

A person wearing a red jacket and dark pants is walking away from the camera on a suspension bridge. The bridge has a metal grate floor and chain-link railings. It spans a deep, lush green forest. The perspective is from behind the person, looking down the length of the bridge.

**BlackRock®**

# **2020 TCFD report**

BlackRock's climate-related  
disclosures



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This Task Force on Climate-Related Financial Disclosures (“TCFD”)-aligned report is being provided for BlackRock, Inc. (together, with its subsidiaries, unless the context otherwise indicates, “BlackRock” or the “Company” or the “firm”). All data in this report is as of September 30, 2020 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.

# To our stakeholders



**Sam Tortora**  
Global Head of  
Investor Relations  
& Corporate  
Sustainability

BlackRock has always been focused on investing in and evolving our business to deliver better financial futures for our clients. Our actions – and the culture that drives them – are rooted in our purpose: to help more and more people experience financial well-being.

BlackRock was founded in 1988 with a vision to manage investment risk differently. BlackRock's founders witnessed the stock market crash of 1987 and the impact on so many people who lost their life-long savings. These people were invested in the markets, but not sufficiently aware of the risks associated with their investments. BlackRock filled a gap by bringing rigorous risk analysis and risk management to the investment industry through innovative technology and a fiduciary mindset.

This focus on risk management and technology continues as a core component of our culture and permeates how we approach climate-related risk – both as a corporation and as an asset manager on behalf of millions of people investing for their futures.

As the world moves towards a net zero economy, we are committed to helping investors prepare their portfolios for this massive transition – and in doing so, helping play a role in accelerating that future. BlackRock manages one of the largest renewable power investment platforms in the world, and we are a leading investor in green bonds on behalf of our clients. We have grown our sustainable solutions to 141 index offerings and 71 dedicated active sustainable strategies, making sustainable investing more accessible than ever before. Through Aladdin®, we are building new technology capabilities to help BlackRock and our clients quantify and measure the impact of climate change and other sustainability-related risks on their portfolios.



**Alexis Rosenblum, CFA**  
Chief Corporate  
Sustainability  
Officer

It is our belief that effective disclosure can lead to real change in how companies are managed for the benefit of all stakeholders. BlackRock was an early participant on the TCFD and we continue to promote the adoption of its climate-related financial disclosure framework. We are encouraged by the growing number of companies reporting on the recommendations, and by the support from policy makers and exchanges around the world.

As advocates for transparency, we recognize the importance of BlackRock meeting the same standards of disclosure that we ask of the companies our clients are invested in. We are pleased to share BlackRock's first report on climate-related risks and opportunities, aligned to the TCFD recommendations. We view this as an important milestone on our journey towards providing more transparency to our stakeholders on key sustainability issues.

As the sustainability landscape evolves, with new information and greater standardization, we will continue to refine and expand our disclosures. We look forward to feedback on how we can progress and strengthen our efforts, as we work towards a more equitable and resilient future for all of our stakeholders.

Sincerely,

*Sam & Alexis*

# Executive summary

BlackRock is a publicly traded investment management firm that provides investment and technology services to institutional and retail clients worldwide. The assets BlackRock manages – our assets under management (“AUM”) – belong to our clients who rely on us to act in their best interests. Our clients range from pension funds providing for nurses, teachers, and factory workers, to individuals saving to buy a home or pay for their children’s education. We invest our clients’ money in companies of all types and sizes, in every region of the world, helping those companies grow and create jobs.

As long-term investors, our clients expect us to account for and be guided by the long-term risks that affect their investments. Clients of every kind and in every part of the world are asking how to prepare their portfolios for physical climate risks to property and communities as well as the transition to a net zero economy.

## Sustainable investing is our standard

As of November 2020, 100% of active portfolios and advisory strategies are environmental, social, and governance (“ESG”) integrated meaning that portfolio managers are accountable for managing exposure to material ESG risks and documenting where in the investment process these risks are considered.

In addition, BlackRock manages \$152 billion in sustainable investment strategies<sup>3</sup> on behalf of our clients. BlackRock’s iShares® Sustainable ETF range is the largest in the industry, both in terms of AUM and the number of investment options we provide to investors. The growth of sustainable iShares is helping to grow the market for sustainable investing by expanding access to sustainable investment options to more people. Additionally, BlackRock’s Real Assets team manages one of the world’s largest renewable power platforms, with over \$10 billion of current and future investments supporting over 270 wind and solar projects globally.<sup>4</sup> Other examples of sustainable investment strategies include environmentally-aware cash management, circular economy, green bonds, and low-carbon transition readiness.

## Engaging on climate risk & opportunities

Investment stewardship is how BlackRock uses its voice as an investor to promote sound corporate governance and business practices to help maximize long-term shareholder value for our clients. For several years, BlackRock Investment Stewardship (“BIS”) has engaged with companies on the need to enhance disclosure of climate-related risks and how they will impact business models over time. During the year-ended June 30, 2020, BIS focused on 440 carbon-intensive companies, representing approximately 60% of the Scope 1 and 2 emissions of the companies in which our clients are invested. As of November 30, 2020 year-to-date, BIS took voting action for insufficient progress on climate on 63 of these companies, and placed an additional 191 companies “on watch”,



**\$152 bn**

**AUM in sustainable investment strategies <sup>1</sup>**



**\$39 bn**

**Flows into sustainable investment strategies YTD 2020**



**\$21 bn**

**Invested in green bonds on behalf of clients**



**270+**

**Wind and solar projects funded by Real Assets Team <sup>2</sup>**



**141**

**iShares® sustainable ETFs and index mutual funds**



**While lots of people are talking about climate risk today, what investors need to make informed decisions is data tied to specific securities in their portfolio. Aladdin Climate is a dramatic step forward to begin filling the information gap necessary to build truly sustainable portfolios.**

Rob Goldstein, Chief Operating Officer, December 2020

meaning that they are at risk of voting action in 2021 unless they demonstrate significant progress on the management and reporting of climate-related risk.<sup>6</sup>

Beginning in 2021, BIS' expanded focus universe will cover more than 1,000 companies representing 90% of the Scope 1 and 2 emissions of the companies in which our clients invest.<sup>7</sup> BIS asks explicitly that the companies in the expanded focus universe disclose a business plan aligned with the goal of limiting global warming to well below 2°C, consistent with achieving net zero global greenhouse gas ("GHG") emissions by 2050.<sup>8</sup>

We communicated our position throughout the past year and expect companies to demonstrate how climate and sustainability-related risks are considered and integrated into their strategy. If a company does not provide adequate public disclosures for us to assess how material risks are addressed, we may conclude that those issues are not appropriately managed and mitigated.

## **Technology to measure climate risk**

Aladdin is BlackRock's end-to-end investment management and operations platform. It combines sophisticated risk analytics with portfolio management, trading, and operations tools on a single, unified platform. In 2020, BlackRock created Aladdin Climate to meet the urgent need among financial institutions and investors to quantify climate risk in their portfolios. Aladdin Climate is the first software application to offer investors measures of both the physical and transition risks on portfolios with climate-adjusted security valuations and risk metrics. Using Aladdin Climate, investors can analyze climate risk and opportunities at the security level and measure the impact of policy changes, technology, and energy supply on specific investments.<sup>9</sup>

## **Our operations are carbon neutral<sup>10</sup>**

We achieved and maintain this by employing energy efficiency strategies, achieving our 100% renewable energy goal,<sup>11</sup> and offsetting emissions we could not otherwise eliminate.<sup>12</sup>

**71**

**Dedicated active sustainable strategies <sup>4</sup>**

**1,260**

**Company engagements on environmental topics in 2019-2020 proxy season <sup>5</sup>**

**63**

**Companies on which BIS took voting action against for insufficient progress on climate-related matters <sup>4</sup>**

**1,200**

**Nearly 1,200 ESG metrics in Aladdin**



**We ask explicitly that the companies in our expanded focus universe disclose a business plan aligned with the goal of limiting global warming to well below 2 degrees Celsius, consistent with achieving net zero global GHG emissions by 2050.**

BlackRock Investment Stewardship, 2021 Global Principles

## **We are committed to transparency**

We believe in the power of transparency to hold ourselves and others accountable for continuous progress. We report Scope 1, Scope 2, and Scope 3 GHG emissions, where possible. At the product level, we publish ESG metrics, including weighted-average carbon intensity (“WACI”), on product websites for iShares ETFs and BlackRock mutual funds. As of October 2020, ESG metrics are publicly available for \$2.6 trillion in AUM, including \$2.1 trillion in AUM for which WACI data are reported, representing 93% and 76%, respectively, of AUM in publicly offered funds.<sup>14</sup>

## **Delivering on our 2020 commitments**

In January, BlackRock announced commitments to establish Sustainability as BlackRock’s New Standard for Investing centered around three themes: (i) building sustainable, resilient, and transparent portfolios; (ii) increasing access to sustainable investing; and (iii) enhancing sustainability and transparency in investment stewardship. We have made significant progress towards the goals we set out including achieving our 100% ESG integration goal for active strategies. For more detail on our progress, see 2020 sustainability actions.

## **Looking forward**

We recognize the importance of global ambitions to reach net zero GHG emissions by 2050 and the increasing momentum in policy, technology, finance, and corporate commitments towards this goal.<sup>15</sup> As of September 30, 2020, we have seen \$39 billion in flows into sustainable investment strategies this year, as we deliver on our goal of increasing access to sustainable investing. In addition, we have exited companies that derive more than 25% of their revenue from thermal coal production in our active portfolios, and we are engaging with investee companies on TCFD reporting and their alignment to a scenario in which global warming is limited to well below 2°C.<sup>16,17</sup> Finally, we have enhanced transparency on the sustainability characteristics of our investment products, and we achieved carbon neutrality in our operations. In 2021, we will announce additional actions that are aligned to net zero ambitions.

**\$2.1 tn**

**AUM in funds for which carbon footprint data is reported publicly <sup>13</sup>**

**100%**

**ESG integrated active strategies**

**100%**

**Renewable energy goal in our operations <sup>18</sup>**

## Key Points in Response to TCFD Recommendations<sup>19</sup>

Pillar / Recommendation	Key Points
<b>Governance:</b> Disclose the organization's governance around climate-related risks and opportunities	
<b>Describe the board's oversight of climate-related risks and opportunities</b>	Oversight of long-term strategy (including sustainability) by BlackRock's Board of Directors (the "Board")
	Board Risk Committee assists the Board in overseeing, identifying, and reviewing risks that could have a material impact on BlackRock, including ESG risks
	Board Nominating & Governance Committee oversees investment stewardship and corporate sustainability
<b>Describe management's role in assessing and managing climate-related risks and opportunities</b>	Global Executive Committee ("GEC") is actively involved in setting and executing on sustainability strategy
	GEC Investment Sub-Committee oversees the firm's investment processes including ESG integration
<b>Strategy:</b> 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	
<b>Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term</b>	Opportunities: increased demand for sustainable investment products and Aladdin, operating efficiencies
	Risks: market, regulatory, and reputational risks, as well as physical risks
<b>Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning</b>	Management of climate-related risks and opportunities is embedded across investment processes, business strategy, and operations
<b>Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario</b>	BlackRock conducted its first corporate climate-related scenario analysis exercise in 2020 in order to refine our understanding of the potential implications of climate-related transition risks to our business strategy. The Appendix provides a detailed description of the methodology and process employed
<b>Describe how risks and opportunities are factored into relevant products or investment strategies and describe related transition impact*</b>	The primary means by which we incorporate climate-related risks and opportunities into our investment products is through our ESG integration and investment stewardship efforts. As of Nov. 2020, 100% of active portfolios and advisory strategies are ESG integrated, meaning that portfolio managers are accountable for managing exposure to material ESG risks and documenting where in the investment process these risks are considered. ESG integration statements for all actively managed products that articulate how ESG is being integrated into their investment processes are published on product websites.

\*Reflects recommendations that are included in the supplemental guidance for asset managers

Pillar / Recommendation	Key Points
<b>Risk Management:</b> Disclose how the organization identifies, assesses, and manages climate-related risks	
Describe the organization's processes for identifying and assessing climate-related risk	BlackRock employs a three-lines of defense approach to managing 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 team, Risk & Quantitative Analysis ("RQA"), serves as a key part of the second line of defense. Internal Audit objectively assesses the adequacy and effectiveness of BlackRock's internal control environment as the third line of defense. RQA evaluates material ESG risks, including climate risk, during its regular reviews with portfolio managers to provide oversight of portfolio managers' consideration of these risks in their investment processes. This helps to ensure that such risks are understood, deliberate, and consistent with client objectives. BlackRock Sustainable Investing ("BSI") partners with RQA to monitor and review ESG risk exposure at the portfolio level, providing rigor and consistency across our diverse investment platform, while seeking to ensure that risk taking is deliberate, diversified, scaled, and in line with the clients' objectives. ESG risks are evaluated in operational processes, including considering ESG risks in risk and control self-assessments, product development, and incident management. Risks associated with ESG investment and operational processes are represented in risk profiles shared with risk oversight committees.
Describe the organization's processes for managing climate-related risks	
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	
Describe how material climate-related risks are identified and assessed for each product or investment strategy.*	
Describe how material climate-related risks are managed for each product or investment strategy.*	
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*	BSI has engaged with companies for several years on the need to enhance disclosure of climate risks. During the year-ended June 30, 2020, BSI focused on 440 carbon-intensive companies. As of November 30, 2020 year-to-date, BSI has taken voting action against 63 companies, and placed an additional 191 companies "on watch", meaning they are at risk of voting action in 2021. Beginning in 2021, BSI's expanded focus universe will cover more than 1,000 companies. BSI asks that the companies in the expanded focus universe disclose a business plan aligned with the goal of limiting global warming to well below 2°C, consistent with achieving net zero GHG emissions by 2050.
<b>Metrics &amp; Targets:</b> Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	
Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	BlackRock reports three main categories of metrics: Business Indicators, Corporate GHG Emissions, and Product-Level Carbon Footprint metrics.
Describe metrics used to assess climate-related risks and opportunities in each product or investment strategy*	Varies by investment strategy. As of Nov. 2020, 100% of active portfolios and advisory strategies are ESG integrated meaning that portfolio managers are accountable for managing exposure to material ESG risks and documenting where in the investment process these risks are considered. ESG integration statements for our actively managed retail funds are published on product websites.
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	See Exhibit 12. We report Scope 1, 2, and 3 emissions, where possible. We obtain third-party verification for our Scopes 1 and 2 emissions, as well as for our Scope 3 business travel, employee shuttles, FERA, and waste emissions data and collection process.
Asset managers should provide the weighted average carbon intensity, where data are available or can be reasonably estimated, for each product or investment strategy*	As of October 2020, we are publicly reporting weighted-average carbon intensity for funds totaling \$2.1 trillion in AUM, representing 76% of BlackRock's publicly offered funds (including ETFs and mutual funds). For separate account clients, we make this data available directly to the client upon request.
Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	In January, BlackRock announced commitments to establish <u>Sustainability as BlackRock's New Standard for Investing</u> , centered around three themes: (i) building sustainable, resilient, and transparent portfolios; (ii) increasing access to sustainable investing; and (iii) enhancing sustainability and transparency in investment stewardship. For detail on our progress, see <u>2020 sustainability actions</u> .

\*Reflects recommendations that are included in the supplemental guidance for asset managers



# Governance

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

Effective corporate governance is critical to executing on our strategy, fulfilling our responsibilities to clients, and delivering for all of our stakeholders. BlackRock's governance of climate and sustainability-related matters reflects our commitment to strong leadership and oversight at the senior management and Board of Directors levels. BlackRock's [Governance Overview](#) provides more information on BlackRock's Corporate Governance framework.

## Board oversight

BlackRock's **Board of Directors** engages with senior leaders on near- and long-term business strategy and reviews management's performance in delivering on our framework for long-term value creation. Sustainability, including climate-related issues – from the integration of ESG factors into the firm's investment processes, to sustainable investment strategies and investment stewardship priorities – is an increasingly important component of the firm's overall business strategy and the objectives of senior management over which the Board has oversight.

The Board holds six regularly scheduled meetings per year during which the Board's committees also meet. In 2020, the full Board received presentations on and discussed BlackRock's sustainability strategy in three out of the six meetings. These presentations and discussions covered the firm's strategy for evolving and increasing transparency in investment stewardship, the approach to expanding sustainable investment solutions for clients, and ongoing ESG integration efforts.

BlackRock's Board has ultimate responsibility for oversight of risk management activities. The **Risk Committee** of the Board of Directors ("Risk Committee") assists the Board in overseeing, identifying, and reviewing risks associated with operational activities that could have a material impact on the firm's performance. The Risk Committee reviews and discusses with management levels of risk, risk assessment, risk management, and related policies, including those related to climate and other sustainability risks, where material. In 2020, the Risk Committee received presentations on and discussed the integration of ESG factors into the firm's risk management processes and regulatory risk relating to sustainability.

