF, green hydrogen, direct air capture, long-duration energy storage and green manufacturing. Since the Foundation’s announcement, Catalyst has committed funding to four projects with grant capital, relating to SAF, e-Methanol and long-duration energy storage battery systems.

**BlackRock’s commitment to transparency**

BlackRock encourages companies in which it invests on behalf of clients to provide financially material disclosures, BlackRock also recognizes the importance of leading by example in its own disclosures and is focused on enhancing transparency at the firm and fund level.

In continuation of BlackRock’s commitment to providing transparency, BlackRock reports estimates of GHG emissions associated with BlackRock’s AUM. These figures represent the emissions associated with the corporate securities and real estate (where data is available) BlackRock invests in on behalf of its clients. In addition to this, BlackRock continues to report emissions intensity metrics for sovereign debt assets.
## Key points in response to TCFD recommendations

<table>
<thead>
<tr>
<th>Pillar/recommendation</th>
<th>Key points</th>
<th>Reference</th>
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<tbody>
<tr>
<td><strong>Governance:</strong> Disclose the organization’s governance around climate-related risks and opportunities</td>
<td>Oversight of near- and long-term business strategy (including sustainability) by BlackRock’s Board of Directors (the “Board”).&lt;br&gt;Nominating, Governance and Sustainability Committee of the Board oversees investment stewardship, public policy, corporate sustainability and social impact activities.&lt;br&gt;Risk Committee of the Board assists the Board with its oversight of BlackRock’s levels of risk, risk assessment, and risk management, including with respect to climate and other sustainability risks.</td>
<td>Page 9</td>
</tr>
<tr>
<td>Describe the board’s oversight of climate-related risks and opportunities.</td>
<td>Global Executive Committee (“GEC”) sets the strategic vision and priorities of the firm and drives accountability at all levels.&lt;br&gt;GEC Investment Sub-Committee oversees the firm’s investment processes.</td>
<td>Page 9</td>
</tr>
<tr>
<td><strong>Strategy:</strong> 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.</td>
<td>Opportunities: increased demand for sustainable investment products and Aladdin, as well as operating efficiencies.&lt;br&gt;Risks: market, product, reputational, regulatory and physical risks.</td>
<td>Pages 19-20</td>
</tr>
<tr>
<td>Describe the climate-related risks and opportunities the organization has identified over the short-, medium- and long-term.</td>
<td>Management of financially material climate-related risks and opportunities is embedded across investment processes, business strategy and operations.</td>
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<tr>
<td>Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy and financial planning.</td>
<td>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.</td>
<td>Pages 21-24</td>
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<tr>
<td>Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</td>
<td>BlackRock incorporates climate-related risks and opportunities into firmwide processes through environmental, social and governance (“ESG”) integration, where financially material and consistent with the relevant investment guidelines. Please refer to the BlackRock ESG Integration Statement for further information. Additionally, please see item FN-AC-410a.3 of BlackRock’s 2022 Sustainability Disclosure, the BIS 2023 Global Voting Spotlight and the BIS 2022 Investment Stewardship Annual Report for an overview of investment stewardship at BlackRock.</td>
<td>Pages 12-16</td>
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<tr>
<td>Describe how risks and opportunities are factored into relevant products or investment strategies and describe related transition impact.*</td>
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*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](https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf)).
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<tr>
<th>Pillar/recommendation</th>
<th>Key points</th>
<th>Reference</th>
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<tr>
<td><strong>Risk management:</strong> Disclose how the organization identifies, assesses and manages climate-related risks</td>
<td>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 &amp; Quantitative Analysis (“RQA”), serves as the second line of defense in BlackRock’s risk management framework along with BlackRock Legal &amp; Compliance (“L&amp;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, on an ongoing basis as part of 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, complementing the first-line monitoring. Climate-related risks are also evaluated in operational processes, including considering financially material relevant climate-related risks 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.</td>
<td>Page 29</td>
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<tr>
<td>Describe the organization’s processes for identifying and assessing climate-related risk.</td>
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<td>Describe the organization’s processes for managing climate-related risks.</td>
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<tr>
<td>Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization’s overall risk management.</td>
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<tr>
<td>Describe how material climate-related risks are identified, assessed and managed for each product or investment strategy.*</td>
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<tr>
<td>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.*</td>
<td>BIS has engaged with companies for several years on TCFD-aligned reporting, where appropriate. In the 2022-2023 proxy year, BIS held 1,662 engagements with 1,302 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.</td>
<td>Pages 17-18</td>
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<tr>
<td><strong>Metrics and targets:</strong> Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material</td>
<td>Categories of metrics: Business Indicators, Corporate GHG Emissions, Firm-Level Climate Metrics for BlackRock’s AUM, Product-Level Sustainability Characteristics.</td>
<td>Page 30</td>
</tr>
<tr>
<td>Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</td>
<td>Varies by investment strategy. 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.</td>
<td>Page 36</td>
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<tr>
<td>Describe metrics used to assess climate-related risks and opportunities in each product or investment strategy.*</td>
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<td>Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 GHG emissions and the related risk.</td>
<td>BlackRock reports Scope 1, 2 and relevant categories of Scope 3 emissions where source data is reliable.</td>
<td>Pages 32-33</td>
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<tr>
<td>Asset managers should disclose GHG emissions for their AUM and WACI for each product or investment strategy, where data and methodologies allow. Asset managers should consider providing other carbon footprint metrics they believe are useful for decision-making.*</td>
<td>BlackRock reports estimates reflecting the absolute emissions associated with BlackRock’s AUM in corporate securities and real estate. 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.</td>
<td>Pages 35-41</td>
</tr>
<tr>
<td>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.*</td>
<td>BlackRock publishes WACI and ITR, on product pages of its website where sufficient data on the underlying fund holdings and satisfactory methodologies are available.</td>
<td></td>
</tr>
<tr>
<td>Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</td>
<td>In 2023, 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.</td>
<td>Pages 12-16 and 25-26</td>
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*Reflects recommendations that are included in the TCFD 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).
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-related 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 sustainability-related investment objectives and preferences 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 2023, 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, Governance and Sustainability Committee of the Board (“NGSC”) oversees investment stewardship, public policy, corporate sustainability and social impact activities. The NGSC periodically reviews corporate and investment stewardship-related policies and programs, as well as significant publications relating to environmental (including climate), social and other sustainability matters. As appropriate, the NGSC makes recommendations on these matters to be reviewed by the full Board. The NGSC 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.

Exhibit G.1: Sustainability-related management committees

<table>
<thead>
<tr>
<th>Management committee</th>
<th>Sustainability-related responsibilities</th>
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</table>
| Global Executive Committee (“GEC”) | • 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 | • 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) matters**

<table>
<thead>
<tr>
<th>Team</th>
<th>Sustainability-related responsibilities</th>
<th>Management reporting line</th>
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</table>
| **Aladdin** | • 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 member of GEC |
| **BlackRock Investment Institute (“BII”)** | • 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 (“BIS”)** | • Serves as a link between clients and the companies they invest in, engaging with investee corporate leadership and proxy voting at shareholder meetings when authorized by clients to do so. Where appropriate, BIS engages with companies on material climate-related issues. | Global Head of BIS is a GEC member |
| **Corporate Sustainability** | • Leads efforts to drive operational sustainability, establish sustainable business programs and policies, and engage key stakeholders on BlackRock’s contribution towards the low-carbon transition and establishing BlackRock’s operational sustainability goals. | Reporting line into Global Head of Corporate Affairs (GEC member) |
| **Enterprise Services (“ES”)** | • Corporate Real Estate, Space Planning, Critical Infrastructure and Workplace Experience teams manage BlackRock’s owned and leased corporate footprint, including the management of energy efficiency and carbon reduction initiatives where BlackRock has operational control.  
• Work alongside key stakeholders such as office leadership, property managers (leased premises) and the employee-run Green Team Network (“GTN”) to plan and implement sustainability efforts in offices.  
• Business Continuity Management manages disaster recovery planning, strategy and crisis management activities.  
• Health and Safety team 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** | • Develops corporate climate- and sustainability-related disclosures globally, for both voluntary and mandatory reporting obligations. | Global Controller reports into Chief Financial Officer (GEC member) |
| **Government Affairs & Public Policy (“GAPP”)** | • Engage in financial services public policy dialogue, including in relation to climate risk and sustainability disclosures, through participation in industry initiatives, engagement with regulators and standard setters around the world, and through whitepapers, comment letters and consultation responses regularly published on BlackRock’s website. | Heads of Government Affairs & Public Policy report to Global Head of Corporate Affairs (GEC member) |
| **Global Product Group** | • Leads sustainable product innovation and development, governance and strategy across the global product platform. | Chief Product Officer reports to President (GEC member) |
### Exhibit G.2: Functional groups involved in sustainability-related (including climate) matters (continued)

<table>
<thead>
<tr>
<th>Team</th>
<th>Sustainability-related responsibilities</th>
<th>Management reporting line</th>
</tr>
</thead>
</table>
| **Investment divisions**                   | • BlackRock investment divisions include ETFs and Index Investments, Portfolio Management Group, Global Trading and Transition Management, 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 (“L&C”)**             | • 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 member of the GEC                                                  |
| **Risk & Quantitative Analysis Group (“RQA”)** | • 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 risks, on an ongoing basis 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, complementing the first-line monitoring.  
• 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                                      |
| **Sustainable & Transition Solutions (“STS”)** | • Leads BlackRock’s sustainability and transition strategy, drives cross-functional change, supports client and external engagement, powers product ideation and embeds sustainable expertise across the firm in partnership with other teams.                                                                                                                                                                                                                               | Global Head of STS reports to a Vice Chairman (GEC member)                                                   |
BlackRock was founded on the premise of understanding and managing investment risk, anticipating client needs and working with clients to achieve their investment goals. This 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. Clients are increasingly asking 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. When financially material, BlackRock incorporates climate information alongside other information into its firmwide processes, where relevant, with the objective of enhancing risk-adjusted returns within the scope of the mandate given by clients. 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. BlackRock continues to believe in the power of providing choice to clients, including by offering a wide range of investment products to help them meet their investment goals, and 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 2023.

Investment approach

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

- Understanding the client’s investment objectives and providing choice to meet their needs;
- Seeking the best risk-adjusted returns within the scope of the mandate given by clients; and
- Underpinning its work with research, data and analytics.20

To help inform the choices BlackRock offers its clients, in June 2023, the firm commissioned iResearch Services, an independent third-party research consultancy, to conduct a market survey on its behalf.21 The results offered a lens into how institutional investors globally think about investing in the low-carbon transition, with 56% of investors who took the survey indicating that they planned to increase transition allocations in the next 1-3 years, and 46% saying that navigating the transition was their most important investment priority in the next 1-3 years. In order to meet this client demand, BlackRock has created a leading sustainable investment platform, described in more detail below.

BlackRock incorporates financially material sustainability data or information, including material data and information related to climate, alongside other information into firmwide processes, where relevant, with the objective of enhancing risk-adjusted returns. BlackRock has a framework for environmental, social and governance integration that permits a diversity of approaches across different investment teams, strategies and particular client mandates. 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. As such, BlackRock’s ESG integration framework needs to allow for flexibility across investment teams. 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 assess 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, because BlackRock sees it having implications on macroeconomic trends, company financial prospects and business models, and portfolios.
Sustainable investment solutions. To enable choice and meet client demand, BlackRock offers a wide range of sustainable investment strategies to clients. As of December 31, 2023, BlackRock had over 400 sustainable funds globally covering a spectrum of sustainable solutions, as well as customized solutions to meet clients’ objectives, and managed $802 billion in its sustainable investing platform on behalf of its clients. In 2023, BlackRock saw $46 billion of net inflows into sustainable investment strategies, representing 16% of total net inflows over the same time period. As of December 31, 2023, BlackRock managed $138 billion in its transition investment platform on behalf of its clients.

Exhibit S.1: BlackRock sustainable investing platform

<table>
<thead>
<tr>
<th>Screened</th>
<th>Uplift</th>
<th>Thematic</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment approach</strong></td>
<td>Constrain investments by avoiding issuers or business activities with certain environmental, social and/or governance characteristics.</td>
<td>Commitment to investments with improved environmental, social and/or governance characteristics versus a stated universe or benchmark.</td>
<td>Targeted investments in issuers whose business models may not only benefit from but also may drive long-term sustainability outcomes.</td>
</tr>
<tr>
<td><strong>Additional details</strong></td>
<td>Includes use of screens and may be enhanced with active engagement with specific issuers.</td>
<td>Environmental, social and/or governance data drives portfolio construction and security selection with some strategies leveraging to target a specific objective.</td>
<td>Strategy construction determined by focused exposure to the specific environmental or social theme.</td>
</tr>
</tbody>
</table>
ETFs & Index investments

BlackRock aims to provide choice to clients with different needs for sustainable products, and offer a range of sustainable ETFs, including screened, uplift (optimized) and thematic products.

Sustainable ETFs remain one of the most dynamic segments within the ETF market. In 2023, iShares launched and/or converted over 20 sustainable ETFs and IMFs across the U.S., Europe, Asia-Pacific and Canada. As of December 31, 2023, iShares had over 300 sustainable index offerings globally. Examples of advancements made to the firm’s sustainable ETF landscape in 2023 include:

- iShares continued its climate product innovation globally, launching transition portfolio building blocks in the U.S. and Asia, broad market environmental, social and/or governance portfolio building blocks in Europe, and factor environmental, social and/or governance exposures in the U.S.
- iShares also expanded and enhanced its thematics suite with the launch of seven ETFs targeting sustainability and the transition. The funds provide exposure to a wide range of clean energy technologies, raw materials and service providers supporting the transition to a low-carbon economy.

BlackRock’s ETFs & Index Investments team continued working to promote greater consistency and transparency of sustainability benchmark methodologies. The team engaged with index providers to advocate for clear metrics and methodologies to comply with evolving regulations.

Active investment strategies

BlackRock manages active investment strategies across a range of asset classes including (i) equities; (ii) fixed income; and (iii) multi-asset strategies. As the world transitions to a low-carbon economy, sustainability-related data and climate-related insights are increasingly important to help uncover the catalysts that could drive asset values over the long-term. In 2023, BlackRock continued to refine the active investment strategies available to clients to incorporate a greater range of sustainable investment strategies. Below are some examples of the active investment strategies that incorporate climate-related considerations.

Fundamental equity. 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 fundamental expert insights and employs an interdisciplinary toolkit to construct portfolios addressing clients’ needs and helping them achieve their sustainable goals. For clients who are seeking to invest in products aligned with sustainability, the FE platform manages three main types of sustainable investment strategies:

- **Uplift (Core).** Core fundamental sustainable equity investing across the breadth of the market in companies that capture sustainable shifts. The range has sustainable investments exposures and explicit climate objectives.
- **Thematic.** The FE Thematics & Sector team invests in specific sustainability themes, including aligning certain investments to the United Nations Sustainable Development Goals (“UN SDGs”).
- **Impact.** The FE Impact team seeks to invest in companies whose core products and services address social and environmental challenges as identified by the UN SDGs and the impact management process aligns with the Operating Principles for Impact Management.

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 environmental, social and/or governance 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 dedicated active environmental, social and/or governance strategies.

The FI team has also developed investment strategies focused on 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 29, 2023, BlackRock invested $61 billion, on behalf of clients, in green bonds across dedicated portfolios and as a component of broader fixed income mandates. These bonds support a variety of green projects, including renewable energy, energy efficiency, 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 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”) 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.28 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.

BlackRock has made more than 130 private markets transition investments in over 20 countries, including in emerging markets across Asia, Africa, Latin America and the Middle East. These include signing contracts to make investments on behalf of BlackRock’s Climate Finance Partnership (“CFP”) into the largest onshore wind farm in Africa, an independent power producer and renewable electricity developer in the Philippines, an operator and developer of solar photovoltaic power projects in Thailand, and a distributed solar developer and energy company in Brazil, with a combined pipeline of four gigawatt of renewable capacity.

**Transition capital.** BlackRock launched the Transition Capital team as part of their Private Markets platform to help BlackRock’s clients explore and invest in transition-related opportunities in private markets across the capital stack. The team collaborates closely with BlackRock investment teams, capital markets professionals and BlackRock’s senior leadership to identify and qualify attractive investments across the corporate lifecycle, and to launch and expand at scale client offerings across the risk spectrum.

**Private markets infrastructure.** BlackRock’s infrastructure investment teams have been at the forefront of investing in the low-carbon transition for clients interested in those investments. The teams manage over $50 billion in client AUM,29 across over 130 investments, spanning more than 20 markets.30 The first investment was a wind project in Europe in 2012 and since then the platform has expanded its strategy with the broadening market opportunities into renewables, natural gas, battery storage, energy efficiency, sustainable mobility, carbon capture and grid infrastructure, amongst other sectors. BlackRock has built a suite of transition capabilities that enables its clients to access the multi-trillion-dollar investment opportunity31 in private markets through climate, diversified and evergreen infrastructure strategies, as well as infrastructure solutions. BlackRock’s infrastructure investment strategies have continued to grow over the past year, raising over $7 billion in 2023.

BlackRock’s diversified infrastructure platform’s opportunity set is driven by the structural trends of decarbonization, decentralization and digitalization, which the team believes requires multi-trillions of future infrastructure investment. The team recognizes the investment opportunities generated by decarbonizing infrastructure beyond wind and solar, such as carbon capture and storage, battery storage, energy efficiency, hydrogen and electrified transportation. This includes investments in a diversified set of essential infrastructure assets and businesses globally that are driving the transition and energy security. In 2023 BlackRock invested, on behalf of its clients, in the world’s largest direct air capture project, which is designed to remove 500,000 tons of carbon dioxide from the air annually.32
ALTÉRRA partners with BlackRock

BlackRock and ALTÉRRA, the world’s largest private investment vehicle for climate change launched at the World Climate Action Summit,* announced an innovative new partnership that targets $2 billion invested in climate opportunities across BlackRock’s private debt and infrastructure equity strategies.

The investment solution created for this arrangement will be capitalized with investments from both ALTÉRRA Acceleration and ALTÉRRA Transformation.

Through the partnership, ALTÉRRA Acceleration will commit $1 billion to BlackRock’s Climate Transition Oriented Private Debt strategy (“CPD”), an innovative new private debt strategy focused on the low-carbon transition. Launched in 2023, CPD uses a proprietary climate transition ratings framework to evaluate and finance a range of middle market companies, primarily in Europe and the U.S., that demonstrate climate transition characteristics and are committed to reducing their carbon emissions. Its portfolio management team actively engages with the companies it finances to support the implementation of their decarbonization targets.

Cash management

In 2019, BlackRock introduced a suite of funds, known as the BlackRock Liquid Environmentally Aware funds (the “LEAF funds”), that seek to offer the stability, liquidity and yield potential of a money market fund while considering environmental criteria. Heightened market volatility in 2023, alongside higher money market yields, led many investors, including those focused on climate risk and opportunities, to hold elevated levels of cash, helping drive global assets in the LEAF funds to over $28 billion in AUM.33 Available in USD, GBP, EUR and CAD currencies, these funds consider select environmental criteria alongside some exclusionary screens, in addition to BlackRock’s standard credit risk assessment process for liquidity management portfolios.34 The EUR, GBP and USD LEAF funds registered in Dublin are categorized as Article 8 under the European Union’s Sustainable Finance Disclosures Regulation (“SFDR”).

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. Each year, the CER units purchased are applied to signature projects which are selected by BlackRock and deemed to be in support of a better environmental future. From BlackRock’s first purchase of CERs from its net management fees from the LEAF funds in 2019 through December 31, 2023, BlackRock has purchased and retired 571,640 CER credits via the Adaptation Fund, at a total cost of $1,395,500. This funding has been applied to projects including wind power, investment in degraded lands and forestry development, and transportation improvements.

The fund leverages and builds on BlackRock’s Global Private Debt platform and capabilities.

ALTÉRRA Acceleration and ALTÉRRA Transformation will also be investing $1 billion into transition related infrastructure through BlackRock’s infrastructure equity strategies. This includes $650 million from ALTÉRRA Acceleration to be invested in the BlackRock Global Infrastructure Fund IV (“Infra IV”) and related infrastructure co-investments. Infra IV invests in a diversified portfolio of essential infrastructure assets globally.

In addition, $350 million will be invested in infrastructure in the Global South. ALTÉRRA Acceleration plans to co-invest $100 million alongside CFP, a public-private finance vehicle focused on investing in climate-related infrastructure in emerging markets.

The investments backed by ALTÉRRA will target similar opportunities, leveraging a robust pipeline sourced by BlackRock’s capital markets and private markets investment teams and supported by the Transition Capital team.

Investment stewardship

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 the 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. BIS’ approach to stewardship is outlined in its Global Principles, regional voting guidelines and engagement priorities.

Consistent with prior years, in 2023, 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 2022–2023 proxy year, BIS held 4,000 engagements with 2,642 companies globally. Amongst the other priorities, climate and natural capital risks were discussed in 1,662 of the engagements with 1,302 of the companies.

The way in which companies navigate material climate-related risks and adapt to a low-carbon economy may have a direct financial impact on clients’ investment outcomes and financial well-being. BIS’ approach on these issues is described in its engagement priorities and is summarized in Exhibit S.2.