## Exhibit 1: BlackRock, Inc. Board Oversight of Sustainability-Related Matters

Governing Body	Sustainability-Related Responsibilities	2020 Sustainability-Related Discussions <sup>a</sup>
<b>Board of Directors</b>	Engages with senior leaders on near- and long-term business strategy and reviews management's performance in delivering on our framework for long-term value creation, including as it relates to sustainability.	3 meetings
<b>Risk Committee</b>	Reviews and discusses with management levels of risk, risk assessment, risk management and related policies including those related to ESG risks.	3 meetings
<b>Nominating &amp; Governance Committee</b>	Periodically reviews corporate and investment stewardship-related policies, programs, and significant publications relating to environmental (including climate change), social, and other sustainability matters.	4 meetings

a) Out of 6 total meetings; reflects meetings where sustainability-related matters were presented and discussed. Sustainability-related matters, for the purposes of this TCFD report, include: the integration of ESG factors into investment processes, sustainable investment strategies, investment stewardship engagement on climate-related matters and corporate sustainability strategy and disclosures.

In 2020, BlackRock formalized Board-level oversight of investment stewardship and corporate sustainability at the **Nominating & Governance Committee** of the Board of Directors ("NGC"). The NGC periodically reviews corporate and investment stewardship-related policies and programs, as well as significant publications relating to environmental (including climate change), social, and other sustainability matters. As appropriate, the NGC makes recommendations on these matters to be reviewed by the full Board. In addition, the NGC periodically reviews public policy and advocacy activities, including lobbying priorities, political contributions, and memberships in trade associations.

In 2020, the NGC received presentations on and discussed BIS' engagement priorities, which include climate risk and sustainability reporting, and BIS' progress toward enhancing transparency. NGC also received presentations on and discussed BlackRock's corporate sustainability program and disclosures, including this TCFD report.

## Management oversight & functional groups

The **Global Executive Committee** ("GEC") is BlackRock's leadership team.<sup>1</sup> The GEC sets the strategic vision and priorities of the firm and drives accountability at all levels. In 2019, a subset of the GEC reviewed BlackRock's sustainability strategy. This review culminated in a series of commitments to accelerate BlackRock's sustainable investing activities and embed sustainability as our standard for investing. The commitments were announced by the entire GEC through an [open letter to BlackRock's clients](#) in January 2020.<sup>2</sup> The GEC continues to be actively involved in and receives regular updates on BlackRock's sustainability strategy.

The **Investment Sub-Committee of the GEC** oversees investment process consistency across the firm's investment groups. Members of the Investment Sub-Committee include the global heads or sponsors of all of BlackRock's major investment verticals: ETFs and Index Investments, Portfolio Management Group, Global Trading & Transition Management, BlackRock Alternative Investors, and BlackRock Sustainable Investing, as well as the firm's Chief Risk Officer. One of the remits of the Investment Sub-Committee is overseeing progress toward ESG integration in BlackRock's investment processes.

The **Risk & Quantitative Analysis Group** ("RQA"), BlackRock's risk management function, is responsible for evaluating investment, counterparty, operational, technology, model, and regulatory risks — including consideration of ESG factors relevant for each. As part of its

investment risk oversight, RQA shares and discusses ESG risk metrics, including climate risk where applicable, during regular reviews with portfolio managers of active investment strategies to provide oversight of portfolio managers' consideration of material ESG risk in investment processes.

**BlackRock Investment Stewardship** ("BIS") is responsible for the firm's [global engagement principles](#) and regional [proxy voting guidelines](#). Investment stewardship is how we use our voice as an investor to promote sound corporate governance and business practices to help maximize long-term shareholder value for our clients.

**BlackRock Sustainable Investing** ("BSI") partners with investment teams to deliver innovative products and solutions, integrate sustainability considerations across investment processes, and drive sustainable investing research efforts. BSI works closely with RQA to drive high-quality ESG integration across investment teams.

**Investment platform leadership** within BlackRock's investment divisions, oversees and is accountable for ESG integration into the investment processes for each business. This includes determining appropriate methodologies for each underlying investment team, setting policy, and facilitating ESG integration into the investment processes and portfolio objectives for each respective business. Many investment teams have specialized sustainability-focused units to help drive ESG integration and sustainable investment product development within the business including the BlackRock Alternative Investors Sustainable Investing team and the Fixed Income Responsible Investing team.

The **Corporate Sustainability** team oversees efforts to incorporate sustainability into BlackRock's business practices and the setting of environmental sustainability objectives and strategy for BlackRock's operations. In addition, the Corporate Sustainability team reports to the Board and external stakeholders on BlackRock's progress. In addition, the Corporate Sustainability team oversees the development of BlackRock's corporate sustainability disclosures, including the production of this TCFD report.

The **Technology and Operations** and **Enterprise Services** teams work with Corporate Sustainability to implement initiatives to reduce the environmental impact of BlackRock's operations. In addition, BlackRock's Business Continuity Management and Disaster Recovery planning, strategy, and crisis management activities are managed by the Business Continuity Management team, which sits within Enterprise Services.

Exhibit 2: Governance Structure, Sustainability





# Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning, where such information is material.

Sustainability is a strategic priority for BlackRock that is integrated into our investment processes on behalf of our clients, our strategy for delivering long-term organic growth to our shareholders, and in how we operate our business. These efforts are reinforced by our commitment to transparency in our investment products, our investment stewardship activities, and our corporate operations. We approach climate-related risks and opportunities from two main perspectives, which are captured across this report:

1. 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; and
2. As an **asset manager** striving to help our clients benefit from investment opportunities arising from the transition to a net zero-carbon economy; and with a responsibility to manage material risks to our clients' portfolios, including climate-related risks, within the bounds of our clients' guidelines and objectives.

In January 2020, BlackRock announced a series of commitments designed to establish Sustainability as BlackRock's New Standard for Investing. These commitments centered around three themes: (i) building sustainable, resilient, and transparent portfolios; (ii) increasing access to sustainable investing; and (iii) enhancing sustainability and transparency in investment

stewardship. BlackRock has already achieved many of the goals it set out in January and has made considerable progress across each of the three focus areas mentioned above.<sup>1</sup>

In addition, BlackRock's operations are carbon neutral. This achievement includes Scope 1, Scope 2, and Scope 3 employee business travel, serviced offices,<sup>2</sup> and co-located data center emissions. We have achieved this milestone by employing energy efficiency strategies, achieving our 100% renewable energy goal,<sup>3</sup> and offsetting emissions we could not otherwise eliminate.<sup>4</sup>

In this section, we discuss how climate-related risks and opportunities are managed within BlackRock's business activities, namely:

- Investment Strategies
- ESG integration
- Investment Stewardship
- Aladdin®
- Operations
- Public Policy & Partnerships

In addition, we discuss the climate-related risks and opportunities that we have identified and provide insight into climate scenario analysis that BlackRock undertook in 2020.

# Investment strategies

It is estimated that over the next 30 years, \$50 trillion will be needed to invest in technologies to achieve global decarbonization.<sup>5</sup> As such, investment solutions that can help BlackRock's clients better manage climate-related risks to their portfolios and benefit from or contribute to the energy transition are amongst the greatest climate-related opportunities for BlackRock.

Our investment conviction is that sustainability-integrated portfolios can provide better risk-adjusted returns to investors. This conviction is held not only by BlackRock, but by investors around the world, and is driving capital globally toward sustainable investment solutions.

In order to deepen our understanding of this shift – and how the pandemic would affect it – we recently surveyed our clients around the world. We sought to understand the main challenges sustainable investing faces and areas where innovation can spur adoption. The respondents represented 425 investors in 27 countries and an estimated \$25 trillion in AUM. The results showed that investors recognize the importance of sustainable investing to risk-adjusted returns and are backing up this conviction with their asset allocation plans, though the scale of adoption varies by region. Respondents to the survey indicated that they plan to double their sustainable AUM, on average, in the next five years.<sup>6</sup>

BlackRock manages \$152 billion,<sup>7</sup> on behalf of our clients, in investment solutions in which sustainability themes are central to enhancing long-term risk-adjusted returns. These solutions include a variety of products and strategies that support the transition to a low-carbon economy.

## iShares®

One of the fastest growing segments within the exchange-traded fund (“ETF”) market is sustainable ETFs. Consistent with BlackRock's goal to double offerings of sustainable ETFs (to 150), iShares® launched over 45 new sustainable ETFs across the US, Europe, and Canada in 2020. With 141 sustainable index offerings globally,<sup>8</sup> BlackRock's iShares® Sustainable ETF range is now the largest in the industry, both in terms of AUM and the number of investment options we provide to investors. The growth of sustainable iShares is helping to grow the market for sustainable investing overall by expanding access to sustainable investment options to more people.

In addition, iShares® works to promote greater standardization and transparency of sustainability benchmark methodologies. Several of our sustainable ETFs are the result of iShares® engagement with major index providers (including S&P, Bloomberg, FTSE Russell, and Markit) to provide sustainable versions of flagship indexes.<sup>9</sup> These products differ from more traditional index solutions in that they combine access to major benchmark exposures with business involvement screens to help investors avoid companies with specific levels of involvement in certain industries such as fossil fuels, tobacco, civilian firearms, and controversial weapons.<sup>10</sup>

Looking forward, we expect to continue to focus on expanding our offerings within impact and climate-oriented strategies, as well as further building out our ESG index offerings.

## Approach to Fossil Fuel Exclusions

BlackRock offers a range of strategies that screen out companies that derive more than a certain percentage of revenues from fossil-fuel-related activities, have thermal coal reserves, or meet other criteria. For example, BlackRock's iShares sustainable ETFs apply screens related to business involvement in thermal coal, tar sands, and fossil fuels. BlackRock also offers separate accounts to qualified investors, where exclusionary screens can be set with specific criteria as determined by the client. Client preferences regarding screens differ by region. BlackRock has developed baseline screens that address a majority of our clients' requests for exclusions in different regions. In the Europe, Middle East, and Africa (“EMEA”) region, baseline screens eliminate holdings with more than de minimis exposure to controversial weapons, nuclear weapons, fossil fuels, civilian firearms, tobacco, and UN Global Compact violators. These screens are applied on all sustainable screened funds in EMEA as well as new active funds on a comply or explain basis. For Global (ex EMEA) sustainable funds, baseline screens exclude companies with more than de minimis exposure to controversial weapons, fossil fuels, civilian firearms producers, and tobacco producers. These screens are applied to all global sustainable screened funds ex-EMEA (where EMEA baseline screens are applied).

## Illiquid Alternatives

Private market investments, such as infrastructure, real estate, and private equity, benefit not only clients, but often have very direct impacts on the local communities where such investments are situated, as well as the individuals who work on the development, operation, and maintenance of such investments.






BlackRock's Real Assets platform has established investment strategies that address the global market opportunities for transitioning to a net zero-carbon economy.

**Global Renewable Power ("GRP").** As an early mover in renewable power investing, BlackRock manages one of the largest renewable power platforms in the world, with over \$7.2 billion<sup>11</sup> of invested and committed capital in our GRP platform alone. The investments made by GRP on behalf of BlackRock's clients have directly invested in more than 250 global projects,<sup>12</sup> including onshore wind, offshore wind,

and solar photovoltaic ("PV") projects.<sup>13</sup> As of November 30, 2020, over 16 million MWh of clean, renewable energy is generated each year by BlackRock's renewable power investments, which is enough to power over 21 million homes.<sup>14</sup> In 2019, GRP investments displaced more than 9.1 million metric tons of GHG emissions and saved over 17.5 million cubic meters of water per annum.<sup>15</sup> Additional impact data for a sample GRP portfolio can be found in Exhibit 3.

We believe BlackRock's GRP strategies are well positioned to support the global energy transition, as we move from a power generation sector historically dominated by fossil fuels, to one that is expected to comprise over 60% renewables by 2050.<sup>16</sup> We view this opportunity as the largest, single structural shift taking place in infrastructure globally, and one that has the potential to create \$10 trillion of investment opportunities in the next 3 years. Our investment strategies also recognize the additional requirements to support wider climate infrastructure, including energy storage and electric vehicle charging.

### Exhibit 3: Sample Global Renewable Power Portfolio – Impact Metrics Projected over Time Horizon of Portfolio<sup>a</sup>

		Dollarized Impact (US\$)	Impact Multiple <sup>b</sup>
<b>6</b> Clean water and sanitation 	Water savings from renewable power generation <b>141,021,789 m<sup>3</sup> water reduced</b>	<b>\$ 284m<sup>c</sup></b>	<b>0.23x</b>
<b>7</b> Affordable and clean energy 	Greenhouse gas emissions avoided <b>39,128,766 tons of CO<sub>2</sub> emissions avoided</b>	<b>\$ 1,737m<sup>d</sup></b>	<b>1.32x</b>
<b>13</b> Climate action 			
<b>8</b> Decent work and economic growth 	New jobs created <b>7,625 jobs created</b>	<b>\$ 239m<sup>e</sup></b>	<b>0.16x</b>
<b>11</b> Sustainable cities and communities 	Community engagement <b>US\$114m lifetime community contribution</b>	<b>\$ 114m<sup>f</sup></b>	<b>0.08x</b>
<b>Portfolio Total</b>		<b>\$ 2,593m</b>	<b>1.78x</b>

Data as of December 31, 2019.

a. To measure impact, we leveraged the Global Impact Investing Network ("GIIN")'s [Impact Reporting and Investment Standards](https://iris.thegiin.org/document/iris-and-u-n-sustainable-development-goals/) ("IRIS") metrics. For full set of SDG-aligned IRIS metrics, see: <https://iris.thegiin.org/document/iris-and-u-n-sustainable-development-goals/>.

b. Impact Multiple for each metric = Dollarized Impact (USD) / total capital invested (USD)

c. Dollarized water saved (USD) = Cost of water (USD/m<sup>3</sup>) \* Total water saved over time horizon (m<sup>3</sup>).

d. Dollarized CO<sub>2</sub> emissions avoided (USD) = social cost of carbon (USD/metric ton) \* total CO<sub>2</sub> emissions avoided over time horizon (metric tons CO<sub>2</sub>). Social Cost of Carbon based on estimates from US Interagency Working Group on Social Cost of Greenhouse Gases, United States Government. Assuming 3% discount rate, adjusting 2007 dollars for inflation to obtain 2019 dollars. See [https://19january2017snapshot.epa.gov/sites/production/files/2016-12/documents/sc\\_co2\\_tsd\\_august\\_2016.pdf](https://19january2017snapshot.epa.gov/sites/production/files/2016-12/documents/sc_co2_tsd_august_2016.pdf)

e. Dollarized jobs created (USD) = Employee annual wages (USD) \* time horizon (years)

f. Community benefits measurements are based on financial contributions to local community benefits funds. Therefore, this measurement is already in dollars terms



## Fixed Income & Green, Social, and Sustainability Bonds

The need for sustainable fixed income solutions is pressing. Many large investors, such as insurers and pension funds, hold the bulk of their assets in bonds. BlackRock's whitepaper, [Sustainability: the bond that endures](#), discusses the growing evidence that a focus on sustainability-related factors can help investors build more resilient fixed income portfolios. BlackRock's Fixed Income Responsible Investing team works with investment teams within Fixed Income to identify relevant ESG risks and opportunities and develops tools to aid this process.

**Green Bonds.** A green bond is a fixed income instrument dedicated to new or existing projects deemed environmentally beneficial by the Green Bond Principles.<sup>17</sup> Green bonds' proceeds are ring-fenced on the issuer's balance sheet to finance these green projects. Since green bonds trade like ordinary bonds and have secondary market liquidity, they serve as a valuable tool that enables investors to fund green projects without taking on the more limited liquidity or credit risk that comes with directly investing in infrastructure projects.

The green and social bond market is steadily growing, helping raise funds for projects that have positive environmental or social impact. More than \$1 trillion in green bonds have been issued since these securities first emerged in 2007, according to research company BloombergNEF.<sup>18</sup>

BlackRock is heavily involved in and supportive of the green bond market. As of September 30, 2020, BlackRock manages \$21 billion, on behalf of clients, in green bonds across dedicated portfolios and as a component of broader









fixed income mandates. These bonds support numerous renewables and low-carbon projects. In addition, BlackRock's Head of Fixed Income Responsible Investing sits on the Executive Committee of the Green Bond Principles and the firm is a partner of the Climate Bonds Initiative.

Finally, investors want to know that green bonds deliver their intended environmental benefits. They want to measure how their investments contribute to their environmental objectives and/or report the environmental benefits to their end-investors, plan participants, or customers. BlackRock has developed portfolio-level impact reporting for a commingled green bond strategy – an example of which is shown in Exhibit 4. The reporting includes carbon emissions avoided, renewable capacity installed, and energy savings attributable to green bond investments in the portfolio.