TCFD-aligned disclosures. Public disclosures allow investors to evaluate how a company considers climate-related risks and opportunities material to their business model and to track progress against management’s stated goals. During the reporting period, BIS encouraged disclosures aligned with the reporting framework developed by the TCFD to support investors’ ability to assess these risks. BIS has observed steady improvements in the TCFD-aligned reporting published by companies in carbon-intensive sectors for which a transition to a lower carbon economy is a material risk. Of over 1,000 such companies, as of June 2023, 78% now report across all four pillars of the TCFD (57% in 2021) and 71% provide the detailed information necessary for investors to assess a company’s approach to managing climate-related risks and their ability to deliver shareholder returns over time (57% in 2021).

Climate-related voting on behalf of clients. BIS makes voting decisions on behalf of clients who authorize it to do so on management and shareholder proposals as a fiduciary acting in their long-term financial interests. BIS is interested in understanding how companies address material climate-related risks and opportunities — just as the team seeks to understand other business-relevant risks and opportunities — and how these factors are considered within strategy in a manner consistent with the company’s business model and sector. BIS supports management whose approach, in the team’s assessment, is consistent with protecting the long-term, financial interests of BlackRock’s clients as long-term shareholders. When BIS determines it is in BlackRock’s clients’ financial interests to signal concerns through voting, the team may do so in two forms: BIS might not support the election of directors or other management proposals, or BIS might not support management’s voting recommendation on a shareholder proposal.

Exhibit S.2: BIS’ approach to climate risk and natural capital

<table>
<thead>
<tr>
<th>Climate risk</th>
<th>Natural capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>While companies in various sectors and geographies may be affected differently by climate-related risks and opportunities, the low-carbon transition is an investment factor that can be material for many companies and economies around the globe. BIS seeks to understand how companies are managing material business-relevant risks and opportunities, including those related to the low-carbon transition, in the context of their business model and sector. BIS looks to companies to disclose their approach to managing material climate-related risks and opportunities in their business models.</td>
<td>The management of nature-related risks and opportunities is a component of companies’ ability to generate long-term financial returns for those whose strategies or supply chains are materially reliant on natural capital. Where natural capital is material to the long-term strategy of companies, BIS looks for public disclosures to assess risk oversight and to understand how nature-related impacts and dependencies are managed. BIS finds it helpful when these disclosures include a discussion of material natural capital risks and opportunities in the context of a company’s governance, strategy, risk management and metrics and targets.</td>
</tr>
</tbody>
</table>
BIS looks to boards to oversee management’s approach to addressing material climate risk in the company’s business model. In the 2022-2023 proxy year, BIS did not support 213 proposals at 155 companies related to the election or discharge of directors because of concerns regarding inadequate disclosure or effective board oversight of climate-related risks.

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. BIS observed an increase in the number of shareholder proposals that did not warrant BIS support in the 2022-2023 proxy year. In the team’s assessment, there was an uptick in the number of such shareholder proposals that were overly prescriptive or unduly constraining on management decision-making. The number of single-issue proposals where the request made did not have economic merit also increased. Importantly, many proposals failed to recognize that companies had already substantively met their request. Globally, BIS voted on 164 shareholder proposals addressing climate and natural capital issues in the 2022-2023 proxy year and supported 14 of such proposals.\(^{39}\)

Exhibit S.3 highlights engagement and voting statistics for climate-related considerations across investee companies for the 2022-2023 proxy year.

**Exhibit S.3: Engagement and voting for climate-related considerations**

| 1,662 engagements on climate and natural capital in the 2022-2023 proxy year |
| 213 election or discharge of directors proposals BIS did not support due to inadequate disclosure or effective board oversight of climate-related risks |
| 164 shareholder proposals voted addressing climate and natural capital issues in the 2022-2023 proxy year |
| 14 shareholder proposals supported addressing climate and natural capital issues* |


*Votes “for” include abstentions. Excludes the Japanese market, where numerous shareholder proposals are filed every year due to low filing barriers, and where shareholder proposals are often legally binding for directors in this market.

BlackRock Voting Choice. While many asset owners are pleased to have BlackRock’s stewardship team cast proxy votes on their behalf, others want the choice to participate more actively in the proxy voting process.

Launched in January 2022, BlackRock Voting Choice gives many clients the option to participate more directly in the proxy voting process where legally and operationally viable.

Voting Choice is available for clients invested in certain institutional pooled funds in the U.S., UK, Ireland, and Canada that utilize equity index investment strategies, as well as clients in certain institutional pooled funds in the U.S., UK and Canada that use systematic active equity strategies. Currently, this includes over 650 pooled investment funds, including equity index funds and systematic active equity investment funds. In addition, institutional clients in separately managed accounts continue to be eligible for BlackRock Voting Choice regardless of their investment strategies. As of December 31, 2023, clients representing more than $598 billion in index equity AUM were participating in BlackRock Voting Choice.

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

This expansion reflects the firm’s commitment to providing clients with a broad range of choices across strategies, products and services.
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 manage 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.

In addition, 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.4a and S.4b provide an overview of climate-related risks and opportunities that BlackRock has identified.

Exhibit S.4a: Summary of key climate-related opportunities

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Description</th>
<th>Primary anticipated financial impact*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Products and services</strong></td>
<td><strong>Investment solutions</strong> BlackRock believes that its $802 billion dedicated sustainable investment platform and its $138 billion transition investment platform are well-positioned to meet the increased demand of clients who are seeking to invest in products aligned with sustainability.</td>
<td>Increased revenues</td>
</tr>
<tr>
<td><strong>Products and services</strong></td>
<td><strong>Aladdin</strong> 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 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.</td>
<td>Increased revenues</td>
</tr>
<tr>
<td><strong>Resource efficiency</strong></td>
<td><strong>Operations</strong> As a corporate entity, BlackRock pursues a strategy that is focused on reducing GHG emissions and increasing the efficiency of BlackRock’s operations, where possible. Finding innovative solutions to increase energy efficiency at BlackRock’s facilities and data centers and leveraging low-carbon energies such as renewable electricity reduces the firm’s environmental footprint.</td>
<td>Reduced expenses</td>
</tr>
</tbody>
</table>

* There is no guarantee that the primary anticipated financial impact referenced above will be achieved.
### Exhibit S.4b: Summary of climate-related risks

<table>
<thead>
<tr>
<th>Risk</th>
<th>Description</th>
<th>Primary anticipated financial impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market</strong></td>
<td>Market-related risks are among the key risks to which BlackRock’s profitability may be exposed. Fluctuations in asset value due to climate-related risks could lead to a reduction in investment management revenues as a result of decline in the value of BlackRock’s AUM, withdrawal of funds from BlackRock’s products or the rebalancing or reallocating of assets into BlackRock products that yield different fee levels.</td>
<td>Reduced revenues</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td>BlackRock may be unable to develop new products and services to suit clients’ climate-related needs and the development of new products and services may expose BlackRock to reputational harm, additional costs or operational risk. Unsuccessful efforts to develop products or services to suit clients’ climate-related needs could expose BlackRock to additional costs and/or cause revenue and earnings to decline. Changes in client preferences and/or changes to regulation to which its clients are subject could reduce demand for certain investment products offered by BlackRock.</td>
<td>Increased expenses and/or reduced revenues</td>
</tr>
<tr>
<td><strong>Reputation</strong></td>
<td>BlackRock is subject to competing demands from different stakeholder groups with divergent views on climate-related matters, including in countries in which BlackRock operates and invests, as well as in states and localities where BlackRock serves public sector clients. This divergence has and continues to increase the risk that any perceived or actual action or lack thereof by BlackRock on such matters on behalf of its clients will be viewed differently by various stakeholders and adversely impact BlackRock’s reputation and business, including through withdrawals, redemptions, terminations or decisions not to commit or invest new capital by clients, as well as legal and governmental action and scrutiny.</td>
<td>Reduced revenues</td>
</tr>
<tr>
<td><strong>Regulatory</strong></td>
<td>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 impact client investment strategies or allocations in a manner that is adverse to BlackRock.</td>
<td>Increased expenses and/or reduced revenues</td>
</tr>
<tr>
<td><strong>Physical</strong></td>
<td>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 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 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 risks.</td>
<td>Increased expenses</td>
</tr>
</tbody>
</table>

**The inclusion of climate-related risks in Exhibit S.4b 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 they depend upon, and the courses of action and/or events that could bring them 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, legal, 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 risks may consist of more extreme weather and climate events, or 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.42

**2023 scenario analysis**

In 2023, BlackRock continued to leverage Aladdin Climate analytics to conduct its analysis on the valuation of its AUM and the associated management fees generated from that AUM, as well as an assessment of the potential climate-related impacts on BlackRock’s corporate operations. The firm leveraged scenarios from the Network for Greening the Financial System (“NGFS”) and from the Inter-governmental Panel on Climate Change (“IPCC”).43 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 2023 climate scenario analysis entailed the key steps outlined in Exhibit S.5.

Exhibit S.5: Steps of BlackRock’s climate scenario analysis

**Risk identification**
Identify key climate-related risks to BlackRock

**Scenario selection**
Select scenarios which consider a range of potential future climate outcomes (and lead to a spectrum of transition and physical risks)

**Impact assessment**
Identify required data inputs and analytical specifications
Utilize Aladdin Climate tools to assess (i) asset-level climate-related impacts through climate-adjusted security and portfolio risk metrics, and (ii) the physical risks to the real estate associated with BlackRock’s operations
Conduct internal workshops to discuss the implications of the scenarios for BlackRock's business and develop assumptions around data inputs not included in pre-specified scenarios
Update analytical specifications based on internal workshops to produce final output

Note: Exhibit S.5 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.644 and Exhibit S.745 illustrate the full range of both NGFS and IPCC scenarios at a glance and highlight that the scenarios reflect a wide variety of outcomes46 and provide a broad range of plausible climate transition pathways.

BlackRock leveraged the IPCC Shared Socioeconomic Pathway (“SSP”) scenario, SSP5-8.5, in addition to the three NGFS scenarios,47 Orderly – Net Zero 2050, Disorderly – Delayed Transition, and Hot House World – Current Policies. BlackRock selected one scenario from each of the NGFS categories to observe a range of outcomes in the analysis.
Exhibit S.6: NGFS scenarios characterized by physical and transition risks*

<table>
<thead>
<tr>
<th>Category</th>
<th>Scenario</th>
<th>Physical risk</th>
<th>Transition risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Policy ambition</td>
<td>Policy reaction</td>
</tr>
<tr>
<td>Orderly</td>
<td>Net zero 2050</td>
<td>1.5°C</td>
<td>Immediate and smooth</td>
</tr>
<tr>
<td></td>
<td>Below 2°C</td>
<td>1.7°C</td>
<td>Immediate and smooth</td>
</tr>
<tr>
<td>Disorderly</td>
<td>Divergent net zero</td>
<td>1.5°C</td>
<td>Immediate but divergent</td>
</tr>
<tr>
<td></td>
<td>Delayed transition</td>
<td>1.8°C</td>
<td>Delayed</td>
</tr>
<tr>
<td>Hot House World</td>
<td>National Determined Contributions (“NDCs”)</td>
<td>~2.5°C</td>
<td>NDCs</td>
</tr>
<tr>
<td></td>
<td>Current policies</td>
<td>3°C+</td>
<td>None – current policies</td>
</tr>
</tbody>
</table>

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


** According to the NGFS, “Risks will be higher in the countries and regions that have stronger policy. For example, in Net Zero 2050 the EU, USA and Japan reach net zero GHGs by 2050, but globally only net zero CO2 is reached by this point.” Please see additional information from the Network for the Greening of Financial Services (“NGFS”): “NGFS Climate Scenarios for central banks and supervisors,” available at: https://www.ngfs.net/sites/default/files/media/2021/08/27/ngfs_climate_scenarios_phase2_june2021.pdf.

Exhibit S.7: Scenarios from the IPCC Sixth Assessment Report*

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Global mean surface temperature rise by end-of-century</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best estimate</td>
</tr>
<tr>
<td>SSP1-1.9</td>
<td>1.4°C</td>
</tr>
<tr>
<td>SSP1-2.6</td>
<td>1.8°C</td>
</tr>
<tr>
<td>SSP2-4.5</td>
<td>2.7°C</td>
</tr>
<tr>
<td>SSP3-7.0</td>
<td>3.6°C</td>
</tr>
<tr>
<td>SSP5-8.5**</td>
<td>4.4°C</td>
</tr>
</tbody>
</table>


** 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.
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 climate 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 risks.

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

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 BII CMA’s; and
- Assumptions around client behavior in response to the respective scenarios derived from internal workshops with various 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, Safety & Security team to assess the risk of climate-related incidents; and
- Reviewed results in detail with the Aladdin Climate and Enterprise Resilience, Safety & Security teams as well as other stakeholders within the firm to assess potential impacts of climate-related risks to the firm’s operations.

Over the long-term through 2050, if significant momentum towards the transition occurs, the potential magnitude of physical climate risks may be reduced. The analysis shows that this is comparatively more beneficial to BlackRock, as well as to economic growth and stability, than in alternative scenarios. However, in the short- and medium-term, delayed transition scenarios create risks that must 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 own physical locations, the impact was found to be limited across the firm’s global footprint. BlackRock leases most of its facilities and the Enterprise Resilience, Safety & Security team have developed global emergency action and business continuity plans that account for possible physical climate-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-risk to its offices.
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 their approach relating to scope, coherence, and uncertainty, which can further limit BlackRock’s climate scenario analysis. 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.

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.

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, Safety & Security team has the necessary monitoring and tools to facilitate early-warning procedures and actions that can be operationalized for any BlackRock location 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 office locations, how companies will react to regulatory and market pressures, as well as how BlackRock’s clients will react and adapt to those impacts.
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 reduce yet through investment in market solutions such as SAF and carbon credits.

In 2023, BlackRock made progress in its operational sustainability strategy by employing energy efficiency strategies, achieving its 100% renewable electricity match goal,50 establishing processes to enhance its approach to SAF and carbon credit procurement, and establishing a Supplier Sustainability Program.

Science-aligned emissions reduction goals

Underpinning BlackRock’s operational sustainability strategy, the firm is working to achieve the following science-aligned emissions reduction goals (relative to a 2019 baseline): (i) 67% reduction of Scope 1 and 2 emissions by 2030; (ii) 40% reduction in Scope 3 business travel emissions by 2030; and (iii) engagement of suppliers representing 67% of the firm’s emissions (estimated based on spend) to set science-aligned goals by 2025.

Below is a discussion of the efforts and pathways that BlackRock is undertaking to embed sustainable business practices with the goal of reducing operational emissions and addressing its remaining emissions over time.

Energy efficiency

BlackRock is primarily a tenant in multi-tenant buildings globally, and therefore, energy efficiency initiatives are undertaken at an individual office level, where possible. Energy efficiency is an important factor for mitigating BlackRock’s operational emissions and as BlackRock’s real estate portfolio evolves,51 BlackRock works to manage energy consumption by emphasizing energy efficiency in office selection, redesigning office space, and ongoing operations (e.g., upgrading lighting and HVAC systems to more efficient technologies, and utilizing flexible desking for employees).52

Clean energy

BlackRock prioritizes energy efficiency in its operations and also seeks to ensure that energy purchased comes from clean sources, wherever possible. To achieve this, the firm leverages renewable electricity through utility contracts and purchases environmental attribute certificates (“EACs”) to reduce electricity related emissions associated with BlackRock’s operations. BlackRock has achieved its 100% renewable energy match goal since 2020.53 This goal reflects BlackRock’s commitment to match the electricity that BlackRock’s global operations consume annually with renewable electricity.

50 Hudson Yards

BlackRock’s headquarters at 50 Hudson Yards in New York City represents the firm’s efforts to operationalize sustainable business practices in its buildings; that is to achieve best-in-class energy efficiency, reduce BlackRock’s environmental footprint, and create a healthy indoor environment for its employees. In 2023, BlackRock obtained its LEED Platinum56 certification and Fitwel 2 Star Rating55 certification for the 50 Hudson Yards office. While 50 Hudson Yards is not the only example of BlackRock offices with building certifications, it represents a key achievement for BlackRock as its global headquarters, which welcomed employees in early 2023.

Business travel

Business travel by employees constitutes a significant source of emissions for BlackRock’s operations. BlackRock recognizes the environmental impact of travel, but also understands 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 additionally through mechanisms such as sustainable aviation fuel certificates (“SAFc”).56

Market solutions

As a part of its operational sustainability strategy, BlackRock supports nascent market solutions, 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 reach its emissions reduction goals but recognizes that investment in these solutions is supplemental to its strategy which is focused on avoiding and reducing operational emissions first.

SAF

To reduce the impact of its private air travel emissions, BlackRock procures physical SAF where available for private aviation. In 2022, BlackRock established a book-and-claim57 program and made a purchase of SAFc. In doing so, BlackRock supports the development of SAF as a near term lever and leading decarbonization solution for aviation emissions. In 2022, the firm purchased an estimated 234,000 gallons of neat SAFc, and in 2023,58 BlackRock continued to procure SAFc through its program.
**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 and to compensate for the emissions from its operations that cannot currently be avoided or reduced.

In 2023, BlackRock further enhanced its selection criteria and process for sourcing high-quality removal credits by establishing an internal procurement standard, strengthening its due diligence process, and enhancing its carbon credit portfolio59 with higher durability removal projects. BlackRock’s due diligence process for projects under consideration includes a financial crimes review and a scientific review, which consists of a comprehensive evaluation framework to identify the highest quality available credits, strengths and potential weaknesses (if any), and project impact metrics such as carbon tons and co-benefits. Going forward, BlackRock will continue to explore and evaluate projects and emerging technologies that may contribute to or benefit from the low-carbon transition.

**Supplier engagement**
In 2023, to make progress against the firm’s supplier engagement goal, BlackRock established its Supplier Sustainability Program. The program is an initiative to engage with the firm’s suppliers to understand efforts on their sustainability commitments, if any, and improve the accuracy and granularity of BlackRock’s supplier emissions data. This is done in practice by engaging with suppliers to discuss their GHG emissions measurement, goals, and reduction strategies. These engagements help BlackRock not only review and confirm supplier-specific reduction plans, but also enables the firm to help suppliers build capacity in their own sustainability strategies. This capacity building is done through knowledge sharing and offering access to learning modules on GHG accounting, emissions reduction strategies, and reduction goal setting via Watershed’s supplier sustainability web-based platform. Additionally, through this platform suppliers verify information on their sustainable commitments and, consequently BlackRock can monitor progress against its engagement goal.

Suppliers representing approximately 37%60 of the firm’s emissions61 have committed to setting or have set science-based targets validated by the Science Based Targets initiative (“SBTi”).

**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 globally that help people, beyond the reach of the firm’s core business, and builds financial security; 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 been involved in championing clean technology innovations through its 5-year $100 million grant to Breakthrough Energy Catalyst. Breakthrough Energy was founded by Bill Gates in 2015 to accelerate the transition to a low-carbon economy, through investment vehicles, philanthropic programs, policy advocacy and other activities. Breakthrough Energy is committed to scaling the technologies the world needs to meet its climate goals. Catalyst is a first-of-its-kind model to finance the new solutions that will underpin a low-carbon economy, focused on five technology areas: SAF, long-duration energy storage, green hydrogen, direct air capture and green manufacturing. As of December 2023, Catalyst had announced four projects to be funded (in whole or in part) with philanthropic capital: A 2022 grant to Lanzajet’s Freedom Pines Fuels SAF plant in Soperton, Georgia, USA; a 2023 grant commitment to Xcel Energy to support the construction of two long duration energy storage battery systems in Minnesota and Colorado; and two European projects, alongside the European Commission and the European Investment Bank. These were the Ørsted FlagshipONE project in Sweden, the largest e-Methanol project in Europe, and Energy Dome’s Ottana project in Italy, a first-of-a-kind long duration energy storage project deploying Energy Dome’s CO2 battery technology.62

- **Generation.** In 2021, the Foundation committed to support an equitable economic recovery from COVID-19 through a 2-year, $13 million grant to Generation,63 a nonprofit that supports jobseekers across eighteen countries64 with the skills to access sustainable employment, in the U.S., UK, France, Italy, Spain and India. The Foundation’s funding helped scale programs to train and place people into growth sectors that are compatible with a sustainable, low-carbon economy, including green jobs opportunities. Generation’s green jobs programs are based on employer demand and designed to help program graduates launch stable careers and ultimately support their communities in the transition to a low-carbon economy. In 2023, the Foundation renewed its commitment to Generation’s programs in Italy and India for an additional two years, and in the UK for another year.
Below are examples of Social Impact’s employee engagement programs that support local communities:

- **Responding to natural disasters.** The firm activates 2:1 matching for employee donations in response to significant natural disasters and humanitarian crises. In 2023, disaster relief campaigns addressing the earthquakes in Türkiye, Syria, and Morocco, wildfires in Canada and Maui, and flooding in Libya collectively raised more than $1 million in employee donations and BlackRock matched contributions for charities responding on the ground. In addition, BlackRock supported Save the Children with a $250,000 direct donation towards relief efforts in the wake of the Türkiye and Syria earthquakes, a $100,000 direct donation to the Hawai’i Community Foundation in support of Maui wildfire relief efforts, and a $100,000 donation to Team Rubicon to support clean up and recovery efforts in vulnerable communities in Tennessee and surrounding areas affected by tornadoes and winter storms.