## Cash management

In 2019, BlackRock introduced the first investment vehicle that offers the stability, liquidity, and yield potential of a money market fund while considering environmental criteria. The vehicle has expanded into a series of six global environmentally-focused cash management vehicles, which invest significantly in securities issued or guaranteed by entities that meet certain environmental criteria. As of September 30, 2020, these strategies comprised over \$14.5 billion in AUM. These solutions consider select environmental metrics in addition to the standard credit risk assessment process for liquidity management portfolios. In addition, these strategies apply screens that exclude companies with significant exposure to fossil fuels, mining, exploration, or refinement, and thermal coal.

### Exhibit 4: Impact Report for Green Bond Strategy

Example Impact Report for Green Bond Strategy (Environmental Impact per USD 1 million invested)			
	<b>1,843 tCO<sub>2</sub>/year</b> of avoided emissions Equivalent to taking <b>398 cars off the road</b>		<b>1,073 MWh/year</b> of renewable energy generated Equivalent to <b>annual electricity use of 87.5 homes</b>
	<b>441 m<sup>3</sup>/year</b> of water savings Equivalent to <b>1/6 of an Olympic-sized swimming pool</b>		<b>253 MWh/year</b> of energy savings Equivalent to <b>6,796 light bulbs switched to LEDs</b>
	<b>38 hectares</b> of land area re/afforested or preserved Equivalent to <b>54.3 football fields</b>		<b>6,350 m<sup>3</sup>/year</b> of water or waste collected and disposed or treated Equivalent to <b>3.2 Olympic-sized swimming pools</b>
	<b>169 people</b> benefitting from forest, agriculture, water or waste projects <b>5 jobs created</b> across all categories		<b>9,835 new passengers/year</b> on public transit <b>214 minutes saved</b> due to better public transit

Sources: BlackRock analysis of publicly available environmental impact reports as communicated by issuers as of 18 May 2020. The above results are shown for informational purposes only, to illustrate the positive environmental impact of a green bond portfolio. They are not meant to be a prediction or projection. Not every issuer reports on every metric, hence no linear extrapolation should be performed. BlackRock is not held responsible for inaccuracies in issuers' reporting; methodology available upon request. US EPA's Greenhouse Gas Equivalencies Calculator for CO<sub>2</sub> and energy measures. Other assumptions: 1 Olympic pool = 2,500 m<sup>3</sup> of water; 1 football = 7,000 m<sup>2</sup>

# Perspectives on fixed income portfolios aligned to the Paris Agreement

Investors can play an important role in supporting the transition needed to keep global temperature rise to well below 2°C from pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. There is ongoing discussion across the industry as to how to align portfolios to the goals of the Paris Agreement.<sup>19</sup> BlackRock is committed to partnering with our clients on their efforts to align their portfolios with the global ambitions to reach net zero emissions by 2050. The below discussion reflects the views of BlackRock's Fixed Income Responsible Investing Team.

## What is a Paris-aligned portfolio?

A Paris-aligned portfolio is not just a portfolio with a fossil fuel screen or a lower carbon intensity than a benchmark or market. A Paris-aligned portfolio tilts exposure to companies aligned with economic activities that trend towards net zero by 2050.

## Why not just underweight 'high impact' sectors, like power generation and oil and gas?

The most widely available emissions data are Scope 1 and Scope 2 emissions. Scope 3 (i.e., indirect emissions that occur in a company's value chain) are hard to measure and often not readily available. A strategy that minimizes Scope 1 and 2 emissions will reduce exposure to power utilities who burn fossil fuels to generate electricity (Scope 1), but maintain or increase exposure to oil and gas producers, a sector where 80-90% of emissions are in Scope 3. This is not a sensible outcome given that more electricity will be needed to satisfy most final energy uses in a decarbonized world, provided such energy is generated in a zero-carbon manner. Conversely, the role of fossil fuels in a decarbonized world will be limited to nonexistent.

## What might a Paris-aligned fixed income portfolio look like in practice?

We are developing a strategy that aims to allocate capital to companies that are well positioned to move towards sector specific models aligned with the goal of the Paris agreement. We identify these companies by using GHG data alongside capital expenditures, research and development, management signaling, and other indicators. Importantly, we are looking to emulate the financial characteristics of common fixed income benchmarks, especially sector allocation – in other words, not underweighting the most carbon intensive sectors, but by selecting companies within sectors that are best aligning themselves with the goals of the Paris agreement. It is our premise that the high emitting sectors are the ones that need the most support in financing the transition and we do not seek to divest from companies who have technological options and are demonstrating willingness to change.

## How do you account for the fact that the number of Paris-aligned companies today is limited?

While the number of high impact Paris-aligned companies are small today, we expect the universe to grow over time as technology evolves and makes decarbonization more affordable and financially viable for more sectors. Importantly, if an entire company is not aligned, we are still keen to finance their aligning projects through green bonds. Green bonds finance projects that have clear environmental benefits, and most of them target GHG emissions reductions as a primary goal. Particularly in transition industries such as power generation or automotive manufacturing, green bonds are encouraged to shift investment to low-carbon technologies and reduce future emissions.

## Active Equity Strategies

The Thematics and Sector Team within BlackRock's Active Equities business has been managing public equity portfolios that invest in the energy transition since 2000. They manage a series of active equity strategies that are designed to provide clients with exposure to the beneficiaries of the transition to a lower carbon economy.

**Circular Economy.** In October 2019, the Thematics and Sector team launched a circular economy investment strategy in partnership with the Ellen MacArthur Foundation ("EMF").<sup>20</sup> EMF is a global thought leader that works to accelerate the transition to a Circular Economy. EMF has helped put the Circular Economy on the agenda of decision-makers around the world.

At its core, the Circular Economy strategy helps BlackRock's clients put their money to work in support of the transition to a circular economy, as well as in businesses that are evolving to a more sustainable way of operating.

The Circular Economy is expected to impact a wide number of industries, presenting growth opportunities to well-positioned companies. This shift may be driven by the confluence of three key factors — increasing regulation, changing consumer preferences favoring sustainable alternatives, and corporate responses to focus on circular

practices. For example, one important catalyst has been the number of companies committing to ambitious targets around recycled plastics use, following tightening policy restrictions and consumers shunning disposable plastic.

In order to identify meaningful exposure to the Circular Economy, the Thematics and Sector team brings together their fundamental expertise on individual stocks with unique insights from EMF. As a 'knowledge partner' to BlackRock, EMF provides expert insights and guidance that complements our fundamental research on the broader theme.

**Low-Carbon Transition Readiness ("LCTR").** In 2018, BlackRock announced the launch of a low-carbon economy "Transition Readiness" equity investment strategy.<sup>21</sup> The LCTR strategy seeks to deliver long-term competitive financial returns relative to standard equity benchmarks and directs capital to companies best positioned to facilitate the global transition to low-carbon economies. It is based on the investment thesis that the transition to a low-carbon economy will create winners and losers across companies, industries, and countries, and will ultimately impact long-term investment performance. These risks and opportunities may result from emerging technologies, regulatory changes, and the physical impacts associated with climate change, all of which will have cross regional and sectoral impacts.<sup>22</sup>



# Perspectives on the Circular Economy

During BlackRock's 2020 Sustainability Summit, BlackRock's Global Head of Thematic & Sector Investing, hosted a conversation with Dame Ellen MacArthur, Founder & Chair of Trustees of the Ellen MacArthur Foundation. Below are some of the highlights from the discussion.

## What is the Circular Economy?

The best way to describe a circular economy is to compare it to our current predominantly linear one. Today, when we take a material out of the ground, we tend to make something out of it and then we throw it away. Within a circular economy, you design with the intention for the product to be used longer, remanufactured, or upgraded, right from the outset. You design that product so that at the end of the product's life, you can recover the materials and design out waste entirely, enabling you to feed those materials back into the economy.

Importantly, you need to change business models to enable this to happen. If you produce an item, you need to ensure that item can come back into the system. The Ellen MacArthur Foundation has investigated how you can decouple growth from resource constraints. There is vast economic potential if we shift towards this model. When you start to see that shift and realize the circular opportunity, you also realize there's massive CO<sub>2</sub> savings. Once you stop being extractive and consumptive and you start being regenerative and restorative, CO<sub>2</sub> emissions fall considerably.

## What role does finance play in the Circular Economy?

Finance is crucial in supporting industries, like the plastics packaging industry, shifting from linear to circular. The circular economy is about opportunity – it isn't just about the "push" to join, it's the "pull." We've identified an economic opportunity to redesign the global economy and build a more-resilient system that is restorative and regenerative. A system that works to rebuild things and improve them, rather than stretch out what we have a little bit longer. We don't have all the answers around the circular economy, and we don't have the answers as to how to make this transition accelerate. However, we know that finance is key in this transition, as are many elements, but you can't accelerate the transition to a circular economy without those forces that pull as well as push.

## How has the recent market downturn affected the pre-COVID momentum towards the circular economy?

There is a direct opportunity here. Despite the fear and the unknown elements of the crisis, there's a possibility to rebuild things differently. It's incredibly positive to see the circular economy as a key pillar of the European Commission's European Green Deal.

# ESG Integration

BlackRock's [ESG Integration Statement](#) details our firm-wide commitment to integrate ESG information into investment processes across all portfolios. The ESG Integration Statement outlines the foundation, ownership, and oversight mechanisms that underpin our approach. ESG integration is the practice of incorporating material ESG information into investment decisions with the objective of improving the long-term financial outcomes of our clients' portfolios.

BlackRock committed that by the end of 2020, all active portfolios and advisory strategies will be ESG integrated – meaning that, at the portfolio level, our portfolio managers are accountable for appropriately managing exposure to material ESG risks (including climate risk) and documenting where in the investment process these risks are considered. As part of delivering on this commitment, portfolio managers, with the help of BSI and RQA created ESG integration statements at the unique investment process level, for all actively managed products, to articulate how ESG considerations are being integrated into their investment processes. The white paper, [Making Sustainability Our Standard](#), describes BlackRock's detailed approach to integrating sustainability related factors into portfolio management and provides an update on our integration efforts – particularly on progress against the goals we set in January – and a presentation of our approach and lessons learned.

As of November 2020, 100% of active portfolios and advisory strategies have met this goal, and as of December 2020 all ESG integration statements for actively managed publicly offered funds are published directly on the relevant product pages. These statements are relevant for all active products, not just for sustainable investment products.

BlackRock's approach as it relates to identifying and managing material climate-related risks and opportunities within client portfolios is two-fold: (i) developing firmwide infrastructure and processes to support the analysis of climate-related risks; and (ii) distributing responsibility to investment professionals to review and manage material investment risks, including climate risks, in portfolios.

Our investors lead in identifying material sustainability-related risks and opportunities – including climate-related considerations– in their portfolios. Investment teams develop views on the materiality of specific sustainability-related topics by considering BlackRock's proprietary ESG research, as well as research from a variety of external sources. In addition, BlackRock has developed proprietary measurement tools to deepen portfolio manager understanding of material ESG risks including climate risks.

In our index investments business, we work with index providers to expand and improve the universe of sustainable indexes, and our investment stewardship processes encourage the companies in which our clients are invested to manage and disclose material sustainability risks.

BlackRock's [PRI Transparency Report](#) provides specific examples of how ESG considerations are incorporated by various investment teams. As a PRI signatory since 2008, BlackRock has committed to upholding all six PRI principles. In 2020, BlackRock received A's across every category in the PRI Assessment Report as shown in Exhibit 5.<sup>23</sup> In addition, every BlackRock direct investment practice area improved its score with A+ earned in equities, fixed income, private equity, property, and infrastructure.

**Exhibit 5: BlackRock PRI Scores by Indicator**

BlackRock's PRI Scores by indicator		2017	2018	2019	2020
Direct	Strategy & Governance	A+	A	A+	A+
	Listed Equity Incorporation	A	B	A	A+
	Listed Equity Active Ownership	A+	A	A+	A+
	Fixed Income SSA	B	A	A	A+
	Fixed Income Corporate Financial	A	A	A	A+
	Fixed Income Corporate Non-Financial	A	A	A	A+
	Fixed Income Securitized	B	B	B	A
	Private Equity	C	A	A	A+
	Property	B	A	A	A+
	Infrastructure	A	A	A	A+
Indirect	Listed Equity Incorporation		A	A	A
	Fixed Income SSA		A	A	A
	Fixed Income Corporate Financial		A	A	A
	Fixed Income Corporate Non-Financial		A	A	A
	Fixed Income Securitized		A	A	A
	Private Equity		A	A	A+
	Infrastructure				A+

# Investment Stewardship

Investment stewardship is an essential component of our fiduciary responsibility. It is how BlackRock uses its voice as an investor to promote sound corporate governance and business practices to help maximize long-term shareholder value for our clients, the vast majority of whom are investing for long-term goals such as retirement. BlackRock has the largest global stewardship team in the industry<sup>24</sup> with 50 people across eight offices who have a regional presence and local expertise across 54 voting markets.

BIS' approach to corporate governance and stewardship is outlined in the [2021 BlackRock Investment Stewardship Global Principles](#) (the "Global Principles") and [market-level voting guidelines](#). The Global Principles further embed sustainability into BlackRock's stewardship activities. BIS anticipates more engagement and voting on material ESG risks going forward.<sup>25</sup>

## Global aspirations to reach Net Zero GHG emissions by 2050

We are firmly convinced that climate risk — both physical and transition risk — presents one of the most significant risks to the long-term value of our clients' investments. In recognition of the long-term risks to client portfolios presented by climate change, the [BIS Global Principles](#), [2021 Stewardship Expectations](#) and [market-level voting guidelines](#) state BIS' expectation that investee companies articulate how they are aligned to a scenario in which global warming is limited to well below 2°C and a global aspiration to reach net zero GHG emissions by 2050.<sup>26, 27</sup> The public and private sectors have roles to play in aligning GHG reduction efforts with targets based on science, where available, to curb the worst effects of climate change and reach the global goal of carbon neutrality by mid-century. Companies have an opportunity to utilize and contribute to the development of current and future low-carbon transition technologies, which are an important consideration for the rate at which emissions can be reduced. BIS expects companies to disclose how they are considering these challenges, alongside opportunities for innovation, within their strategy and emissions reduction efforts.

In order to use our resources most effectively on behalf of clients, climate-related engagements are focused on companies in carbon-intensive sectors that, taken together, represent a significant proportion of market capitalization and GHG emissions in their respective regions. These companies face material financial risks in the transition to

a low-carbon economy that we need to understand as long-term investors. In addition, companies across multiple sectors face physical risks related to climate change, and BIS seeks to understand how companies manage and mitigate these risks within their strategy and operations.

During the 2019-2020 proxy season, BIS conducted 1,260 engagements on environmental issues — a 299% increase from the prior year. Looking at carbon-intensive industries more broadly, BIS focused on a universe of 440 carbon-intensive companies that face material financial risks in the transition to a low-carbon economy. BIS identified 244 companies that are making insufficient progress integrating climate risk into their business models or disclosures. As of November 30 2020 year-to-date, BIS has taken voting action against 63 companies for insufficient progress and placed 191 other companies 'on watch,' meaning that they are at risk of voting action in 2021. Beginning in 2021, our expanded focus universe will cover more than 1,000 companies that represent 90% of the global scope 1 and 2 emissions of the companies in which our clients invest.<sup>28</sup>

We also recognize that for many carbon-intensive companies, the credibility of their commitments to manage climate and other sustainability risks may be undermined by their involvement in efforts that seek contradictory public policy aims. For this reason, we enhanced our disclosure requirements in relation to political activities, to cover significant trade association memberships.<sup>29</sup> We also explained that we expect companies to monitor and address misalignment with their trade associations on major policy positions.

## Support for TCFD-aligned disclosure

Enabling investors to better identify, address, measure, and monitor sustainability-related risks is crucial to our role as stewards for our clients' capital. That is why we ask companies to publish reports aligned with the SASB standards and the TCFD recommendations. As of October 2020, 454 unique companies have reported SASB metrics, a 288% increase against the total number of reporters for the full year 2019 (117 companies). In addition, the TCFD framework has been supported by nearly 1,500 organizations representing a market cap of over \$12.6 trillion.<sup>30</sup> Further, an increasing number of stock exchanges and regulators are recommending or mandating TCFD reporting.

# Our Commitment to Transparency in Stewardship

Given the growing interest in our stewardship efforts from clients and broader society, we have significantly increased investment stewardship disclosure in 2020, including:

- **BlackRock Investment Stewardship 2021 Global Principles and market-level voting guidelines:** Sets out our stewardship philosophy and our views on corporate governance and sustainable business practices that support long-term value creation by companies. Our market level voting guidelines provide detail on how we implement the principles, taking into consideration local market standards and norms. Together they form the basis for our stewardship activities, including thought leadership, company engagement, and holding companies accountable by voting on management and shareholder proposals.
- **Our approach to sustainability:** Special report on our approach to voting on climate risk and other sustainability topics.
- **Global quarterly stewardship reports:** Case studies on individual engagements and data on the number of companies BIS engaged with during each quarter globally across a range of E, S, and G topics, including COVID-19 related issues.
- **Global vote disclosures:** BIS' vote instructions for individual meetings globally. This record reflects votes at meetings held from July 1<sup>st</sup> through June 30<sup>th</sup> of the following year. It is updated quarterly until June 30<sup>th</sup> each year, when it is superseded by BlackRock's annual Form N-PX filing.
- **Vote bulletins:** Vote bulletins describe our votes and rationales for key complex or high-profile votes. This has included bulletins on votes for more than 50 companies during the 2020 calendar year.<sup>31</sup>
- **Enhanced client reporting:** We implemented a new capability through *Aladdin* to deliver portfolio-specific company engagement reports for our clients.

In addition, BIS has published several commentaries<sup>32</sup> outlining its approach to engagement on climate risk and related topics, including:

- **Approach to engagement on climate risk**
- **Emissions, engagement, and transition to a low-carbon economy**
- **Sustainability reporting: convergence to accelerate progress**



# Aladdin® and Aladdin Climate

Asset management is both a people business and an information processing business. Talented people, working with best-in-class tools and information, and a disciplined process, deliver better investment outcomes for clients. Technology enables people to make more informed decisions and construct better portfolios.

Within the broad umbrella of sustainability-related issues, climate change has emerged as a dominating theme amongst BlackRock investors and clients. Limited data and technology focused on climate risk make physical and transition risks challenging to quantify and to act upon. As a leader in financial technology and risk analytics, BlackRock is committed to addressing this need by empowering our investors and Aladdin clients to build more sustainable portfolios by putting ESG analysis at the heart of Aladdin.

Over the past several years, BlackRock has made significant investments in expanding the breadth and depth of ESG-related capabilities across the Aladdin platform. BlackRock's investors, who leverage the risk analytics and comprehensive portfolio management tools in *Aladdin*, now have access to a breadth of ESG metrics to further inform their investment decisions.

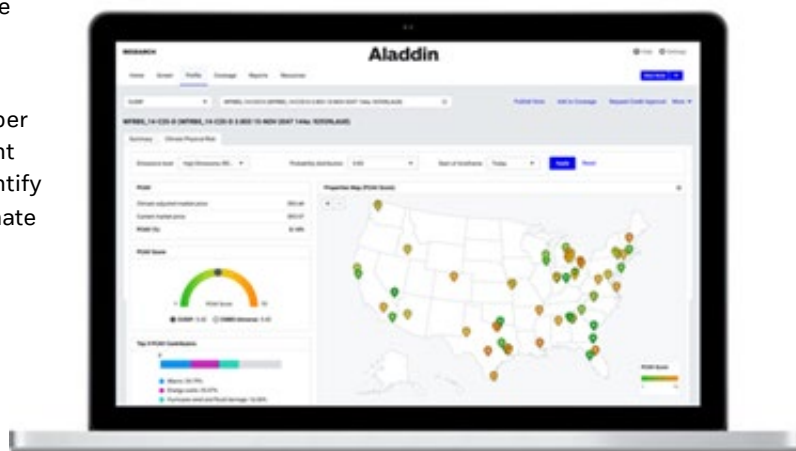
BlackRock has also expanded access to ESG data through new partnerships with leading data providers Sustainalytics and Refinitiv. Aladdin now offers over 1,200 key performance indicators to help portfolio and risk managers identify sustainability-related risks and make informed asset allocation decisions. By providing all Aladdin clients a set of ESG scores across a broad universe of companies, BlackRock is making it easier for investors to incorporate ESG metrics in their investment process.

Building on BlackRock's strength in risk management through the Aladdin platform, we announced in December 2020 that we created [Aladdin Climate](#) to meet the urgent need among financial institutions and investors to quantify climate risk in their portfolios as the physical toll of climate change mounts and the global transition to net zero emissions accelerates.

Through Aladdin Climate, users have access to climate data and analytics across Aladdin's full suite of portfolio and risk management tools including those related to physical and transition risk. This allows BlackRock portfolio managers to assess climate-related risks and opportunities at the security and portfolio level.

BlackRock has partnered with Rhodium Group ("Rhodium"), who leads the world's largest climate science and econometric research collaboration, to inform BlackRock's financial risk models. Together, we use a range of datasets to project climate hazards, such as flooding and temperature rise, to estimate a probabilistic distribution of these hazards' impact on economic indicators like employment, home prices, and GDP. We incorporate these probabilities in the financial risk models that power BlackRock and our Aladdin platform to calculate the financial impact for an equity, or a mortgage-backed security. We then generate financial analytics that are 'climate-adjusted' versions of standard analytics that are specific to the scenarios that investor chose. Paired with BlackRock's leadership in financial modeling and the power of Aladdin as a platform, Rhodium's data provides important new risk capabilities for our clients and for the industry.<sup>33</sup>

Aladdin Climate will power new Aladdin capabilities and add new risk metrics to BlackRock's modeling platform, and we will continue to extend our research across asset classes and geographies over time.<sup>34</sup>



# Risks, opportunities & scenario analysis

BlackRock recognizes the importance of effective identification, monitoring, and management of climate-related risks and opportunities across its global business. Before discussing climate-related risks and opportunities, it is important to revisit BlackRock's business model for context. Importantly, the assets that BlackRock manages belong to BlackRock's clients, not BlackRock. BlackRock typically earns investment management fees as a percentage of AUM. BlackRock also earns performance fees on certain portfolios relative to an agreed-upon benchmark or return hurdle. For some products, we also may earn securities lending revenue.

In addition, BlackRock offers its proprietary Aladdin investment system as well as risk management, outsourcing, advisory, and other technology services, to institutional investors and wealth management intermediaries. Revenue for these services may be based on

several criteria including value of positions, number of users, or accomplishment of specific deliverables.

Although the firm's global offices could be impacted by adverse climate events, the direct financial impact is limited, as BlackRock leases most of its facilities.<sup>35</sup> Nonetheless, 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. Additionally, we have insurance to further mitigate potential financial impact of physical climate risks we face. Further discussion of business continuity management is included on page 33.

As such, BlackRock's exposure to climate-related risk is primarily indirect, with the potential to affect future revenues and expenses. Exhibits 6 and 7 provide a list of key climate-related opportunities and risks that BlackRock has identified.<sup>36</sup>

## Exhibit 6: Key Climate-Related Opportunities

Opportunity	Description
<b>Products &amp; Services</b>  Investment Solutions	There is increasing client demand for sustainable investment solutions. According to BlackRock's <a href="#">Global Sustainable Investing survey</a> , respondents plan to double their sustainable AUM, on average, in the next five years. BlackRock's \$152 billion sustainable investment platform is well-positioned to meet increased demand as more of our clients focus on the impact of climate change on their portfolios. BlackRock's iShares® Sustainable ETF range is the largest in the industry, both in terms of AUM and the number of investment options we provide to investors. BlackRock manages one of the largest renewable power infrastructure investment platforms in the world and is one of the largest investors in green bonds on behalf of clients.
<b>Products &amp; Services</b>  Aladdin	There is increasing demand from Aladdin clients to understand climate-related risks in their portfolios, as more investors seek to quantify and act on climate-related risks to their portfolios. Building on BlackRock's strength in risk management through the Aladdin platform, BlackRock created <a href="#">Aladdin Climate</a> to address this need. <a href="#">Aladdin Climate</a> is the first software application to offer investors measures of both the physical risk of climate change and the transition risk to a low-carbon economy on portfolios with climate-adjusted security valuations and risk metrics. Using Aladdin Climate, investors can now analyze climate risk and opportunities at the security level and measure the impact of policy changes, technology, and energy supply on specific investments.
<b>Resource Efficiency</b>  Operations	BlackRock pursues a sustainability strategy that seeks to decouple company growth from our impact on the environment. By reducing waste and employing energy efficiency strategies to lower our emissions, amongst other efforts, we are minimizing the environmental impact of our operations and improving operational efficiency.

## Exhibit 7: Key Climate-Related Risks

Risk	Description
<b>Market</b>	Climate-related risks could impact the value of BlackRock's AUM and reduce investment management revenue. BlackRock may be unable to develop new products and services and the development of new products and services may expose BlackRock to reputational harm, additional costs, or operational risk. Unsuccessful efforts to develop products 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 our clients are subject could reduce demand for certain investment products offered by BlackRock. In addition, climate-related market risks could affect the value of seed and co-investments. <sup>37</sup>
<b>Reputation</b>	Stakeholder concern and/or associated activism related to the impact of BlackRock's client portfolio holdings on the climate could create reputational risk, reduce client and employee loyalty, or lead to shareholder divestment.
<b>Regulatory</b>	New environmental and sustainability-related disclosure requirements, or regulations or taxes that apply to BlackRock's investment products, emissions, or other aspects of BlackRock's operations could increase compliance costs or make BlackRock's products less desirable to clients.
<b>Physical</b>	Increased severity of climate-related events could affect our operations, to the extent such events impact our office locations and operations; although as mentioned previously, BlackRock's financial exposure to physical assets is limited and BlackRock has established business continuity and disaster recovery programs to facilitate the continuity of business in the event of a business disruption, including those related to physical climate risks. Additionally, we have insurance to further mitigate potential financial impacts of physical climate risks we face.

The inclusion of climate-related risks in Exhibit 7 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 our Annual Report on Form 10-K, as well as our subsequent Form 10-Q filings.

## Scenario analysis

To fully incorporate the potential effects of climate change into an organization's planning processes, the TCFD recommends that companies "consider how climate-related risks and opportunities may evolve and their potential business implications under different conditions."<sup>38</sup>

Climate-related scenario analysis allows an organization to develop insight into how the physical and transition risks and opportunities arising from climate change might impact the business over time. Importantly, scenario analysis is not meant to predict the future, but rather to hone an understanding of climate-related risks and opportunities to which an organization may be exposed.

This section covers scenario analysis conducted by BlackRock from two vantage points – first, as a publicly-traded company; and second, as a fiduciary on behalf of our clients.

BlackRock conducted its first climate-related scenario analysis exercise in 2020 with the aim of refining our understanding of climate-related risks, while providing insight into longer-term opportunities. A detailed discussion of our process and approach to this analysis is provided in the Appendix.

As discussed above, one of the key channels through which BlackRock may be exposed to climate-related risks is through the risk that fluctuations in asset values, due to climate-related risks, lead to a reduction in BlackRock's investment management revenues – due to (i) a decline in the value of AUM; (ii) the withdrawal of funds from BlackRock's products; or (iii) the rebalancing or reallocating of assets into BlackRock products that yield lower fees.

All of the aforementioned items could be affected by both transition and physical climate risks to markets. We opted to focus in the first order on a transition risk scenario aligned to the TCFD recommendations, which call on companies to assess their resilience to a 2°C or lower scenario. This was based on our view that transition risks are more likely to have a significant impact on our business and would be more likely to affect BlackRock in the short- to medium-term.<sup>39</sup>

We reviewed several transition risk scenarios aligned with a 2°C or below warming target. From the scenarios considered, we concluded that the UN Principles for Responsible Investing's ("UN PRI") Inevitable Policy Response ("IPR") provided the best starting point given its explicit consideration of a delayed policy response and associated market shocks.<sup>40</sup> The scenario was adapted

through a series of workshops with subject-matter experts across the firm to develop assumptions around key drivers of potential impacts to BlackRock, such as client and product flows. Please see the Appendix for more detail.

The IPR envisions a forceful global policy response to climate change. The policy changes include: (i) deep and rapid changes to the energy system including a peak in oil between 2026 and 2028 and a complete phase-out of thermal coal by 2040; (ii) electrification of transport within 20 years including bans on the sale of internal combustion engine vehicles and 70% of passenger vehicles electrified by 2040; and (iii) major changes in land use including the virtual elimination of deforestation by 2030.<sup>41</sup>

We used the discussions and quantitative analysis to derive a series of potential outcomes. Key drivers of different outcomes in our analysis were as follows:

- Assumptions around client investment flows into and out of different types of investment products;
- Assumptions regarding expected capital market returns across different asset classes; and
- Assumptions regarding whether policy changes are implemented as expected in a consistent manner across jurisdictions, or alternatively in a fragmented and less predictable manner that could lead to additional uncertainty, market shocks, and volatility.

We recognize that there is potentially a lot of uncertainty regarding how to quantify these impacts and that reasonable people can differ in their assessments. As our collective knowledge and understanding of these mechanisms evolve, it is possible that the quantification of these scenarios may also change.

The results of the analysis indicate that despite a lack of direct exposure to climate-related risks, a scenario similar to the IPR could impact BlackRock's future revenues and profits. As such, BlackRock may be vulnerable to climate-related transition risks if BlackRock is not strategically positioned to capitalize on rapid, unexpected market shifts including fragmented policy implementation across jurisdictions in which BlackRock operates.

Nonetheless, BlackRock's diversified platform of alpha-seeking active, index, and cash management strategies across asset classes, positions BlackRock to serve our clients even during times of significant market repricing and/or a major transition in the world's energy and economic systems. Further, BlackRock is likely well-positioned to capitalize on opportunities to increase AUM, revenues, and market share if the firm is able to effectively anticipate changes in both markets and client preferences.

While we believe that BlackRock's business model would

remain resilient and BlackRock would remain profitable, the analysis revealed a distinct divergence in BlackRock's potential future business growth depending on BlackRock's ongoing ability to adapt its product offerings and investment capabilities in a manner that is aligned to a well-below 2°C scenario. Failure to adjust the business model to the changing market and client preferences could lead to reduced market share and profitability, while successful business adaptation could lead to a growth of business and market share.

As discussed throughout this report, BlackRock has invested significant resources to build both the analytical capabilities and investment products to help our clients benefit from the policy shifts envisioned by the IPR, as well as to help assess and anticipate the associated risks. The results of the analysis reinforce the importance of both the continued investment in these capabilities including Aladdin Climate, ESG integration, and investment stewardship, and the expansion of sustainable investment product offerings.

Like all scenario analysis, the exercise is hypothetical and subject to uncertainties and limitations. For example, while the analysis was being conducted, the COVID-19 pandemic was unfolding. The market response to the crisis and magnitude of investor flows in March and April 2020 across asset classes informed and contributed to our discussions and thinking. These considerations will be re-evaluated in future climate scenario analysis exercises. In addition, we will continue to expand and evolve our scenario analysis to incorporate future market conditions.

Further, the analysis was concluded prior to the US Presidential election, the outcome of which will likely have significant implications for the trajectory of US climate policy.<sup>42</sup> Potential implications will be incorporated into future scenario analysis.

Indeed, scenario analysis has proven to be one of the most challenging aspects of the TCFD Recommendations for all companies. In its most recent [Status Update](#), the TCFD reported that only one in fifteen companies utilizing the TCFD framework included information in their disclosures about the resilience of their strategies under different climate scenarios – a lower uptake than other TCFD Recommendations. In addition, the TCFD noted a lack of consistent public disclosures by asset managers against the TCFD Recommendations.<sup>43</sup> One of the challenges we faced in developing our scenario analysis was a lack of guidance specific to the asset manager business model. In the spirit of helping to advance the state of disclosure in our sector, we have provided a detailed discussion of our methodology and process used to develop our analysis. Please refer to the Appendix for additional details.

## Investment analysis

BlackRock has also developed scenario analysis tools designed to help refine investors' considerations of the potential implications of physical climate-related risks on investment portfolios. One example related to physical climate risk is discussed below.

In 2019, BlackRock published the results of a pilot study on the physical risks of climate change in the US, in the BlackRock Investment Institute report, "[Getting Physical](#)". The research isolated financial impacts of physical climate risk. To account for uncertainty around future pathways, the research considered four scenarios ranging from the Intergovernmental Panel on Climate Change ("IPCC") "no climate action" scenario (RCP 8.5) that assumes continued burning of fossil fuels; to the "Decisive Action" scenario (RCP 2.6) that assumes aggressive policy actions to curb emissions, in addition to "Limited Action" and "Some Action" (RCP 4.5) scenarios.<sup>44</sup>

The research focused on three sectors with long-dated assets that can be located with precision: US municipal bonds, commercial mortgage-backed securities ("CMBS") and electric utilities. For the US municipal bond market, the research translates physical climate risks into implications for local GDP. For commercial real estate, hurricane and

flood risk and estimate potential losses to the sector are evaluated. For US electric utilities, the exposure to climate risk of 269 publicly listed US utilities is assessed based on the physical location of their plants, property and equipment.

This analysis gives BlackRock's portfolio managers insight into the severity, dispersion, and trajectory of potential physical climate-related risks and helps them assess the extent to which these risks are priced by markets, which can inform investment decisions. Early findings suggest investors must rethink their assessment of vulnerabilities. We believe that weather events such as hurricanes and wildfires are currently underpriced in financial assets, including US utility equities. A rising share of municipal bond issuance is expected to come from regions facing climate-related economic losses. And our research shows that many high-risk commercial properties are outside official flood zones. We believe that understanding and integrating these insights on climate-related risks may help enhance portfolio returns and resilience.

While the initial analysis focused on assets and companies in the US, we plan to extend the analysis across regions, asset classes, and sectors as data availability improves.