- **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 2023, Gives directed $3 million to 212 organizations in 111 communities which included $50,000 in funding to 3 nonprofit organizations dedicated to environmental conservation in the UK and the U.S. In addition, the Network Grants program has also directed $200,000 in funding to support various BlackRock GTN initiatives and programs.

- **Employee volunteering.** 33% of BlackRock’s employees volunteered in their communities in 2023, including park clean-ups, tree planting, and the build of a rooftop garden.

## Industry engagement and public policy

BlackRock advocates for public policies that it believes are in the long-term 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 GAPP team contributes to financial services standard setting efforts and public policy discourse. The team comments on public policy topics through, among other things, its published ViewPoints series of whitepapers, 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. BlackRock’s approach to public policy engagement is further described in BlackRock’s 2022 Sustainability Disclosure.

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

## Industry initiatives

BlackRock and its employees participate in industry initiatives to contribute to a dialogue on issues that are important to the firm’s clients, including those related to climate-related risks and the transition to a low-carbon economy, as well as those to support the development of consistent industry standards and approaches around climate-related disclosure standards.

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 is a member of the Net Zero Asset Managers Initiative (“NZAMI”). BlackRock’s 2030 net zero statement was submitted to NZAMI and details the terms of its participation. BlackRock also serves on the Principals Group for the Glasgow Financial Alliance for Net Zero and has participated in workstreams sponsored by that initiative.

In early 2024, BlackRock transferred its Climate Action 100+ membership to its international business, BlackRock International.
Public policy

BlackRock supports corporate sustainability disclosure aligned with the TCFD framework to support investment decision making. 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, Sustainability Accounting Standards Board, ISSB, SBTi, Global Reporting Initiative, 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. In BlackRock’s view, investors can make better-informed investment decisions when companies provide a clear picture of how they are managing material risks and opportunities, including where appropriate, any material sustainability-related, including climate, risks and opportunities.

Throughout the years, BlackRock has contributed comments on several policy efforts to heighten the quality of sustainability-related, including climate, reporting globally. This has included submitting direct responses to consultations by the U.S. Securities and Exchange Commission (“SEC”), 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”). BlackRock’s responses to these consultations are guided by and build on the firm’s principles for high quality climate-related disclosures based on financial materiality. BlackRock views the work of these institutions as an important contribution to a multijurisdictional 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.

While it will take time to operationalize a consistent disclosure framework, given the complexity, scale and rapidly evolving understanding of these long-term trends, BlackRock believes companies, investors, and others benefit from greater transparency and consistency in publishing financially material sustainability-related data and information.

As well as providing reporting frameworks, the TCFD, the inaugural ISSB standards, 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 — e.g., 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, e.g., BlackRock’s response to the 2023 FCA’s Discussion Paper “Finance for positive sustainable change: governance, incentives and competence in regulated firms.”

69 BlackRock’s responses to these consultations are guided by and build on the firm’s principles for high quality climate-related disclosures based on financial materiality. BlackRock views the work of these institutions as an important contribution to a multijurisdictional 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.
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 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, on an ongoing basis as part of regular 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, complementing the first-line monitoring. 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 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.
BlackRock recognizes the importance of leading by example in its own disclosure and is encouraged by the continued growth of companies that take this into account with their own disclosure of sustainability and climate-related topics.

In this section, BlackRock outlines four categories of climate-related metrics to provide stakeholders with transparency on BlackRock’s sustainability journey including:

• **Business indicators.** Exhibit M.1 provides business indicator metrics across sustainable and transition investing and investment stewardship.

• **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. Exhibit M.2 provides BlackRock’s corporate GHG emissions, in addition to select intensity and energy metrics. As discussed below, BlackRock believes that Scope 3 (Investments) should refer to emissions from investments made with assets that are owned by the company rather than those managed by an asset manager on behalf of external asset owners. As such, the Scope 3 (Investments) figure reported in Exhibit M.2 represents emissions from BlackRock’s seed and co-investment portfolios (where data is available), which reflect investment of BlackRock’s own capital. Emissions associated with BlackRock’s AUM in corporate and real estate securities, and emissions intensity metrics associated with BlackRock’s AUM for sovereign debt assets, are reported separately as described in the following bullet.

• **Firm-level climate and portfolio alignment metrics for BlackRock’s AUM.** BlackRock reports estimates reflecting the absolute emissions associated with BlackRock’s AUM in corporate securities and real estate. In addition, BlackRock reports both the adjusted and unadjusted carbon footprint figures for corporate securities to account for enterprise value including cash volatility (“EVIC”). Estimates of these metrics are provided in Exhibit M.5. BlackRock also reports, separate from absolute emissions and carbon footprint metrics associated with AUM, estimates for emissions intensity metrics associated with BlackRock’s AUM for sovereign debt assets. Sovereign emissions intensity metrics are provided in Exhibit M.8.

• **Product-level climate and portfolio alignment metrics.** BlackRock manages thousands of portfolios, each with their own investment strategy, guidelines, and constraints. As an asset manager, one of the components of transparency BlackRock provides is with respect to the Sustainability Characteristics of certain investment products offered to clients.

Sustainability Characteristics provide investors with certain climate and other sustainability metrics. Alongside other forms of metrics and information, these provide investors with information to evaluate funds. Sustainability Characteristics do not provide an indication of current or future investment performance, nor do they represent the potential risk and reward profile of a fund. They are provided for transparency and for information purposes only. Sustainability Characteristics should not be considered solely or in isolation, but instead are one type of information that investors may wish to consider when assessing a fund.

BlackRock makes Sustainability Characteristics publicly available for certain publicly-offered funds that it manages, including ETFs (where reliable data is available).
# Business indicators

## Exhibit M.1: Business indicators

<table>
<thead>
<tr>
<th>Business indicators</th>
<th>2019*</th>
<th>2020*</th>
<th>2021*</th>
<th>2022*</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainable investing AUM ($ billions)**</td>
<td>$107</td>
<td>$199</td>
<td>$509</td>
<td>$586</td>
<td>$802</td>
</tr>
<tr>
<td>Net flows into sustainable products ($ billions)**</td>
<td>$25</td>
<td>$60</td>
<td>$93</td>
<td>$67</td>
<td>$46</td>
</tr>
<tr>
<td>Transition investing AUM ($ billions)†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$138</td>
</tr>
<tr>
<td>Investment Stewardship team size‡</td>
<td>43</td>
<td>47</td>
<td>68</td>
<td>73</td>
<td>66</td>
</tr>
<tr>
<td>Total investment Stewardship engagements§</td>
<td>2,585</td>
<td>3,501</td>
<td>3,642</td>
<td>3,693</td>
<td>4,001</td>
</tr>
<tr>
<td>Total investment Stewardship engagements on climate and natural capital-related issues§</td>
<td>621</td>
<td>1,939</td>
<td>2,293</td>
<td>2,058</td>
<td>1,662</td>
</tr>
</tbody>
</table>

* AUM and flows data as of year-end.
** AUM and flows data as of year-end. BlackRock’s sustainable investing platform includes portfolios that use sustainability as a principal strategy in selecting investments. These dedicated strategies exist across asset classes, in both index and active, and are categorized as “Screened,” “Uplift,” “Thematic” or “Impact.”
† AUM is as of year-end. The BlackRock transition investing platform includes private market funds, transition deals, and public market portfolios whose principal strategy either through portfolio objective or investment selection focuses on preparing for, being aligned to, benefitting from and/or contributing to the low-carbon transition. Some transition projects may be in funds that also invest in non-transition assets. Investments are made by BlackRock’s funds, and it is generally not for clients to invest directly into a single project.
‡ Investment stewardship team size data is as of year-end.
§ BlackRock counts only direct interaction as an engagement. BIS also writes letters to raise companies’ awareness of thematic issues on which BIS is focused or BIS changes in its policies, but this outreach is considered distinct from engagement and therefore it is not included in the figures shown in this row. Total investment stewardship engagements data and total investment stewardship engagements on environment-related issues is as of calendar year-end, with the exception of 2023 which reflects data for the 2022-2023 proxy year (covering the period from July 1, 2022 to June 30, 2023, representing the SEC 12- month reporting period for U.S. registered funds, including iShares). To learn more about Investment Stewardship engagements please refer to the 2022 Annual Report; the quarterly Global Engagement Summary reports; the quarterly Stewardship Statistics reports; and the 2023 Voting Spotlight. All reports are available through the BIS website here: https://www.blackrock.com/corporate/about-us/investment-stewardship. Subsequent reports and publications distributed may include additional information, updates, and modifications, as appropriate.
### Corporate GHG emissions

Exhibit M.2 provides BlackRock’s corporate GHG emissions covering Scope 1, Scope 2 and relevant Scope 3 categories. Please see Operations on pages 25-26 for a discussion on BlackRock’s strategy to achieve its emission reduction goals. Note that the data provided in this section is for the year-ended 2022.