# Operations

In our operations, BlackRock pursues a sustainability strategy that seeks to decouple company growth from our impact on the environment, while increasing the efficiency and resiliency of our operations. Finding innovative ways to power our business with renewable energy, lower our emissions, and reduce waste, among other efforts, reduces our environmental impact. BlackRock has set targets for operational sustainability designed to reduce our carbon footprint.

BlackRock's operations are carbon neutral in Scope 1, Scope 2, and Scope 3 employee business travel, serviced offices, and co-located data center emissions.<sup>45</sup> Looking beyond 2020, we are working to establish updated targets that are aligned to climate science and plan to publish them in 2021. Exhibit 8 provides an overview of progress relative to the goals we have set for our operations. Exhibit 9 illustrates the

relationship between BlackRock's revenue and Scope 1 and 2 (location-based) GHG emissions as an illustration of our progress towards decoupling our emissions from our revenue growth.

In June 2020, we achieved our 100% renewable energy goal to match the same amount of renewable electricity as the electricity that our global operations (including data centers) consume annually through procuring renewable energy directly where possible and through purchasing environmental attribute certificates<sup>46</sup> where we do not have operational control or renewable energy is not available. We contract directly for renewable energy wherever possible (approximately 50%) and where we do not have operational control to procure our own energy, we purchase environmental attribute certificates as a means of achieving our 100% renewable goal.

## Exhibit 8: Progress towards select environmental sustainability targets

Category	Description	Progress to Date <sup>a</sup>	Target <sup>b</sup>
<b>Emissions</b>	Reduce facility location-based GHG emissions (electricity, stationary combustion, and refrigerants) per full-time employee	44%	45%
<b>Renewable Energy</b>	Match same amount of renewable electricity (in MWh) as the electricity that our global operations, including data centers, consume annually	100%	100%
<b>Electricity</b>	Reduce absolute global electricity consumption	1%	18%
<b>Air Travel</b>	Reduce air travel per employee	21%	20%
<b>Paper</b>	Reduce global paper consumption	44%	25% <sup>c</sup>
<b>Waste</b>	Increase global waste diversion from landfill	48%	75% <sup>c</sup>

a. Progress for operations indicators is as of Dec. 31, 2019 with a 2014 baseline unless otherwise noted.

b. All target dates as of year-end 2020

c. 2017 baseline

## Travel

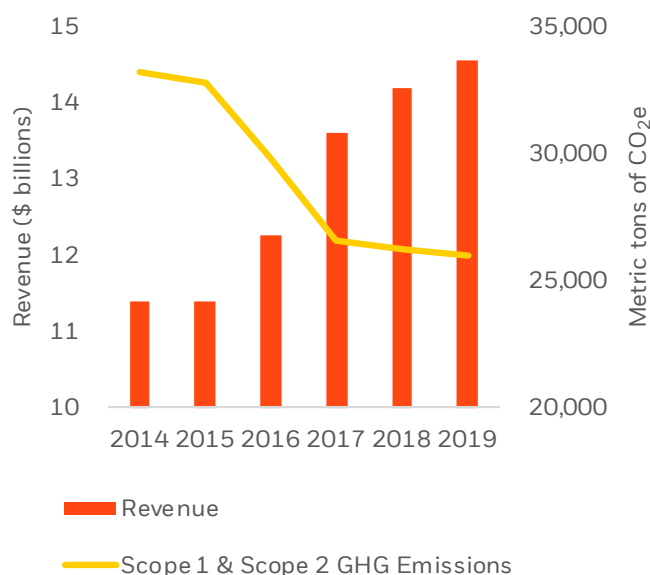
Prior to the COVID-19 crisis, which essentially halted employee travel, business travel has consistently been a significant source of carbon emissions for BlackRock's operations given our client-facing global business. Since 2017, we have elected to offset 100% of our travel-related emissions.<sup>47</sup> We also reduced air travel per employee by 21% as of year-end 2019 from a 2014 baseline. We attribute this reduction, in part, to our ongoing investment in our video conferencing capabilities, helping to make remote meetings both effective and practical. These investments not only make our operations more sustainable but support our resilience and ability to serve our clients even during the COVID-19 crisis.<sup>48</sup>

## Electricity

Electricity is another significant source of carbon emissions. Since we began tracking our electricity use in 2014, our electricity consumption has decreased by 1% despite a 15% expansion in square footage and a 40% increase in headcount.<sup>49</sup> Because of this growth, we were unable to achieve our initial 2020 goal of an 18% reduction. However, we continue to focus on reducing electricity through partnering with our landlords and leveraging energy efficiencies. Exhibit 10 provides additional data on our change in headcount versus electricity consumption. We improve energy efficiency through the consolidation of our data centers, retrofitting for LED lighting, redesigning our office space use, and adjusting our heating, ventilation, and air conditioning systems to more closely correlate to occupancy.

### Exhibit 9: Revenue v. GHG Emissions

For the year ended December 31, 2019



## Renewable Energy

We have made it a priority to not only become more energy efficient, but also to ensure that the energy we purchase comes from renewable sources, wherever possible. Our support for renewable energy goes hand in hand with reducing our carbon footprint and BlackRock's position as one of the world's largest investors in renewable energy assets. By increasing the efficiency of our operations and buying both renewable power and environmental attribute certificates where we do not have operational control to procure our own energy, we have achieved our 100% renewable energy goal.

## Data Centers

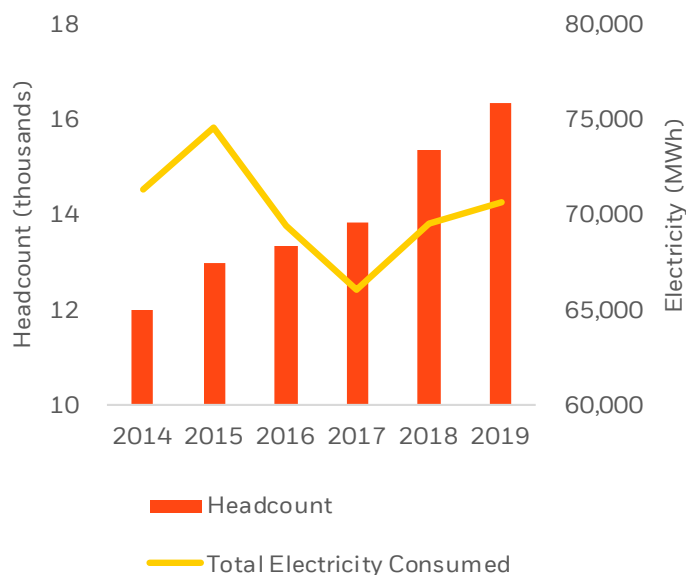
Data centers are integral to supporting our operations globally. We have worked to make our data centers among the most efficient in the industry by designing, building, and operating them to maximize efficient use of energy, water, and materials.<sup>50</sup>

## Paper

BlackRock set a 2020 paper reduction target of 25% in October 2017. As of year-end 2019, BlackRock has reduced paper use globally by 44%. We attribute this reduction to heightening of employee awareness, swipe technology, and standard double-sided print settings on all copiers.

### Exhibit 10: Headcount v. Electricity Consumption

For the year ended December 31, 2019



## Waste

BlackRock began tracking waste in 2017. We face challenges in local waste practices for some cities in which we operate that have limited or no waste diversion practices. Additionally, as primarily a tenant in multi-tenant buildings, we are reliant on data provided by landlords' waste haulers, which may be less rigorous.

Nonetheless, employees, through Green Team Network ("GTN") initiatives, are encouraged to use less and recycle more through training, signage, and office wide initiatives. As of year-end 2019, we have reported a 48% diversion rate of waste from landfills.

## Suppliers

For the year-ended 2019, BlackRock began an effort to measure Scope 3 Purchased Goods and Services emissions, which are reported in Exhibit 12. [BlackRock Supplier Code of Conduct & Ethics](#) states BlackRock's expectation that its suppliers comply with all applicable laws and regulations in relation to the protection of the environment and take active steps to continuously reduce their carbon footprint.

In addition, BlackRock's three cafeterias have committed to adopt the Fitwel Food and Beverage Standard. This includes increasing plant-based offerings, serving lean, high quality meats, and locally sourcing when possible.

Finally, BlackRock's Events Team has developed a Sustainable Events Playbook that includes prioritizing venues and suppliers that align with our sustainability standards.

## Green Team Network

The Green Team Network ("GTN") is BlackRock's community of conservation-minded employees who aim to increase the sustainability of our offices, our homes, and our communities. As employees, GTN members are critical to bringing about a more sustainable culture at BlackRock. As of September 30, 2020, 46 offices host GTN chapters with 2,300 employees participating. Examples of GTN initiatives undertaken in partnership with our Facilities team include efforts to reduce single-use plastic, reduce paper use and waste, planting trees, and encouraging biodiversity in local communities.

In 2020, in light of the remote work environment due to the COVID-19 pandemic, the GTN ran two employee engagement campaigns to encourage conservation at home. The "Do One Thing" campaign focused on six things employees could do to reduce their impact on the environment at home, including adjusting water heater settings, unplugging unused electronics, getting educated on environmental issues, and reducing meat consumption. Over 1,300 pledges were made to adopt one or all of the behaviors. The GTN also ran a "Plastic Not Fantastic" campaign suggesting eight ways employees could reduce their plastic use at home.

## Social Impact

BlackRock's Social Impact team partners with non-profits, corporations, and our employees to help more people find financial security and opportunity. The Social Impact team's employee engagement portfolio supports a number of programs that identify social entrepreneurs with disruptive and innovative ideas to address global social challenges. The accelerator programs have sub-portfolios of climate-focused entrepreneurs supported by BlackRock's grantee partners, including the [Echoing Green Climate Change Fellowship](#), and the Draper Richards Kaplan Environment & Climate Change Fellows. The Echoing Green Climate Change Fellowship has invested \$8.1 million in climate change solutions in over 41 countries, and includes 136 fellows and 105 organizations that help global communities mitigate and adapt to climate change. The Draper Richards Kaplan Environment & Climate Change Fellows portfolio is composed of 13 organizations, including [Clean Energy Trust](#), [Cloud to Street](#), [GreenWave](#), [OceanMind](#), and [BoxPower](#).<sup>51</sup>

In February 2020, BlackRock made a charitable contribution of its 20% stake in PennyMac Financial Services, Inc. to [the BlackRock Foundation](#), a newly established corporate foundation, and the BlackRock Charitable Fund, a donor-advised fund, which was established in 2013. The contribution will provide long-term funding for the firm's future philanthropic investments and partnerships focused on promoting sustainability and economic mobility and building a financial safety net for underserved and underemployed people.

# Public Policy & Partnerships

BlackRock believes that corporate citizenship requires active engagement in important policy and regulatory debates. As part of our responsibility to deliver value for our shareholders and clients, BlackRock advocates for public policies that we believe are in our shareholders' and clients' long-term best interests. We support the creation of regulatory regimes that increase financial market transparency, protect investors, and facilitate responsible growth of capital markets, while preserving consumer choice and properly balancing benefits versus implementation costs.

BlackRock's approach to public policy engagement is described in Public Policy Engagement & Political Activities, which sets forth BlackRock's approach to the Governance of Public Policy Engagement, Trade Associations, and Political Participation.

BlackRock's engagement on public policy issues is coordinated by the Global Public Policy Group ("GPPG"). BlackRock's Board Nominating and Governance Committee ("NGC") periodically reviews BlackRock's public policy and advocacy activities, including lobbying priorities, political contributions and memberships in trade associations. GPPG leadership periodically attends meetings of the Board's Risk Committee and NGC to keep these committees apprised of legislative and regulatory priorities as well as advocacy initiatives. In May 2020, the Global Head of Public Policy presented to the NGC on public policy priorities including how BlackRock is advocating for standardized frameworks around sustainable investment product naming and disclosure.

As it relates to climate and sustainability-related policy matters, BlackRock strives to engage constructively in the global dialogue in the following ways:

- Supporting the development of sustainable finance through thought leadership and industry partnerships;
- Encouraging issuer disclosure standards that support investors' abilities to evaluate sustainability- and climate-related risks and opportunities; and
- Advancing industry dialogue on sustainable investment product naming and disclosure to prevent "greenwashing".

BlackRock comments on public policy topics through, among other things: *ViewPoints*, comment letters, and consultation responses that are submitted to policy makers.

We believe in the value of open dialogue and transparency on these important issues. As such, our position papers and comment letters are publicly available on [www.blackrock.com/publicpolicy](http://www.blackrock.com/publicpolicy).

**Sustainable Finance.** We contribute to the policy dialogue by offering technical expertise and research as to how climate-related risks may affect capital markets and investments. For example, in 2020 BlackRock's Global Head of ESG Integration joined the Task Force on Scaling Voluntary Carbon Offset Markets, a private sector-led initiative working to build an effective, efficient, and functioning voluntary carbon offset market to help meet the goals of the Paris Climate Agreement.<sup>52</sup>

In addition, BlackRock contributed to a report on measuring portfolio alignment and assessing the position of companies and portfolios on the path to net zero.<sup>53</sup> Also in 2020, BlackRock contributed to the development of a report by the G30 Working Group on Climate Change and Finance, entitled "Mainstreaming the Transition to a Net Zero Economy." The report provides recommendations for policy makers with respect to effective policy actions needed to effectuate the energy transition in a just and orderly manner.<sup>54</sup>

In addition, BlackRock participates in the Climate Financial Risk Forum ("CFRF") co-chaired by UK FCA and the UK Prudential Regulatory Authority, a working group that seeks to develop and share best practices among financial regulators and industry participants to advance approaches related to the management of financial risks from climate change. In June 2020, the CFRF published a guide to climate-related financial risk management that BlackRock contributed to, which focused on climate-related disclosures, innovation, scenario analysis and risk management.<sup>55</sup>

In July 2020, BlackRock provided comments to the Department of Labor's proposed rule on "Financial Factors in Selecting Plan Investments" (the "DoL Proposal") highlighting our concern that the DoL Proposal could interfere with plan fiduciaries' abilities and willingness to consider financially material ESG factors. BlackRock provided recommendations that aimed at helping the Department of Labor improve the DoL Proposal, while mitigating the potential burdens the DoL Proposal would have placed on plan fiduciaries. We were pleased to see several of our suggestions incorporated into the final rule.

In 2019, BlackRock contributed to the Vatican's Dicastery for Promoting Integral Human Development and the University of Notre Dame's second dialogue on "The Energy Transition and Care for Our Common Home." BlackRock signed both resulting statements, highlighting our view that "a significant acceleration of the transition to a low-carbon future beyond current projections requires sustained, large-scale action and additional technological solutions to keep global warming below 2°C while advancing human and economic prosperity" and called for action on climate risk disclosure and carbon pricing.<sup>56</sup>

BlackRock also commits to supporting members of the One Planet Sovereign Wealth Funds in their implementation of the One Planet Sovereign Wealth Fund Framework, which calls for integrating climate-related risks and opportunities into investment management by sovereign wealth funds and the broader market. This supports our commitment to helping sovereign wealth fund clients realize the commitments they have made under this framework. In addition, BlackRock, together with the support of the Governments of France and Germany and three foundations, has launched the Climate Finance Partnership ("CFP"), which will seek to provide institutional investors access to emerging market climate infrastructure opportunities in a novel, risk-adjusted, manner.

Finally, BlackRock publishes research and thought leadership to help shape the dialogue around investment risks presented by climate change. For example, BlackRock published the results of a pilot study on the physical risks of climate change in "[Getting Physical](#)" in 2019 as discussed on page 26. In 2020, BlackRock published "[Troubled Waters: Financial Risks of Water Scarcity](#)," a paper that highlighted that water scarcity due to population growth, urbanization, and climate change may have wide ranging implications across asset classes, which investors are not fully pricing in. This comes on top of other growing physical climate risks such as exposure to flooding and extreme weather events.

#### **Corporate Sustainability Disclosures & TCFD Advocacy:**

Enabling investors to better identify, assess, measure, and monitor sustainability-related risks and opportunities is crucial to our role as stewards for our clients' capital. We believe company valuations can be significantly influenced by these risks. As such, better quality reporting and data would support more accurate asset pricing and enhance understanding of the drivers of risk and value in companies' business models as well as our ability to advocate for sound governance and business practices. For this reason, in January 2020, we asked the companies that we invest in on behalf of our clients to publish reports that align with the Sustainability Accounting Standards Board ("SASB") standards and the TCFD recommendations.