#### Exhibit M.2: Corporate GHG emissions

<table>
<thead>
<tr>
<th>In metric tons of CO₂e</th>
<th>2019* (baseline)</th>
<th>2020*</th>
<th>2021</th>
<th>2022</th>
<th>% Change from 2019*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope 1 and 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>5,882</td>
<td>3,569</td>
<td>4,766</td>
<td>5,765</td>
<td>-2%</td>
</tr>
<tr>
<td>Scope 2 (location-based)**,†,‡</td>
<td>23,126</td>
<td>19,363</td>
<td>18,637</td>
<td>22,372</td>
<td>-3%</td>
</tr>
<tr>
<td>Scope 2 (market-based)§,a,b</td>
<td>4,454</td>
<td>2,256</td>
<td>2,207</td>
<td>3,239</td>
<td>-27%</td>
</tr>
<tr>
<td>Total Scope 1 and Scope 2 (location-based)**</td>
<td>29,008</td>
<td>22,932</td>
<td>23,403</td>
<td>28,137</td>
<td>-3%</td>
</tr>
<tr>
<td>Total Scope 1 and Scope 2 (market-based)§,a,b</td>
<td>10,336</td>
<td>5,825</td>
<td>6,973</td>
<td>9,004</td>
<td>-13%</td>
</tr>
<tr>
<td><strong>Scope 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Purchased goods and servicesc</td>
<td>249,356</td>
<td>214,957</td>
<td>241,526</td>
<td>250,345</td>
<td>0%</td>
</tr>
<tr>
<td>2. Capital goodsb,c,d</td>
<td>8,015</td>
<td>2,337</td>
<td>29,410</td>
<td>49,097</td>
<td>513%</td>
</tr>
<tr>
<td>3. Fuel- and energy-related activities (location-based)**,e</td>
<td>7,865</td>
<td>6,825</td>
<td>9,396</td>
<td>11,291</td>
<td>44%</td>
</tr>
<tr>
<td>Fuel- and energy-related activities (market-based)e</td>
<td>3,093</td>
<td>2,465</td>
<td>3,019</td>
<td>4,641</td>
<td>50%</td>
</tr>
<tr>
<td>4. Transportation and distributionc,g</td>
<td>1,709</td>
<td>973</td>
<td>1,313</td>
<td>1,450</td>
<td>-15%</td>
</tr>
<tr>
<td>5. Waste generated in operationsbh</td>
<td>1,162</td>
<td>379</td>
<td>146</td>
<td>396</td>
<td>-66%</td>
</tr>
<tr>
<td>7. Employee commuting (employee shuttles in India)g</td>
<td>1,161</td>
<td>26</td>
<td>30</td>
<td>65</td>
<td>-94%</td>
</tr>
<tr>
<td>8. Leased assets (location-based)**,jk</td>
<td>777</td>
<td>928</td>
<td>937</td>
<td>1,223</td>
<td>57%</td>
</tr>
<tr>
<td>Leased assets (location-based)**,jk</td>
<td>0</td>
<td>0</td>
<td>334</td>
<td>647</td>
<td>–</td>
</tr>
<tr>
<td><strong>Downstream</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Transportation and distribution</td>
<td>Not relevant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Processing of sold products</td>
<td>Not relevant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Use of sold products</td>
<td>Not relevant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. End-of-life treatment of sold products</td>
<td>Not relevant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Leased assets</td>
<td>Not relevant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Franchises</td>
<td>Not relevant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Investments (BlackRock balance sheet only – see Exhibit M.5 for AUM-related metrics)ij,m</td>
<td>–</td>
<td>116,015</td>
<td>80,868</td>
<td>53,774</td>
<td>–</td>
</tr>
<tr>
<td><strong>Emissions Intensity Metrics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1 and Scope 2 location-based tCO₂e/ $1 million revenue</td>
<td>2.0</td>
<td>1.4</td>
<td>1.2</td>
<td>1.6</td>
<td>-20%</td>
</tr>
<tr>
<td>Scope 1 and Scope 2 location-based tCO₂e per employeen</td>
<td>1.8</td>
<td>1.3</td>
<td>1.3</td>
<td>1.4</td>
<td>-22%</td>
</tr>
<tr>
<td>Scope 3 business travel per employeen</td>
<td>2.4</td>
<td>0.4</td>
<td>0.2</td>
<td>0.9</td>
<td>-63%</td>
</tr>
<tr>
<td><strong>Electricity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total electricity consumed (MWh)o</td>
<td>70,605</td>
<td>64,225</td>
<td>65,616</td>
<td>75,760</td>
<td>7%</td>
</tr>
<tr>
<td>Percent renewable electricityo</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>–</td>
</tr>
</tbody>
</table>
The year over year percent change in this table was calculated by management using the 2022 GHG Emissions information presented within this table and comparable 2019 information. The 2019 GHG Emissions information used in the calculation and included within this table and the 2020 GHG Emissions Information included in this table 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 was subject to limited assurance by Lloyd’s Register Quality Assurance, Inc. (LRQA). Deloitte’s Independent Accountant’s Review Report for the year-ended December 31, 2022 can be found on page 7 at: https://www.blackrock.com/corporate/literature/continuous-disclosure-and-important-information/blackrock-2022-ghg-emissions-report.pdf.

** As defined by the GHG Protocol: “A location-based method reflects the average emissions intensity of grids on which energy consumption occurs.”

** Scope 2 emissions include indirect emissions arising from purchased electricity and purchased heat.

In 2022, actual activity data for electricity consumption was collected for approximately 90% of the emissions reported. Where actual electricity data was unavailable, BlackRock estimated usage based on square footage. The emission factors used for U.S. electricity consumption were the subregion emission rates from U.S. EPA’s eGRID database specific to each year reported. Electricity emissions for locations outside the U.S. were primarily obtained from the International Energy Agency ("IEA") CO2 Emissions from Fuel Combustion (2022). For Canada, emissions factors were obtained from the Canada National Inventory Report (2022). For Australia, emissions factors were obtained from the Department of Climate Change, Energy, the Environment and Water, Australian National Greenhouse Accounts Factors (February 2023). For China, emissions factors were obtained from the Institute for Global Environmental Strategies List of Grid Emissions Factors (version 10.10, 2019 edition). For Great Britain, emissions factors were obtained from the Department for Environment, Food and Rural Affairs (“DEFRA”) (2022). For Brazil, emissions factors were obtained from Ecoinvent 3.8. Scope 2 emissions from purchased heat are estimated based on square footage.


- As defined by the GHG Protocol: “A market-based method reflects emissions from electricity that companies have purposefully chosen (or their lack of choice). It derives emission 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.
- For 2019-2021, BlackRock had a renewable energy contract with Calpine for its New York offices located at 40, 49 and 55 East 52nd Street, that included the purchase of wind power energy on behalf of BlackRock. The associated EACs were not provided as part of the transaction. BlackRock considers its wind power electricity contract with Calpine to allow for market-based emissions reporting to be zero. BlackRock did not receive the associated EACs from the wind asset as they are used and retired by NYSERDA to meet its compliance obligations under the State renewable energy standards.
- The 2019 and 2020 GHG emissions for these categories were calculated using U.S. EPA 2020 v.1.0 emission factors. 2021 emissions were calculated using U.S. EPA 2020 v.1.1 emission factors. Beginning in 2022, U.S. EEOC v.2.0.1 emission factors and supplier-specific emission factors from CDP (where available) were applied.
- Capital Goods in 2021 and 2022 increased primarily due to construction of BlackRock’s New York City headquarters.
- FERA increase reflects an activity change in well-to-tank emissions for fuels.
- T&D 2019 amount was not subject to LRQA’s limited assurance review in 2019.
- Certain emissions were lower in 2020-2022 compared to 2019 primarily due to changes to the firm’s operating model arising from the effects of COVID-19.
- Waste includes waste that is landfilled, recycled, composted, or incinerated. In 2022, BlackRock reported Scope 3 waste emissions based on actual data for sites where employees representing 56% of BlackRock’s total headcount were located. Average waste volumes for sites with actual data are used to extrapolate waste-related emissions for the remaining sites based on headcount.
- The 2019, 2021 and 2022 business travel amounts include commercial air travel, rail, car rental and car services. The 2020 business travel amounts include commercial air travel, rail, car rental and car services, and corporate housing and hotels. Business travel emissions calculations were based on purchased tickets for commercial air and rail travel and usage data provided by vendors for car rentals, car services, and chartered vehicles. Air travel emissions were calculated using DEFRA (2022) emission factors and rail travel emissions were calculated using U.S. EPA emissions factors for trips within the U.S. and DEFRA (2022) emissions factors for all other trips. Car rentals and car services emissions were calculated using U.S. EPA Emission Factors for Greenhouse Gas Inventories published in April 2022.
- Upstream leased assets emissions are for unmanned co-located data centers and executive suites.
- Upstream leased assets increase in 2022 reflects the addition of well-to-tank emissions which were added to this category in 2022. 2019-2021 figures do not include well-to-tank emissions as the methodology change was not significant to trigger an update to prior year figures.
- This is not a comprehensive measure of S3C15. Reported emissions for S3C15 is limited to corporate equity, corporate fixed income, and associated derivatives in BlackRock’s seed portfolios and co-investments. This figure and the data coverage noted below also excludes emissions from strategic investments and carried interest. The 2022 data coverage represents approximately 40% of BlackRock’s seed and co-investment portfolios. Methodology and limitations are discussed on pages 37-41.
- BlackRock’s analysis of its seed and co-investment portfolios for 2021 and 2022 indicated that the decrease in emissions could be associated with, but not limited to, changes in BlackRock’s ownership of seed and co-investment portfolios, changes in the list of investments held by BlackRock’s seed and co-investment portfolios where emissions data is available, or changes in the emissions of the seed and co-investment portfolio themselves.
- Denominator consists of full-time equivalent employees.
- Electricity consumed represents electricity under BlackRock’s operational control (Scope 2). Additional electricity consumed by upstream leased assets in 2022 was 2,743 MWh.
- 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.
Scope 3 (investments)

For Category 15 of Scope 3, “Investments” (hereafter, “Scope 3 Investments” or “S3C15”), a key question that arises for asset managers, like BlackRock, is the treatment of investments that are managed on behalf of external clients, who are the asset owners.

The GHG Protocol distinguishes asset owners from asset managers under S3C15 in that it requires asset owners to report emissions associated with their investments, whereas asset managers are not required to report emissions associated with their AUM for external clients under S3C15 (although they may optionally do so). While the GHG Protocol draws this distinction between asset owners and asset managers, it does not fully address S3C15 reporting for asset managers. Moreover, were asset managers to optionally report emissions associated with investments managed on behalf of their external clients under S3C15, there would be double counting with their clients’ (the asset owners’) S3C15. BlackRock believes this is a problematic outcome that would lead to confusion and reduce the comparability and usability of S3C15 data across financial institutions.

The lack of clarity in the existing GHG Protocol guidance could also likely lead to underreporting of emissions associated with asset management for external clients, particularly in instances where financial institutions manage investments of their own capital in addition to investments on behalf of other asset owners.

BlackRock encourages the development of a level playing field for S3C15 reporting across financial institutions operating in the same lines of business regardless of corporate structure, and by reflecting within that framework the unique nature of different types of financial activities. In BlackRock’s view, S3C15 should consider balance sheet loans and owned investments, and GHG emissions associated with assets managed on behalf of external clients should be reported separately.

This view has been reflected within the reporting provided in this Report. S3C15 in Exhibit M.2, which covers BlackRock’s corporate GHG emissions, reflects emissions associated with BlackRock’s seed investments and co-investments portfolios, which are made with BlackRock’s own capital. The emissions reported use the same methodologies described in the Firm-Level Climate Metrics for BlackRock’s AUM section, therefore, reflect emissions for a subset of BlackRock’s seed and co-investments portfolios that are invested in corporate equity, corporate fixed income, and associated derivatives. Additionally, reported S3C15 excludes emissions from strategic investments and carried interest. These assets have been excluded due to insufficient data and methodologies available to report this information.

Estimates of emissions associated with BlackRock’s AUM in corporate securities and real estate is provided separately in Exhibit M.5. BlackRock also provides estimates on emissions intensity metrics associated with BlackRock’s AUM for sovereign debt assets in Exhibit M.8.
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.\textsuperscript{77} BlackRock reports estimates reflecting the absolute emissions associated with the investments BlackRock makes on behalf of its clients in corporate securities and real estate (where data is available). BlackRock also reports estimates reflecting the unadjusted and adjusted carbon footprint\textsuperscript{78} associated with the investments BlackRock makes on behalf of its clients in corporate securities (where data is available) as well as emissions intensity for sovereign debt assets (where data is available). As of year-end 2022, collectively, absolute emissions for investments in corporate securities and real estate assets included in this analysis represent approximately 51\% of BlackRock’s AUM.

Metrics selection

As there is currently no consensus on how to measure portfolio alignment and/or exposure to the low-carbon transition, BlackRock continues to evaluate existing climate-related and portfolio alignment metrics and methodologies, with the goal of reporting aggregate statistics (where sufficient data and methodologies exist) for BlackRock’s AUM. In BlackRock’s view there is no single metric that provides full insight into a portfolio’s trajectory or exposure as it relates to the transition to a low-carbon economy. Moreover, some metrics are more appropriate for disclosure at the portfolio or fund level, and others are more appropriately reported at a firm or institution level. Exhibit M.3 shows a summary of key climate-related and portfolio alignment metrics, including uses and limitations.

For BlackRock’s TCFD firm-level reporting, absolute emissions and carbon footprint are reported. Absolute emissions in this context refers to proportionate exposure to an investee company or asset’s emissions (based on \% ownership). While the absolute emissions metric has the benefit of intellectual consistency with other GHG emissions metrics reported at the corporate level,\textsuperscript{79} a drawback of absolute emissions is that it does not account for the size of the investor. In other words, absolute emissions are likely to grow if the portfolio or AUM grows and vice versa if the portfolio shrinks. To account for this limitation, carbon footprint, which refers to absolute emissions divided by AUM (rounded to the nearest million), was also estimated. Carbon footprint normalizes emissions for the size of the portfolio.

Further discussion of metrics utilized for fund-level reporting is provided on page 41.
### Exhibit M.3: Overview of key climate-related and portfolio alignment metrics and incorporation into BlackRock reporting

<table>
<thead>
<tr>
<th>Unit</th>
<th>What it measures</th>
<th>Pros</th>
<th>Cons</th>
<th>Current BlackRock use of metric</th>
<th>Firm-level:</th>
<th>Fund-level:</th>
<th>Fund-level:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ or %</td>
<td>Proportionate exposure to “green” assets or revenues</td>
<td>Helps identify opportunities associated with financing the transition</td>
<td>Lack of consensus on definition of “green”</td>
<td>Future development</td>
<td>Absolute Emissions of AUM (corporates, real estate)</td>
<td>Implied Temperature Rise (“ITR”)*</td>
<td>Corporate and sovereign issuers exposure to science-based targets or the equivalent</td>
</tr>
<tr>
<td>tCO₂e</td>
<td>Proportionate exposure to investee GHG emissions</td>
<td>Standard data inputs</td>
<td>Does not account for size</td>
<td>Firm-level:</td>
<td>Carbon Footprint of AUM (tCO₂e/$ million AUM)</td>
<td>Implied Temperature Rise (“ITR”)*</td>
<td></td>
</tr>
<tr>
<td>tCO₂e per unit</td>
<td>Emissions exposure per unit of output or investment (e.g., revenue, AUM, MWh)</td>
<td>Standard data inputs and Normalizes for size, allowing comparability</td>
<td>Market movement can create noise</td>
<td>Fund-level:</td>
<td>Weighted average carbon intensity (“WACI”)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degrees Celsius</td>
<td>Temperature rise implied by holdings</td>
<td>Intuitive connection to net zero goals</td>
<td>Incomplete data/asset class coverage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>Portion of AUM in investees meeting criteria (e.g., having science-based targets)</td>
<td>Clearly defined</td>
<td>Complex, requires multiple assumptions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note that WACI and ITR are not reported for all BlackRock funds. The metrics that are reported vary by asset class and strategy in addition to available data and methodologies. For examples of these disclosures on BlackRock funds, please visit [www.ishares.com](http://www.ishares.com) and [www.blackrock.com](http://www.blackrock.com).*
Methodology

BlackRock referenced the Partnerships for Carbon Accounting Financials ("PCAF") 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. However, the PCAF Standard does not address all asset classes and has a number of methodological issues still to be explored. Further, the PCAF Standard was developed primarily for use by banks and, therefore, has not yet fully addressed 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. Exhibit M.4 highlights key methodological choices.

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

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. 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, 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 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”). Whereas the holdings analysis date is December 31 of each reporting year, the emissions effective date is September 30 of the following year. As discussed in the limitations section below, while this approach is unlikely to address all instances of lagged emissions data, it increases the likelihood that emissions and holdings are aligned.

Exhibit M.4: GHG emissions from AUM – Methodological highlights

<table>
<thead>
<tr>
<th>Emissions included</th>
<th>Scope 1 and Scope 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions excluded</td>
<td>Scope 3</td>
</tr>
<tr>
<td>Asset classes included</td>
<td>Listed equities, corporate bonds and associated derivatives, Direct real estate</td>
</tr>
<tr>
<td>Asset classes excluded</td>
<td>Non-corporate fixed income, Commodities, Alternatives other than real estate, Derivatives not linked to corporate issuers</td>
</tr>
<tr>
<td>Data sources</td>
<td>MSCI (corporates)</td>
</tr>
</tbody>
</table>
Real estate. For directly invested, physical real estate, BlackRock has long-established data programs to collate, measure, and report key sustainability metrics, including GHG emissions, at the individual property-level and aggregated portfolio-level. Operational Scope 1 and 2 emissions for each property were apportioned to BlackRock based on the proportionate investments in each property represented by BlackRock’s clients’ assets.

Unadjusted and adjusted carbon footprint metrics. Absolute emissions and carbon footprint metrics are sensitive to fluctuations in asset values — particularly, though not exclusively, due to changes in EVIC from one period to the next. In other words, as financial institutions use the metrics to demonstrate progress towards decarbonization of their portfolios, market volatility can introduce noise that reduces comparability from one year to the next. To address this, BlackRock reports an unadjusted and adjusted carbon footprint for BlackRock’s AUM in corporate securities to illustrate the influence of market value fluctuations on these metrics driven by EVIC.

Results and discussion

Exhibit M.5 provides estimates of absolute emissions for BlackRock’s AUM in corporate securities and real estate (where data was available). Estimated absolute emissions were 332.3 million tons CO2e in 2022, down from 340.8 million tons of CO2e in 2021. Among other elements, one of the drivers of the reduction in emissions from 2021 to 2022 was the overall decrease in BlackRock’s AUM. As previously discussed, BlackRock also reports the unadjusted and adjusted carbon footprint for BlackRock’s AUM in corporate securities. The unadjusted carbon footprint in 2022 was 59 tons of CO2e per million dollars of AUM, up from 50 tons per million dollars of AUM in 2021. Based on the established methodology, an adjustment is only relevant for 2022 and 2021, since the adjustment factor is calculated to be applied relative to an unadjusted base carbon footprint, in this case 2020. As such, the 2022 adjusted carbon footprint, which adjusts for the 2021-2022 market volatility, was 62 tons of CO2e per million dollars of AUM, up from 55 tons of CO2e per million dollars of AUM in 2021. When comparing the unadjusted numbers, BlackRock observed that over this time period markets had fallen and exaggerated the increase in carbon footprint, and with the adjusted carbon footprint figure it identifies a less dramatic increase after removing the effect of market volatility. BlackRock believes that the adjusted carbon footprint numbers for 2022 and 2021 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 $4.4 trillion in 2022, representing approximately 51% of BlackRock’s total AUM.

The limitations of the estimates should be reviewed carefully (see the Limitations section on the next page). 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 and real estate (where data was available), representing approximately $4.4 trillion of BlackRock’s AUM, which equates to approximately 1% of global financial assets. Similarly, the emissions associated with the investments in the analysis represent just under 1% of total annual global emissions. 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.5: GHG emissions associated with BlackRock’s assets under management*

<table>
<thead>
<tr>
<th></th>
<th>2020**</th>
<th>2021†</th>
<th>2022‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute emissions (million tCO2e)</td>
<td>320.4</td>
<td>340.8</td>
<td>332.3</td>
</tr>
<tr>
<td>Unadjusted carbon footprint</td>
<td>57</td>
<td>50</td>
<td>59</td>
</tr>
<tr>
<td>Adjusted carbon footprint</td>
<td>55</td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

Data above represents unaudited estimates. Not comprehensive — figures reflect coverage of approximately 51% 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 provided on page 39.

* Absolute Emissions includes corporate securities (listed equity, corporate bonds, associated derivatives) and physical real estate (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. Changes in reported absolute emissions or carbon footprint from previous reports can be attributed to shifts in the portfolios and/or positions in scope of the analysis.

† 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.
**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. For this Report, BlackRock continues to report GHG intensity per GDP Purchasing Power Parity ("PPP") associated with BlackRock’s AUM in sovereign assets (where data is available).

**Metrics selection**

BlackRock has continued to select GHG intensity per GDP PPP to represent the emissions intensity for sovereign bond investments. GHG intensity per GDP PPP represents the carbon intensity 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.8 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 from corporate assets. 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. This means that any accounting of sovereign emissions should be done separately from other securities to avoid double counting emissions for certain assets.

Another, more fundamental difference in sovereign emission attribution is a breakdown in the concept of ownership when it comes to sovereign issuers. Corporate emissions footprint exposure is calculated based on percentage ownership of the issuer’s total emissions; however, there is no analogous concept of ownership of sovereign nations resulting from investments in sovereign bonds. 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 BlackRock’s client assets.

**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 greater contribution of global GHG levels and the associated impact on warming.

Exhibit M.8 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 10% in 2022.

**Exhibit M.8: BlackRock GHG emissions intensity metric for sovereigns included in BlackRock’s AUM**

<table>
<thead>
<tr>
<th></th>
<th>2020**</th>
<th>2021†</th>
<th>2022‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG intensity per GDP PPP§</td>
<td>203.6</td>
<td>193.6</td>
<td>201.6</td>
</tr>
</tbody>
</table>

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 and 10% in 2022.  
**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.

**Limitations**

**Data quality**

Accurate computation of climate-related metrics in investment portfolios requires high quality security-level data including GHG emissions 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. Estimated data reduces the reliability of the metrics since estimated emissions may not accurately reflect the actual emissions of any given company.

BlackRock 2023 TCFD Report
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.9.

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.

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 effective 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.5 were derived from an analysis of corporate securities and real estate assets as a portion of BlackRock’s AUM which represents approximately 51% for 2022. The metrics outlined in Exhibit M.8 were derived from an analysis of sovereign assets as a portion of BlackRock’s AUM which represents approximately 10% for 2022.

Sensitivity to market volatility
Absolute emissions and carbon footprint metrics are sensitive to fluctuations in asset values — particularly, though not exclusively, due to changes in EVIC from one period to the next. In other words, as financial institutions use the metrics to demonstrate progress towards decarbonization of their portfolios, market volatility can introduce noise that reduces comparability from one year to the next. Other factors that drive changes in absolute emissions are: (i) changes to emissions of the underlying investee companies, and (ii) changes to asset allocation. 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 for 2020, 2021 and 2022 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 are an appropriate starting point for its firm-level reporting of climate-related and portfolio alignment metrics, it is worth noting that these metrics are backward-looking in that they only consider past emissions of investees. They do not provide an assessment of how those investees may evolve their businesses to reduce their emissions in the future based on transition plans, emissions reduction targets and goals.