BlackRock's public policy efforts primarily focus on advocating for the SASB and TCFD frameworks in support of consistent reporting standards for corporate issuers. In 2020, BlackRock provided comments in support of several policy efforts to encourage TCFD reporting. For example, we responded to the UK Financial Conduct Authority ("FCA") proposal to apply the TCFD framework to UK publicly listed issuers.<sup>57</sup> We welcomed the subsequent announcement by the UK Government to introduce mandatory TCFD reporting by 2025. In our response to the FCA, we advocated for mandatory reporting on all publicly listed companies from 2021. We also submitted comments to the UK Department for Work and Pensions regarding proposed mandatory TCFD Reporting for large occupational pension schemes.<sup>58</sup>

Going forward, BlackRock will continue to advocate for TCFD and SASB-aligned reporting, in addition to supporting convergence of the private sector reporting frameworks and standards to establish a globally consistent approach to sustainability reporting under a common governance framework.<sup>59</sup> BlackRock believes the optimal outcome and the one most likely to succeed is the one proposed by the International Financial Reporting Standards ("IFRS") Foundation<sup>60</sup> that would establish a sustainability standards board working with the existing initiatives and building upon their efforts.

**Sustainable Product Standards & Disclosures:** Addressing the problem of 'greenwashing' is a key feature of many policy efforts in a number of jurisdictions. We are strongly supportive of efforts to provide end-investors with more clarity regarding investment products' sustainability characteristics and claims. This starts with promoting a framework that encourages asset managers to find a common language in how they name and describe sustainable investment products. The objective is to reduce investor confusion about what exactly a 'sustainable investment product' is and to enable end-investors and their advisors to easily find the products that meet their investment preferences and objectives.

In January 2020, BlackRock published a *ViewPoint*, entitled [Towards a Common Language for Sustainable Investing](#), which highlighted the importance of clear and consistent sustainability terminology. A key component of putting sustainability at the core of how BlackRock manages risk, constructs portfolios, designs products, and engages with companies, is achieving a common understanding of how to discuss, analyze and classify ESG products. This requires a standardized taxonomy across investment product naming conventions, corporate issuer disclosures, and sustainable economic activity.



We have advocated for clear and consistent naming conventions for ESG products across the industry, so that investors can make informed decisions when they invest in an investment product that is referred to as a sustainable investment product. BlackRock has also participated in Investment Company Institute (“ICI”)<sup>61</sup> and the Institute of International Finance (“IIF”)<sup>62</sup> efforts to encourage broader adoption of sustainable investment product naming standards. We recommend policy makers establish sustainable investment product naming standards with the objective of global consistency, as many products are offered in multiple jurisdictions.

Beyond clearer naming standards, combatting ‘greenwashing’ also entails consistent and decision-useful sustainability metrics and disclosures by investment products on an ongoing basis. This helps aid investment decision-making by end-investors, but importantly, helps substantiate whether or not investment products are living up to the claims that they make.

Sustainability-related information is of growing importance to a wide range of end-investors. Pages 39 and 40 provide an overview of the disclosures BlackRock is providing for its publicly offered investment funds. These disclosures are designed to help investors identify product characteristics and find the products that meet their investment preferences and needs.

**Electronic delivery (“E-delivery”) of investment documents:** BlackRock has long advocated for the electronic delivery of fund and retirement plan documents as the default mechanism for communication with investors. E-delivery is environmentally friendly, as it reduces the use of paper and related printing and mailing

resources. In addition, e-delivery provides cost savings for investors and makes it easier for individuals to receive information in real time on their computers or mobile devices.

In the US, the SEC has taken positive steps to facilitate e-delivery of mutual fund shareholder reports through the adoption of Rule 30e-3, which allows Registered Investment Companies to transmit shareholder reports electronically (subject to certain requirements). The ICI estimated that the adoption of Rule 30e-3 would save 1.87 million trees annually.<sup>63</sup> Rule 30e-3 is effective beginning January 2021. We have long advocated for e-delivery given its benefits to investors and the environment, and we have encouraged the SEC to allow e-delivery as the default transmission mechanism beyond what they accomplished with 30e-3. In November 2020, the SEC Asset Management Advisory Committee recommended that the SEC further expand e-delivery.<sup>64</sup>

In Europe, as new legislative initiatives have been brought in, we have sought to maximize the opportunities for digital dissemination. BlackRock produces approximately 50,000 Undertakings for the Collective Investment in Transferable Securities (“UCITS”) Key Investor Information Documents a year in multiple languages and we use our website as our primary delivery mechanism. We have also consistently advocated for key information disclosure documents, including UCITS, packaged retail investment, and insurance-based investment products and pan European personal pension products to be designed on a digitally friendly basis rather than on a paper basis.<sup>65</sup>

# Risk Management

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

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 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 material environmental (as well as social and governance) risks and opportunities for an industry or company just as they consider other potential economic issues related to their investments. Examples of fundamental climate change 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 is developing risk tools that monitor exposure to carbon intensive assets as a way to better understand potential transition risks.

BlackRock's risk management function, RQA, serves as a key part of the second line of defense in BlackRock's risk management framework. RQA partners with portfolio teams and business management to help them understand, monitor, manage, and report risks, including ESG-related risks. In addition to producing quantitative analysis to support BlackRock in managing its fiduciary and enterprise risks, RQA works with portfolio managers to help ensure that portfolio risks are consistent across mandates, reflect current investment themes within particular strategies, and are consistent with clients' reasonable expectations. RQA evaluates material ESG risks, including climate risk, during its regular reviews with portfolio managers to provide oversight of portfolio managers' consideration of these risks in their investment processes. This helps to ensure that such risks are understood, deliberate, diversified and scaled, and are consistent with client objectives.

BSI partners with RQA to review and monitor ESG risk exposure at the investment group level, providing rigor and consistency across our diverse investment platform. RQA and BSI work with investment leadership to create ESG risk

dashboards and standard reporting practices, leveraging the capabilities of Aladdin.

The third line of defense, BlackRock's Internal Audit function, operates as an assurance function. The mandate of Internal Audit is to objectively assess the adequacy and effectiveness of BlackRock's internal control environment in order 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 the Business Continuity Management ("BCM") and technology Disaster Recovery ("DR") programs designed to meet or exceed legal and regulatory obligations in the locations in which we operate.

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 our physical locations to create individual site risk models and plans for our offices and data centers that are then incorporated into our risk management framework and reported on a monthly basis to the firm's risk management committees. These risk models consider climate-related risks, including severe weather, wildfires, and flooding.

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

# Metrics & Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.

In January, BlackRock announced commitments to establish [Sustainability as BlackRock's New Standard for Investing](#) centered around three themes:

- 1) building sustainable, resilient, and transparent portfolios;
- 2) increasing access to sustainable investing; and
- 3) enhancing sustainability and transparency in investment stewardship.

We have made significant progress towards the goals we set out, including achieving our 100% ESG integration goal for active strategies. For more detail on our progress, see [2020 sustainability actions](#).

In addition, BlackRock utilizes three main categories of metrics, as follows:

- **Business Indicators.** Exhibit 11 provides business indicator metrics across sustainable investing, ESG integration, and investment stewardship.
- **Corporate GHG Emissions.** We report Scope 1, Scope 2, and Scope 3 GHG emissions, where possible. We obtain third-party verification for our Scopes 1 and 2 emissions, as well as for select Scope 3 categories: business travel, fuel-and energy-related activities ("FERA"), employee commuting related to employee shuttles in India, upstream leased assets, and waste GHG emissions data and collection process.<sup>1</sup> Exhibit 12 provides BlackRock's corporate GHG emissions metrics, in addition to select intensity and energy metrics.

With respect to Scope 3 (Investments), methodologies are still emerging and data gaps for certain asset classes make it difficult to measure this category comprehensively. Nonetheless, we recognize the importance of reporting this information and we are investing in the effort with a goal to report additional information on Scope 3 (Investments) in 2021.

- **Product-Level Carbon Footprint Metrics.** BlackRock manages thousands of portfolios, each with their own investment strategy, guidelines, and constraints. As an asset manager, one of the most important components of the transparency we provide is with respect to the investment products that we offer to our clients.

Transparency helps investors make informed decisions as to which investment products are most appropriate to address their financial needs. We want investors to be able to clearly see the sustainability characteristics of their investments, including the carbon footprint of the portfolios we manage on our clients' behalf.

As such, we make ESG metrics, including carbon intensity, publicly available for publicly-offered funds managed by BlackRock, including iShares ETFs and BlackRock mutual funds. As of October 2020, ESG metrics are publicly available for funds totaling \$2.6 trillion in AUM, including \$2.1 trillion in AUM for which weighted-average carbon intensity ("WACI") data are reported, representing 93% and 76%, respectively, of our AUM in publicly offered funds.<sup>2</sup>

For separate account clients, we make this data available directly to the client upon request. In addition to supporting our clients in considering climate and other sustainability-related risks to which a given fund may be subject, making this data available to our clients supports our clients' abilities to report GHG emissions data for their investments. On pages 39 and 40, we provide an example of the product-level disclosure provided to clients.

# Our 2020 sustainability actions

We believe in the power of transparency to hold ourselves and others accountable for continuous progress.

In January 2020, BlackRock [wrote to clients](#) outlining our conviction that sustainability risk – and climate risk in particular – is investment risk. We committed to making sustainability a key component of the way BlackRock manages risk, constructs portfolios, designs products, and engages with companies.

Here are a few highlights from this year.

Source: <sup>a</sup> As of September 30, 2020.

Source: <sup>b</sup> Data is January 1, 2020 to October 31, 2020. Global Use of SASB Standards. Available at: <https://www.sasb.org/global-use/>. Learn more about TCFD at: <https://www.fsb-tcfd.org/>

\*<https://www.blackrock.com/corporate/about-us/our-2020-sustainability-actions>

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## Integrating ESG

We delivered on our goal of having 100% of our approximately 5,600 active and advisory BlackRock strategies ESG integrated – covering more than US\$2.7 trillion in assets.<sup>a</sup>

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## Increasing access

Helping clients allocate \$39 billion<sup>a</sup> to sustainable investment strategies, which helped increase our sustainable AUM to \$152 billion.

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## New climate risk tools

Aladdin Climate launched, setting a new standard for assessing environmental risks across all asset classes in investment portfolios.

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## Improving ESG data

We added nearly 1,200 sustainability metrics to Aladdin and established data partnerships with Sustainalytics, Refinitiv, and Rhodium to help clients better understand ESG and physical climate risks.

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## Pioneering sustainability

BlackRock pioneered new sustainable strategies with the first dedicated ESG solution in Mexico and, in the US, the first index-based target-date ESG funds, and the first suite of single-ticker ESG asset allocation ETFs.

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## Intensifying engagement and transparency

Increased transparency with more than 50 Vote Bulletins on high-profile votes and saw a 288% increase in Sustainability Accounting Standards Board (SASB) reporters since our call for SASB and reporting aligned with the Task Force on Climate-related Disclosures (TCFD).<sup>b</sup>

[Read the full report\\*](#)

[Learn more about BlackRock's Corporate Sustainability](https://www.blackrock.com/corporate/sustainability)  
<http://www.blackrock.com/corporate/sustainability>

**Exhibit 11: Business Indicators**

<b>Business Indicators</b>	<b>2018</b>	<b>2019</b>	<b>2020 <sup>b</sup></b>	<b>% change 2018-2020</b>
Sustainable Investing AUM (\$ billions) <sup>a</sup>	\$52	\$107	\$152	192%
Flows into Sustainable Products (\$ billions)	-	\$34	\$39	-
ESG Screened AUM (\$ billions)	\$444	\$547	\$573	29%
ESG Integrated Active & Advisory Investment Portfolios (%)	-	-	100%	-
Investment Stewardship Team Size	36	45	50	39%
Total Investment Stewardship Engagements <sup>c</sup>	2,049	2,050	3,043	49%
Total Investment Stewardship Engagements on Environment-Related Issues (# of engagements) <sup>d</sup>	301	316	1,260	319%
Climate-Related Voting Action Taken (# companies) <sup>e</sup>	4	5	63	1475%

- a. Sustainable investment products include products with broad market ESG exposure ("Broad") or pursue a specific E, S, G, or Sustainable Development Goal ("SDG") issue ("Thematic") and impact investments that have an intent to contribute to measurable positive environmental, social, or SDG outcomes, alongside financial returns. Our definition of impact investments is in line with the International Finance Corporation's Operating Principles for Impact Management. Calculations are using exact figures, so percentage change calculations using the rounded figures above may not tie.
- b. Sustainable investing AUM is as of Sep. 30, 2020, ESG integration is as of November 30, 2020, and investment stewardship data is for the period between July 1, 2019 - November 30 2020.
- c. BlackRock counts only direct interaction as an engagement. We also write letters to raise companies' awareness of thematic issues on which we are focused or changes in policy, but this outreach is considered distinct from engagement as it is difficult to monitor the effectiveness of letter writing without direct interaction.
- d. In 2020 the BIS team intensified its focus and dialogue with companies on environmental topics (including climate risk), increasing by nearly four times the number of engagements BIS had on the topic in the prior year. Environmental topics include board oversight of climate risk management, adaptation strategies for the transition to a low-carbon economy, climate-related disclosure frameworks, environmental impact management, and operational sustainability (e.g., waste, water, energy use and efficiency, packaging, product life-cycle management, supply chain-related environmental impacts, and deforestation risks).
- e. Data in each column is as of the 12-month period ended June 30 in the year in question, except for 2020 in which data is between July 1, 2019 and November 30 2020. BIS took voting action against 63 companies for their failure to make sufficient progress regarding climate risk disclosure or management. BlackRock has been engaging with companies for several years on their progress on TCFD- and SASB-aligned reporting and long-term plans to contribute to the energy transition. Given that both the TCFD and SASB frameworks were finalized within the past three years and require an in-depth review of a company's business, a period of familiarization proved necessary. However, we believe the period of acclimation is over and expect companies to increasingly align their reporting and business practices with the recommendations of both frameworks.



**Exhibit 12: Corporate GHG Emissions**

(in metric tons of CO <sub>2</sub> e		2014	2015	2016	2017	2018	2019	% change <sup>a</sup>
Scope 1 and 2								
	Scope 1	5,756	4,758	4,281	5,050	4,805	5,589	(3%)
	Scope 2 Location-Based Approach	27,409	28,003	25,518	21,539	21,392	20,369	(26%)
	Scope 2 Market-Based Approach	27,409	22,976	15,432	5,404	4,750	0	(100%)
	Total Scope 1 and Scope 2 (location-based)	33,165	32,761	29,799	26,589	26,198	25,958	(22%)
	Total Scope 1 and Scope 2 (market-based)	33,165	27,734	19,713	10,454	9,555	5,589	(83%)
(in metric tons of CO <sub>2</sub> e)					2017	2018	2019	% change <sup>b</sup>
Upstream	1. Purchased Goods & Services <sup>c</sup>				-	-	373,032	-
	2. Capital Goods <sup>c</sup>				-	-	15,521	-
	3. Fuel- and Energy-Related Activities (location-based) <sup>d</sup>				5,809	8,100	7,865	35%
	4. Transportation & Distribution (T&D) <sup>e</sup>				-	-	-	-
	5. Waste Generated in Operations <sup>f</sup>				818	637	1,162	42%
	6. Business Travel <sup>g</sup>				39,238	45,384	39,116	(0.3%)
	7. Employee Commuting (employee shuttles in India) <sup>h</sup>				611	837	1,161	90%
	8. Leased Assets (location-based)				596	674	777	30%
Downstream	9. Transportation & Distribution				Not Relevant			
	10. Processing of Sold Products				Not Relevant			
	11. Use of Sold Products				Not Relevant			
	12. End-of-Life Treatment of Sold Products				Not Relevant			
	13. Leased Assets <sup>i</sup>				Not Relevant			
	14. Franchises				Not Relevant			
	15. Investments				Weighted-average carbon intensity reported at product level; Additional reporting on this category in 2021			
Electricity								
	Total Electricity Consumed (MWh)				66,097	69,540	70,605	7%
	Percent Renewable Energy				86%	89%	100%	-
Intensity Metrics								
	Total Scope 1 & Scope 2 GHG Emissions per \$1 million revenue				2.0	1.8	1.8	(10%)
	Facilities tCO <sub>2</sub> e per Employee <sup>j</sup>				1.9	1.7	1.6	(16%)
	Scope 3 Business Travel tCO <sub>2</sub> e per Employee <sup>j</sup>				2.8	2.9	2.3	(18%)

## Footnotes to Exhibit 12

- a) Percentage change versus 2014 baseline unless otherwise specified. Calculations are using exact figures, so percentage change calculations using the rounded figures above may not tie exactly.
- b) Percentage change versus 2017 baseline unless otherwise specified. Calculations are using exact figures, so percentage change calculations using the rounded figures above may not tie exactly.
- c) Estimated, unaudited figure.
- d) Fuel and energy-related activities that are not included in Scope 1 & 2
- e) Transportation and Distribution figures are included in Fuel- and Energy-Related Activities .
- f) This figure is estimated. To calculate this figure, BlackRock collected waste data from representative sites. Total emissions are then extrapolated based on the total headcount of the company.
- g) Business travel includes air travel, car rentals, car service, and rail.
- h) Employee commuting emissions are calculated from shuttles transporting employees from their home to work at our India offices. This is not a comprehensive measure of emissions from employee commuting in locations outside of India.
- i) Upstream leased assets emissions are for unmanned data centers and serviced office suites.
- j) Denominator includes full time employees and contingent workers

## TCFD Supplemental Guidance for Asset Managers

The TCFD Supplemental Guidance for Asset Managers states that asset managers should “provide the weighted average carbon intensity, where data are available or can be reasonably estimated, for each product or investment strategy.”<sup>3</sup>

In accordance with the TCFD recommendations, we provide transparent, publicly available data on sustainability characteristics – including exposure to controversial holdings and weighted-average carbon intensity (“WACI”) on iShares ETFs and BlackRock mutual funds. Exhibits 13A and 13B provide examples of the disclosure provided to investors.

Weighted-average carbon intensity (“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.

Starting in April 2020, we made ESG metrics publicly available for publicly-offered funds managed by BlackRock, including iShares ETFs and BlackRock mutual funds, representing a total of \$2.6 trillion in AUM, and approximately 93% of publicly-offered funds globally.<sup>4</sup> This disclosure includes portfolio WACI for \$2.1 trillion in AUM representing 76% of publicly-offered funds globally. For separate account clients, we make this data available directly to the client upon request, where possible.

### Exhibit 13A: Illustrative Example of Product-Level Sustainability Disclosures

Sustainability Characteristics			
Sustainability Characteristics can help investors integrate non-financial, sustainability considerations into their investment process. These metrics enable investors to evaluate funds based on their environmental, social, and governance (ESG) risks and opportunities. This analysis can provide insight into the effective management and long-term financial prospects of a fund.			
The metrics below have been provided for transparency and informational purposes only. The existence of an ESG rating is not indicative of how or whether ESG factors will be integrated into a fund. The metrics are based on MSCI ESG Fund Ratings and, unless otherwise stated in fund documentation and included within a fund’s investment objective, do not change a fund’s investment objective or constrain the fund’s investable universe, and there is no indication that an ESG or Impact focused investment strategy or exclusionary screens will be adopted by a fund. For more information regarding a fund’s investment strategy, please see the fund’s prospectus.			
Review the MSCI methodology behind Sustainability Characteristics, using links below.			
MSCI ESG Fund Rating (AAA-CCC) as of 01-Nov-20	A	MSCI ESG Quality Score (0-10) as of 01-Nov-20	6.70
MSCI ESG Quality Score - Peer Percentile as of 01-Nov-20	66.74	MSCI ESG % Coverage as of 01-Nov-20	99.46
Fund Lipper Global Classification as of 01-Nov-20	Equity US	MSCI Weighted Average Carbon Intensity (Tons CO2E/\$M SALES) as of 01-Nov-20	143.58
Funds in Peer Group as of 01-Nov-20	3,265		
All data is from MSCI ESG Fund Ratings as of 01-Nov-20, based on holdings as of 31-Aug-20. As such, the fund’s sustainable characteristics may differ from MSCI ESG Fund Ratings from time to time.			
To be included in MSCI ESG Fund Ratings, 65% of the fund’s gross weight must come from securities covered by MSCI ESG Research (certain cash positions and other asset types deemed not relevant for ESG analysis by MSCI are removed prior to calculating a fund’s gross weight; the absolute values of short positions are included but treated as uncovered), the fund’s holdings date must be less than one year old, and the fund must have at least ten securities. For newly launched funds, sustainability characteristics are typically available 6 months after launch.			

**Exhibit 13B: Illustrative Example of Product-Level Sustainability Disclosures (contd.)**

## Business Involvement

Business Involvement metrics can help investors gain a more comprehensive view of specific activities in which a fund may be exposed through its investments.

Business Involvement metrics are not indicative of a fund's investment objective, and, unless otherwise stated in fund documentation and included within a fund's investment objective, do not change a fund's investment objective or constrain the fund's investable universe, and there is no indication that an ESG or Impact focused investment strategy or exclusionary screens will be adopted by a fund. For more information regarding a fund's investment strategy, please see the fund's prospectus.

Review the MSCI methodology behind the Business Involvement metrics, using links [below](#).

MSCI - Controversial Weapons ⓘ as of 30-Nov-20	0.94%	MSCI - UN Global Compact Violators ⓘ as of 30-Nov-20	0.82%
MSCI - Nuclear Weapons ⓘ as of 30-Nov-20	0.72%	MSCI - Thermal Coal ⓘ as of 30-Nov-20	0.00%
MSCI - Civilian Firearms ⓘ as of 30-Nov-20	0.16%	MSCI - Oil Sands ⓘ as of 30-Nov-20	0.02%
MSCI - Tobacco ⓘ as of 30-Nov-20	0.64%		
<b>Business Involvement Coverage ⓘ</b> as of 30-Nov-20	<b>99.65%</b>	<b>Percentage of Fund not covered ⓘ</b> as of 30-Nov-20	<b>0.35%</b>

BlackRock business involvement exposures as shown above for Thermal Coal and Oil Sands are calculated and reported for companies that generate more than 5% of revenue from thermal coal or oil sands as defined by MSCI ESG Research. For the exposure to companies that generate any revenue from thermal coal or oil sands (at a 0% revenue threshold), as defined by MSCI ESG Research, it is as follows: Thermal Coal 0.14% and for Oil Sands 1.25%.

Business Involvement metrics are calculated by BlackRock using data from MSCI ESG Research which provides a profile of each company's specific business involvement. BlackRock leverages this data to provide a summed up view across holdings and translates it to a fund's market value exposure to the listed Business Involvement areas above.

Business Involvement metrics are designed only to identify companies where MSCI has conducted research and identified as having involvement in the covered activity. As a result, it is possible there is additional involvement in these covered activities where MSCI does not have coverage. This information should not be used to produce comprehensive lists of companies without involvement. Business Involvement metrics are only displayed if at least 1% of the fund's gross weight includes securities covered by MSCI ESG Research.

It is worth noting that, a large portion of the assets that BlackRock manages are held in index portfolios. These products provide numerous benefits to our clients by democratizing access to diversified and professionally managed portfolios for millions of investors around the world. Index funds, by their very nature, are meant to reflect the underlying markets in which they invest. As such, the

WACI of index funds reflect the carbon intensity of the underlying markets in which those funds invest. For illustrative purposes, Exhibit 14 provides examples of the WACI of several representative index portfolios, along with other details on sustainability screens and characteristics of the underlying index.

**Exhibit 14: Illustrative Examples of WACI for Representative Index Portfolios**

Index Portfolio Description	WACI (tCO <sub>2</sub> e/US \$ million sales)	Data Coverage
Developed Market Equities (ex. US/Canada) – Large/Mid Cap	133.52	98.7%
Developed Market Equities (ex. US/Canada) – Growth	62.11	98.8%
Developed Market Equities (ex. US/Canada) – Value	211.19	98.6%
Developed Market Equities (ex. US) – Dividend	495.77	97.4%
Emerging Markets Equities	265.93	98.0%
European Equities – All Cap	136.25	98.6%
Pacific Basin (ex Japan) Equities – Large Cap	231.43	99.1%
US Equities – Large Cap	148.95	99.5%
US Equities – Large/Mid Cap Growth	30.71	98.9%
US Equities – Momentum Factor	64.45	98.9%
US Equities – Value Factor	168.03	98.8%
US Equities – High Dividend	465.72	99.7%
US Equities – Quality Factor	118.72	99.6%

As of Sept. 30, 2020. For disclosures of WACI for additional funds managed by BlackRock, please visit [www.iShares.com](http://www.iShares.com). The WACI measure used for these portfolios is attributable to MSCI. iShares anticipates that the carbon emission numbers seen here will change over time. Updates will be reflected on [www.ishares.com](http://www.ishares.com).

# Appendix: Scenario Analysis

Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Over the past year, BlackRock's Chief Corporate Sustainability Officer convened a cross-functional working group comprised of members of relevant subject-matter experts across the firm (the "Working Group") to conduct enterprise-level climate scenario analysis. The exercise was conducted to assess climate-related risks and opportunities and the resilience of BlackRock's strategy, taking into consideration different climate-related scenarios.

The journey of both conceptualizing and modelling our climate scenario analysis was a challenging one – and will evolve as standards around data and scenarios emerge across the industry. Nonetheless, given the critical and urgent need to incorporate effective climate scenario analysis into companies' long-term strategic planning, including BlackRock's, we sought to establish a framework that we could build upon over time. We hope that by disclosing our framework, we can help inspire greater disclosure and industry dialogue around scenario analysis. The following sections discuss our approach and our process for the analysis.

## Background

To appropriately incorporate the potential effects of climate change into organizations' planning processes, the TCFD states that businesses "need to consider how climate-related risks and opportunities may evolve and their potential business implications under different conditions."<sup>1</sup> Larry Fink's 2020 Letter to CEO's underscored the importance of climate scenario analysis by asking the companies in which BlackRock invests on behalf of our clients to disclose their "plan for operating under a scenario where the Paris Agreement's goal of limiting global warming to less than two degrees is fully realized."<sup>2</sup>

Scenario analysis is a tool used to inform assessments of the resilience of an organization's business or investment strategy to disruptions and/or its ability to adapt to changes or uncertainties that might affect the organization's performance. In the case of climate change, climate-related scenario analysis allows an organization to develop insight into how climate-related physical and transition risks and

opportunities might impact the business over time.

While scenario analysis is a well-established method for BlackRock that is used in our strategic planning, the incorporation of climate-related scenarios represented a significant advancement, particularly as climate scenarios reflect a much longer time horizon than other types of scenarios typically utilized for financial planning. Importantly, the objective of climate scenario analysis is not to predict the future, but rather to hone our understanding of climate-related risks to which BlackRock may be exposed.

## Overview of Process

The Working Group took the following steps, detailed in each ensuing section:

- A. Risk identification:** Identified key climate-related risks to BlackRock
- B. Scenario Development:** Developed climate scenario, leveraging available scenarios (in particular the UN PRI Inevitable Policy Response) as a starting point. The emphasis in the first order was on 2°C or lower scenarios, in line with the TCFD recommendations.
- C. Scenario Implementation:**
  - Identified required data inputs and analytical specifications
  - Conducted internal workshops to discuss the implications of the scenario for our business and developed assumptions around data inputs not included in pre-specified scenarios
  - Updated analytical specifications based on internal workshops to produce final output
  - Discussed findings and implications for the resilience of BlackRock's business strategy
  - Identified next steps to evolve the analysis



## Risk Identification

The Working Group evaluated climate-related risks relevant to BlackRock's business referencing guidance provided by the TCFD.<sup>3</sup> Four key climate-related risks were identified, as shown in Exhibit 7. Importantly, as discussed on page 23 of this report, BlackRock's exposure to climate-related risk is primarily indirect, affecting potential future revenue and expenses, rather than our balance sheet. The Working Group determined that BlackRock's enterprise climate scenario analysis should focus on climate-related impacts to: 1) the valuation of assets under management ("AUM") and the associated management fees generated by that AUM, and 2) flows into and out of BlackRock product offerings due to changing client preferences or regulation.

## Scenario Development




While we recognize that both transition and physical risks to markets could affect BlackRock's future profitability, the Working Group decided to utilize a transition risk scenario as a starting point, as we determined that transition risks are more likely to have a significant impact on our business and would be more likely to affect BlackRock in the short- to medium-term.<sup>4</sup> Based on the conclusions from our risk identification process, the Working Group determined that the most relevant climate scenario would emerge from an event that had a significant impact on asset valuations and associated management fees as well as client flows into and out of BlackRock products and amongst different products managed by BlackRock due to asset class and investment strategy re-allocation.

The Working Group reviewed a series of available climate transition scenarios. The top scenarios considered by the Working Group were the International Energy Agency ("IEA") Sustainable Development Scenario ("SDS"), the Intergovernmental Panel on Climate Change ("IPCC") Representative Concentration Pathway 2.6 ("RCP 2.6"), and the UN Principles for Responsible Investing's ("PRI") Inevitable Policy Response ("IPR"). Key aspects of each scenario that were discussed are outlined in Figure A.1.

From the scenarios considered, we concluded that the most disruptive climate scenario would emerge from an event that had a significant impact on asset valuations and client flows. In that regard, the Working Group determined to pursue a scenario that modeled a market repricing due to a forceful public policy response in line with meeting a well below-2°C warming target, as defined by the Paris Agreement. With this context, the UN PRI IPR scenario appeared plausible, distinctive, and supportive of our analysis. In addition, the IPR focuses on decisive action from governments within the next five years to reach the goals of the Paris Agreement, which we determined was a relevant and important transition risk to consider for our business. Furthermore, the IPR was designed with an investor use-case in mind, providing specific equity and fixed income market shocks that could be applied efficiently to our analysis.

The IPR scenario's premise is that a forceful policy response to climate change in the near-term to meet the goals of the Paris Agreement is 'inevitable' and that these policy changes are not yet fully priced into markets.

**Figure A.1: Overview of Transition Risk Scenarios**

	1 SDS 	2 IPR 	3 RCP 2.6 
<b>Description</b>	<ul style="list-style-type: none"> <li>• Temperature: 1.7°-1.8°C (50% chance of achieving 1.65°C)</li> <li>• Focused on detailed energy mix projections to achieve a sub-2°C target</li> </ul>	<ul style="list-style-type: none"> <li>• Temperature: Below 2°C</li> <li>• Policy-based forecast considering changes in energy system, land use and societal behavior to achieve a sub-2°C target</li> </ul>	<ul style="list-style-type: none"> <li>• Temperature: Mean increase 2°C by 2050 and 2100</li> <li>• Granular climate model focused on emission concentration and probability to achieve sub-2°C target</li> </ul>
<b>Assessment</b>	<ul style="list-style-type: none"> <li>+ Currently most widely adopted by peers</li> <li>+ Granular energy data and annual refresh</li> <li>+ Designed to align with Paris and addresses climate UN SDGs</li> <li>- No modelling of land-use/ economy in integrated way</li> </ul>	<ul style="list-style-type: none"> <li>+ Comprehensive modelling (incl. land-use)</li> <li>~ Pathway reflects delayed policy response (vs. SDS/ RCP 2.6)</li> <li>- No projections for Fossil Fuel Scope 1 &amp; 2 identified</li> </ul>	<ul style="list-style-type: none"> <li>+ Widely used by climate scientific community</li> <li>- Limited energy data (e.g. no energy mix) requiring additional modelling for business use</li> <li>- Infrequent/ irregular updates</li> </ul>
<b>Selected by Working Group</b>			

The IPR asserts that these policy changes would cause deep structural changes across industries, including the financial sector. According to IPR, the risk to financial markets would be significant and manageable, but the impact will be unevenly distributed across sectors.

## Scenario Implementation

The Working Group evaluated climate-related risks relevant to BlackRock's business referencing guidance provided by the TCFD. Four key climate-related risks were identified, as shown in Exhibit 7. These risks were reviewed and approved by the Chief Corporate Sustainability Officer in consultation with relevant risk owners and the Risk & Quantitative Analysis team ("RQA"). Importantly, as discussed on page 23, BlackRock's exposure to climate-related risk is primarily indirect, affecting potential future revenue and expenses, rather than our balance sheet. The Working Group determined that BlackRock's enterprise climate scenario analysis should focus on climate-related impacts to: 1) the value of AUM and the associated asset management fees generated by that AUM, and 2) flows into and out of BlackRock product offerings due to changing client preferences or regulation.

The Working Group also identified several required data inputs:

- AUM breakdown. By asset class, investment style, and GICS sector.
- Market return assumptions. Based on BlackRock Investment Institute Capital Market Assumptions ("CMAs").<sup>5</sup>
- Management Fees. The AUM breakdown was mapped to portfolio management fee data. This established the management fee level and expected revenue for the analyzed asset class and sector-level exposures.
- Market Valuation Shocks. From IPR scenario documentation.<sup>6</sup>
- Client Flows. Developed based on assumptions derived from workshop discussions.

In addition, the Working Group conducted three internal workshops to refine and agree on the scope, scenario selection, and business implications and assumptions with a range of subject matter experts across the firm.

## Analytical Choices & Assumptions

One challenge that we had to address was the lack of any pre-specified scenarios that contemplated our clients' potential responses to a transition scenario. Given that we would expect our clients to respond to the scenario by, at the very least, reviewing their asset allocations and the market shock and/or changing their asset allocations to reflect a

regime shift in the market, it is reasonable to expect that such asset rebalancing would be reflected in client flows into and out of various investment products managed by BlackRock.

Recognizing that there are multiple unknowns with respect to how the policy response would play out and associated client reactions, the Working Group established a series of potential client responses ('Zero Net Flows', 'Optimistic', and 'Adverse') to illustrate a range of potential client responses and associated outcomes for BlackRock.

The **Zero Net Flows** outcome was established as a baseline used to help isolate which results are attributable to climate-related risks, as opposed to other dynamics that could affect our business. As such the Zero Net Flows outcome served as a point of comparison against the Optimistic and Adverse pathways; it assumes AUM growth is only due to market beta exposures of existing AUM, and no new net flows are attracted.