## Sustainability characteristics for client reporting

BlackRock provides publicly available data on Sustainability Characteristics of investment products offered to clients. At the fund level, BlackRock publishes climate-related metrics including WACI and ITR, on product websites for funds where sufficient and reliable data are available.

WACI measures a portfolio’s exposure to carbon intensive companies by representing the estimated GHG emissions per $1 million in sales across the fund’s holdings. WACI is one of the metrics recommended for client reporting in the TCFD Supplemental Guidance for Asset Managers. Investors can use WACI as a comparable and standardized metric to assess the average emissions output associated with a specific portfolio.

In December 2021, BlackRock began publishing ITR on product websites for funds (where reliable data are available). The ITR metric incorporates both current emissions intensity and forward-looking assessments of projected emissions to produce a temperature indication, expressed in half-degree Celsius bands. ITR can help shed light on whether indexes and portfolios are progressing toward the temperature goal of the Paris Agreement, which calls for countries to limit global warming to well below 2°C, and ideally 1.5°C.
**Endnotes**

1. Please see additional information about the TCFD Recommendations at: https://assets.bbhub.io/company/site/60/2021/07/2021-TCFD-Implementing_Guidance.pdf.
2. In select instances information relating to 2024 has been included in this Report. Each instance is clearly identifiable as such.
3. Please see additional information about the TCFD disbanding at: https://www.fsb-tcfd.org/.
4. Please see additional information about S2 incorporating the TCFD pillars and recommendations at: https://www.ifrs.org/content/dam/ifrsl/supporting-implementation/ifrs-s2/ifrs-s2-comparison-tcfd-july2023.pdf.
5. 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 23, 2024 (“2023 Annual Report”) and other publicly filed documents for additional information at: https://ir.blackrock.com/.
6. 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.”
7. Please refer to Exhibit G.2 for more information on the functional groups involved in sustainability-related, including climate, matters.
8. 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, and 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.
9. The BlackRock Transition investing platform includes private market funds, transition deals, and public market portfolios whose principal strategy either through portfolio objective or investment selection focuses on preparing for, being aligned to, benefitting from and/or contributing to the low-carbon transition. Some transition projects may be in funds that also invest in non-transition assets. Investments are made by BlackRock’s funds, and it is generally not possible for clients to invest directly in a single project. Not all funds and projects on the transition investing platform sit on the sustainable investing platform.
11. BlackRock iResearch Services global survey, sample size n=200, May–June 2023. Survey covered institutional investors’ attitudes, approaches, barriers and opportunities regarding transition investing. iResearch Services polled 200 institutional investors globally with the goal of providing a representative sample across regions and organization types. Survey responses have not been edited and solely represent the opinions of the respondents at the time of the survey.
12. Active sustainable funds across Fixed Income, Equity, Multi Asset and Alternatives excluding separate accounts and cash.
13. BlackRock Investment Stewardship (“BIS”) counts only direct interaction as an engagement. BIS also writes letters to raise companies’ awareness of thematic issues on which BIS is focused or BIS changes its policies, but this outreach is considered distinct from engagement. The 2022–2023 proxy year covers the period from July 1, 2022, to June 30, 2023, representing the U.S. Securities and Exchange Commission’s (“SEC”) 12-month reporting period for U.S. registered funds, including iShares. To learn more, please see additional information in BIS’ 2023 Global Voting Spotlight Report at: https://www.blackrock.com/corporate/literature/publication/2023-investment-stewardship-voting-spotlight.pdf. Subsequent reports and publications distributed may include additional information, updates, and modifications, as appropriate.
14. The IFRS Foundation has assumed responsibility for monitoring companies’ climate-related financial disclosures from the TCFD, which was disbanded in October 2023. For more information, please see, IFRS, “Comparison IFRS S2 Climate-related Disclosures with the TCFD Recommendations,” July 2023.
16. Watershed is an enterprise climate platform used to measure BlackRock’s operational GHG emissions footprint.
17. As defined by Breakthrough Energy. The Green Premium is the additional cost of choosing a clean technology over one that emits a greater amount of greenhouse gases. Please see additional information available at: https://www.breakthroughenergy.org/our-challenge/the-green-premium.
18. Sustainability-related matters, for the purposes of this Report, include: the integration of BlackRock’s operational GHG emissions footprint.
20. Please see additional information about BlackRock’s fiduciary approach at: https://www.blackrock.com/corporate/insights/our-approach-to-sustainability.
21. BlackRock iResearch Services global survey, sample size n=200, May–June 2023. Survey covered institutional investors’ attitudes, approaches, barriers and opportunities regarding transition investing. iResearch Services polled 200 institutional investors globally with the goal of providing a representative sample across regions and organization types. Survey responses have not been edited and solely represent the opinions of the respondents at the time of the survey.
22. 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.
23. The BlackRock Transition investing platform includes private market funds, transition deals, and public market portfolios whose principal strategy either through portfolio objective or investment selection focuses on preparing for, being aligned to, benefitting from and/or contributing to the low-carbon transition. Some transition projects may be in funds that also invest in non-transition assets. Investments are made by BlackRock’s funds, and it is generally not possible for clients to invest directly in a single project. Not all funds and projects on the transition investing platform sit on the sustainable investing platform.
24. 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.
26. The last business day of 2023 was 12/29/2023, therefore exposure is run as of that date.
27. Please see more information on LEED at: https://www.usgbc.org/help/what-leed.
30. On January 12, 2024, BlackRock and Global Infrastructure Partners ("GIP"), a leading independent infrastructure fund manager, jointly announced that they have entered into an agreement for BlackRock to acquire GIP. The transaction will create an infrastructure investing platform with combined client AUM of over $150 billion across equity, debt and solutions. Please see additional information at: https://www.blackrock.com/corporate/newsroom/press-releases/article/corporate-one/press-releases/blackrock-agrees-to-acquire-global-infrastructure-partners.
As of December 29, 2023.


The information outlined in this section highlights BIS’s activities in 2023. In January 2024, BIS published updated global principles and regional voting guidelines for 2024.


BIS' climate focus universe includes more than 1,000 companies and represents nearly 90% of the global scope 1 and 2 GHG emissions of the aggregate equity holdings in public companies in which BlackRock invests on behalf of our clients. Based on MSCI data, as of 2021.

For more information on BIS’ approach to engaging on climate-related risk and the low-carbon transition, please see: https://www.blackrock.com/corporate/literature/publication/blk-commentary-climate-risk-and-energy-transition.pdf. In this commentary — which was updated in January 2024 — BIS notes that the SSB standards, IFRS S1 and S2, provide companies with a useful guide to prepare disclosures. The standards build on the TCFD framework.

Source: BIS’ 2023 Global Voting Spotlight, available at: https://www.blackrock.com/corporate/literature/publication/2023-investment-stewardship-voting-spotlight.pdf. Subsequent reports and publications distributed may include additional information, updates and modifications, as appropriate.

Aladdin Climate provides a framework to measure climate 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.

BlackRock’s new principal office, which is leased, is located at 50 Hudson Yards, New York, New York. Prior to the occupancy at its new principal office, BlackRock leased office space in New York City at 55 East 52nd Street, 40 East 52nd Street, and 49 East 52nd Street; BlackRock’s leases with each of these office spaces ended by mid-2023. 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.


Exhibit 5.6 was developed by the NGFS and derived from their NGFS Phase II 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/medianal/2021/08/27/ngfs_climate_scenarios_phase2_june2021.pdf.

Exhibit 5.7 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. Original figures. 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/medianal/2021/08/27/ngfs_climate_scenarios_phase2_june2021.pdf.

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

BlackRock utilized phase II of the NGFS scenarios to conduct its 2023 scenario analysis.


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. BlackRock achieved its 100% renewable electricity match goal for three successive years by the year ended 2022.

LEED Platinum is the highest level that can be achieved within LEED that includes a multi-year review from conducting preliminary design reviews to post construct reviews. BlackRock’s headquarters earned points to achieve Platinum certification by adhering to criteria which addresses energy, water, waste, transportation, materials, health, and indoor environmental quality. Please see additional information on the LEED certification criteria at: https://www.usgbc.org/leed/v4.1.

Fitwell is a leading certification body focused on building health for occupants. In 2023, BlackRock received a Fitwell 2 (out of 3) Star Rating. Please see additional information on the Fitwell certification criteria at: https://www.fitwell.org/resources/p/fitwel-v2.1-worksheet-for-commercial-interior-space-scorecard-excel-1.

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.

Book-and-claim is an approach to purchasing SAFc whereby the environmental attributes associated with the fuel is decoupled from the physical fuel.

BlackRock may report in future disclosures its 2023 SAFc purchases through book-and-claim. Book-and-claim is an approach to purchasing SAFc whereby the environmental attributes associated with the fuel is decoupled from the physical fuel.

For its 2022 operational GHG emissions, BlackRock applied carbon credits to its Scope 1, Scope 2, and a portion of Scope 3 Business Travel. BlackRock’s portfolio consisted of both nature-based (reforestation) and hybrid (biochar) carbon dioxide removal credits.


In 2023, Generation expanded its operations to Ghana.

Please see additional information on BlackRock Public Policy ViewPoints, at: https://www.blackrock.com/corporate/insights/public-policy/viewpoints-letters-consultations.

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.

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.

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.

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.


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 investments. This aligns with the terminology used in the European Union’s SFDR.

Please see additional information available at: https://ghgprotocol.org/sites/default/files/standards_supporting/Chapter15.pdf.

In-scope derivatives are derivatives with corporate issuer underlier and include equity warrants and options, convertible debt and equity, total return swaps, and credit default swaps (“CDS”). The following derivative types are out of scope: equity index options, currency options, options on commodities and volatility index, CDS index, swaps (other than CDS and total return), and synthetics.

Please see additional information about BlackRock’s fiduciary approach at: https://www.blackrock.com/corporate/insights/our-approach-to-sustainability.

The term “carbon footprint” in this Report refers to absolute emissions financed by BlackRock’s clients’ investments in corporate securities and real estate divided by BlackRock’s AUM (rounded to $ millions) in those investments. This aligns with the terminology used in the European Union’s SFDR.

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.

About | PCAF. Available at: https://carbonaccountingfinancials.com/about.

BlackRock also consulted the GHG Protocol and the EU SFDR Regulatory Technical Standards.

MSCI utilizes reported data from companies where emissions are disclosed. Where companies do not disclose their emissions, MSCI applies proprietary methods to estimate emissions.


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 on page 39 for further information.


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 2023 and BlackRock reserves the right to update its measurement techniques and methodologies in the future.

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