The Adverse and Optimistic outcomes were developed in order to assess BlackRock's ability to capitalize on climate-related opportunities under the 'Optimistic' outcome and BlackRock's business resilience to climate-related risks in the case of an 'Adverse' outcome.

The **Optimistic** outcome assumes the following occurs after the market shock in 2023:

- IPR policy changes are successfully implemented in a global and coordinated manner, and financial market valuations grow at a lower, but steady pace
- ESG products outperform and clients' preferences towards ESG products accelerate, causing inflows to sustainable iShares as clients re-allocate portfolios towards sustainable products
- BlackRock's active products successfully anticipate the policy shift due to effective ESG integration and the sophistication of BlackRock's *Aladdin* Climate analytics, which leads to outperformance of active strategies
- Public opinion on the need to act decisively to address climate change aligns, which positively affects BlackRock's reputation, recognizing that a portion of reputational risk BlackRock faces today results from divergent views across stakeholders and regulators on the topic of climate action
- There is increased demand for BlackRock's Alternatives products, particularly BlackRock's Global Renewable Power platform
- As a result, BlackRock grows AUM organically and preserves leadership position in industry

The **Adverse** outcome assumes the following occurs after the market shock in 2023:

- Policies are announced but fail to get implemented in line with expectations,<sup>7</sup> leading to policy fragmentation.
- BlackRock's range of sustainable products do not meet client needs or products underperform. Alternatively BlackRock's sustainable products do not align with certain regulators' definitions of sustainable products
- BlackRock experiences outflows and loses market share both in ESG and non-ESG products

## Results and conclusions

The results of the scenario analysis indicate that despite a lack of direct exposure to climate-related risks, a scenario similar to the IPR could materially impact the value of BlackRock's AUM and associated revenues, profit, and market share. As such, BlackRock may be vulnerable to climate-related transition risks if BlackRock is not strategically positioned to capitalize on rapid market shifts due to climate-related policy including fragmented policy implementation across jurisdictions.

Nonetheless, BlackRock's diversified platform of alpha-seeking active, index, and cash management strategies, across asset classes, positions BlackRock to serve clients even during times of significant market repricing and/or a major transition in the world's energy and economic systems. Further, BlackRock is likely well-positioned to capitalize on opportunities to increase AUM, revenues, and market share if the firm effectively anticipates changes in both markets and client preferences.

While we believe that BlackRock's business model would remain resilient and profitable, the analysis revealed a distinct divergence in business growth depending on how well BlackRock adapts its product offerings and investment capabilities to a well-below 2°C scenario. Failure to adjust the business model to the changing market and client preferences could lead to reduced market share and profitability; while successful business adaptation could lead to a growth of business and market share.

BlackRock has invested significant resources to build both the analytical capabilities and investment products to help our clients benefit from the policy shifts envisioned by the IPR, as well as to assess and anticipate any associated risks. The results of the analysis reinforce the importance of both

the continued investment in these capabilities including *Aladdin* Climate, ESG integration, investment stewardship, and the expansion of sustainable product offerings.

## Limitations of the analysis

The climate scenario analysis provided a structured way to evaluate climate-related risks and opportunities – both in a quantitative and qualitative manner, and it opened a wider discussion across the firm with respect to how climate transition risks could affect our business.

As with any scenario analysis, there are limiting factors worth highlighting. First, a comprehensive climate-related scenario analysis should assess the potential implications of both physical and transition risk. For the purposes of this year's TCFD report, we decided to focus on transition risk only. Additionally, the level of data granularity was another limitation: market shocks were used at the sector level, with no distinction made at the security level, so security-specific sensitivities were not considered.

Additionally, the analysis took place during the COVID-19 pandemic, informing and contributing to our discussions and thinking. In addition, the analysis was concluded prior to the US Presidential election. As the COVID-19 pandemic continues to unfold and the intentions of the US Presidential Administration on climate policy become clear, policy forecasts will also evolve to account for additional developments and potential long-term structural changes.

## Next Steps

Scenario analysis is a dynamic exercise, which will evolve over time with successive iterations, methodology enhancements, and lessons learned. As an ongoing process, several next steps were identified for 2021:

- Incorporate physical risk scenarios, in particular indirect impacts on valuations of clients' portfolios
- Expand on the set of assumptions and scenarios considered to review other potential future scenarios and their subsequent implications

# Endnotes

## Executive Summary (pages 4 to 8)

1. As of November 30, 2020. We define a portfolio to be ESG integrated if our portfolio managers can demonstrate that they have incorporated ESG insights, including climate risk, in one or more steps of their investment process. Additionally, the portfolio manager must conduct regular portfolio monitoring with RQA, as well as portfolio reviews with Chief Investment Officers. These reviews included discussion of the portfolio's exposure to material ESG risks, as well as exposure to sustainability-related business involvements, climate-related metrics, and other factors.
2. As of November 30, 2020
3. BlackRock defines sustainable investment solutions as those with an explicit sustainable objective alongside a financial one. This figure does not include portfolios that are ESG integrated. This figure is comprised of \$95.5 billion in broad ESG strategies, \$28.0 billion in thematic ESG strategies, \$8.7 billion in impact strategies, and \$19.3 billion in portfolios which adhere to BlackRock sustainable baseline screens as of September 30, 2020.
4. Data as of November 30, 2020
5. Reporting period is between July 1, 2019 and June 30, 2020, representing the Securities and Exchange Commission's ("SEC") 12-month reporting period for US mutual funds, including iShares® ETFs.
6. BlackRock Investment Stewardship (BIS). July 2020. Our approach to sustainability. Available at: <https://www.blackrock.com/corporate/literature/publication/our-commitment-to-sustainability-full-report.pdf>
7. The sectors included in the universe are: communication services, consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, real estate, and utilities
8. The global aspiration is reflective of aggregated efforts; companies in developed and emerging markets are not equally equipped to transition their business and reduce emissions at the same rate—those in developed markets with the largest market capitalization are better positioned to adapt their business models at an accelerated pace. Government policy and regional targets may be reflective of these realities.
9. See BlackRock Unveils New Offering to Power Investors' Transition to Net Zero Emissions. Available at: <https://ir.blackrock.com/news-and-events/press-releases/press-releases-details/2020/BlackRock-Unveils-New-Offering-to-Power-Investors-Transition-to-Net-Zero-Emissions/default.aspx>
10. This achievement includes Scope 1, Scope 2, and Scope 3 employee business travel, serviced offices, and co-located data center emissions. Serviced Offices are offices and co-located data centers for which landlords have full operational control.
11. In June 2020, we achieved our 100% renewable energy goal to match the same amount of renewable electricity as the electricity that our global operations (including data centers) consume annually through procuring renewable energy directly where possible, contracting directly for renewable energy wherever possible (approximately 50%), and through purchasing environmental attribute credits where we do not have operational control or renewable energy is not available.
12. BlackRock's support for this initiative is made via grants recommended to and paid by the BlackRock Charitable Trust, a donor-advised fund.
13. As of October 30, 2020
14. A portion of the funds for which we are making ESG metrics available do not have sufficient CO<sub>2</sub>e data coverage to support GHG emissions data reporting. We expect coverage to improve over time. For separate account clients, ESG characteristics of portfolios are reported directly to the client upon request.
15. See Mark Carney's keynote speech at the Green Horizon Summit. Available at: <https://custom.cvent.com/8644FD66069649369747A352DBAB07C3/files/c27f5fbc83447dcb47036c241791a1a.pdf>
16. The global aspiration is reflective of aggregated efforts; companies in developed and emerging markets are not equally equipped to transition their business and reduce emissions at the same rate—those in developed markets with the largest market capitalization are better positioned to adapt their business models at an accelerated pace. Government policy and regional targets may be reflective of these realities.
17. The BIS' 2021 Global Principles further embed sustainability into BlackRock's stewardship activities. Available at: <https://www.blackrock.com/corporate/about-us/investment-stewardship/our-commitment-to-stewardship>
18. BlackRock has achieved our renewable energy goal by increasing the efficiency of our operations and buying both renewable power and environmental attribute certificates where we do not have operational control to procure our own energy. See Operations for more information.
19. The inclusion of information contained in this disclosure should not be construed as a characterization regarding the materiality or financial impact of that information. Please also see our Annual Report on Form 10-K filed on February 28, 2020 ("2019 Annual Report and 10-K") and other publicly filed documents available at <https://ir.blackrock.com/>.

## Governance Section (pages 9 to 11)

1. See Our leadership for a list of members of the GEC. Available at: <https://www.blackrock.com/corporate/about-us/leadership>
2. See Sustainability as BlackRock's New Standard (January 14, 2020). Available at: <https://www.blackrock.com/corporate/investor-relations/blackrock-client-letter>

## Strategy Section (pages 12 to 32)

1. See progress against our sustainability commitments: Our 2020 Sustainability Actions (May 2020). Available at: <https://www.blackrock.com/corporate/literature/publication/our-2020-sustainability-actions.pdf>.
2. Serviced Offices are offices and co-located data centers for which landlords have full operational control.
3. In June 2020, we achieved our 100% renewable energy goal to match the same amount of renewable electricity as the electricity that our global operations (including data centers) consume annually through procuring renewable energy directly where possible and through purchasing environmental attribute certificates where we do not have operational control or renewable energy is not available. We contract directly for renewable energy wherever possible (approximately 50%) and where we do not have operational control to procure our own energy, we purchase environmental attribute certificates as a means of achieving our 100% renewable goal. BlackRock achieved carbon neutrality in our operations as of August 2020.
4. BlackRock's support for this initiative is made via grants recommended to and paid by the BlackRock Charitable Trust, a donor-advised fund.
5. See Morgan Stanley's "Decarbonization: The Race to Zero Emissions" (November 25, 2019). Available at: <https://www.morganstanley.com/ideas/investing-in-decarbonization>.
6. For more key findings, please see BlackRock's 2020 Global Sustainable Investing Survey. Available at: <https://www.blackrock.com/corporate/about-us/blackrock-sustainability-survey>.
7. Includes \$95.5 billion in broad ESG strategies, \$28.0 billion in thematic ESG strategies, \$8.7 billion in impact strategies, and \$19.3 billion in portfolios that adhere to BlackRock sustainable baseline screens as of September 30, 2020.
8. As of November 23, 2020
9. See "iShares New ESG Screened Suite Expands Line-up, Simplifies Sustainable ETF Options for Investors" (September 24, 2020). Available at: <https://www.ishares.com/us/literature/press-release/esgspscreenedsuite-pr-final-stamped.pdf>.
10. Screens are based on revenue or percentage of revenue thresholds for certain categories and categorical exclusions for others. Detailed disclosures regarding the specifications of business involvement screens are available on [www.iShares.com](http://www.iShares.com).
11. Total value for BlackRock Global Renewable Power as of November 30, 2020. Committed capital is still subject to drawdown.
12. BlackRock manages more than 270 global projects. Approximately 20 of which are through investments made by BlackRock's Global Energy & Power Infrastructure Fund team and Infrastructure debt team, which both sit on the BlackRock Real Assets platform.
13. Total number of wind and solar projects invested in by the Global Renewable Power team as of November 30, 2020
14. Calculated using World Energy Council indicators of the average household electricity consumption. The calculation is made based on household electricity consumption in the countries where our renewable projects are located, to ensure an accurate consideration of the relevant national, average consumption.
15. GHG emissions are calculated based on total renewable energy output and using IEA World Energy Outlook conversion factors. The appropriate conversion factors per country and/or state-level are used relative to where the projects are located. Water savings are calculated using World Energy Outlook conversion factors based on an alternate water use for combined cycle turbine production (i.e., water saved from transitional energy generation vs renewable energy generation) for like-for-like MWh generated
16. Data sourced from [IEA, Bloomberg New Energy Finance, New Energy Outlook 2019](https://about.bnef.com/new-energy-outlook-2019/). Refers to expected investment in renewables up to 2050. Available at: <https://about.bnef.com/new-energy-outlook-2019/>
17. See [2018 Green Bond Principals](https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf) (most recently updated, June 2018) Available at: <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-June-2018-270520.pdf>
18. See "Record Month Shoots Green Bonds Past Trillion-Dollar Mark" (October 5, 2020) Available at: <https://about.bnef.com/blog/record-month-shoots-green-bonds-past-trillion-dollar-mark/>.
19. For example, see the Institutional Investors Group on Climate Change Paris Aligned Investment Initiative Net Zero Investment Framework for Consultation. Available at: <https://www.iigcc.org/download/net-zero-investment-framework-consultation/?wpdmdl=3602&masterkey=5f270ef146677>
20. The Ellen MacArthur Foundation works to inspire a generation to re-think, re-design and build a positive future circular economy. Additional information available at <https://www.ellenmacarthurfoundation.org/>
21. See announcement from Business Wire "Wespath and BlackRock Collaborate to Launch New Low-Carbon Economy 'Transition Ready' Investment Strategy" (October 11, 2018). Available at: <https://www.businesswire.com/news/home/20181011005111/en/Wespath-and-BlackRock-Collaborate-to-Launch-New-Low-Carbon-Economy-%E2%80%9CTransition-Ready%E2%80%9D-Investment-Strategy>.
22. Investing in the Transition to a Low-Carbon Economy: Exploring the Link Between a Company's Transition Readiness and Financial Performance (January 15, 2019). Available at SSRN: <https://ssrn.com/abstract=3311544>
23. For more about this year's results, see BlackRock's PRI Report. Available at: <https://www.blackrock.com/corporate/sustainability/pri-report>
24. Financial Times, "[Jobs bonanza in stewardship and sustainable investing teams](https://www.ft.com/content/2714da14-c12d-46b2-8ecf-9aba3f665fdf)" (March 8, 2020). Available at: <https://www.ft.com/content/2714da14-c12d-46b2-8ecf-9aba3f665fdf>.
25. Engagement and voting are the two most frequently used instruments in BIS' stewardship toolkit.

26. The global aspiration is reflective of aggregated efforts; companies in developed and emerging markets are not equally equipped to transition their business and reduce emissions at the same rate—those in developed markets with the largest market capitalization are better positioned to adapt their business models at an accelerated pace. Government policy and regional targets may be reflective of these realities.
27. The BIS' 2021 Global Principles further embed sustainability into BlackRock's stewardship activities. (December 2020). Available at: <https://www.blackrock.com/corporate/about-us/investment-stewardship/our-commitment-to-stewardship>
28. The sectors included in the universe are: communication services, consumer discretionary, consumer staples, energy, financials, health care, industrials, information technology, materials, real estate, and utilities.
29. See BlackRock Investment Stewardship's perspective on corporate political activities. (December 2020). Available at: <https://www.blackrock.com/corporate/literature/publication/blk-commentary-perspective-on-corporate-political-activities.pdf>.
30. See Third TCFD Status Report (October 29, 2020). Available at: <https://mailchi.mp/aa44aa0e7dbb/third-tcf-status-report-shows-progress-highlights-need-for-greater-climate-related-disclosures-and-transparency?e=bee93da671>. See "SASB Published Translated Implementation Guidance for Companies" (November 19, 2020). Available at: <https://www.sasb.org/wp-content/uploads/2020/11/Translations-Media-Release-Final-Web.pdf>
31. Full account of BlackRock Stewardship and voting history is available at <https://www.blackrock.com/corporate/about-us/investment-stewardship#engagement-and-voting-history>.
32. Please see [www.blackrock.com/stewardship](http://www.blackrock.com/stewardship) for additional commentaries.
33. See "BlackRock partners with Rhodium on climate analytics" for more detail. Available at: <https://www.blackrock.com/us/individual/about-us/blackrock-rhodium-partner-on-climate-analytics>.
34. See "BlackRock Unveils New Offering to Power Investors' Transition to Net Zero Emissions" (December 1, 2020). Available at: <https://www.blackrock.com/corporate/newsroom/press-releases/article/corporate-one/press-releases/blackrock-unveils-new-offering>
35. As of December 2019, BlackRock owned an 84,500 square foot office building in Wilmington (Delaware) and a 43,000 square foot data center in Amherst (New York). However, BlackRock otherwise primarily leases office space, including in New York City (New York), and throughout the world, including Atlanta (Georgia), Belgrade (Serbia), Boston (Massachusetts), Budapest (Hungary), Edinburgh (UK), Mumbai (India), Gurgaon (India), Hong Kong, London (UK), Melbourne (Australia), Mexico City (Mexico), Munich (Germany), Princeton (New Jersey), San Francisco (California), Seattle (Washington), Frankfurt (Germany), Santa Monica (California), Singapore (Singapore), Sydney (Australia), Taipei (Taiwan) and Tokyo (Japan).
36. The inclusion of climate-related risks in Exhibit 7 should not be construed as a characterization regarding the materiality or financial impact of these risks. For a discussion of risks that BlackRock has determined could be material, please see Item 1A. Risk Factors in BlackRock, Inc.'s Annual Report on Form 10-K, as well as its subsequent Form 10-Q filings.
37. As of December 31, 2019 BlackRock, has net economic investment exposure of approximately \$2.7 billion in its investments (see "Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations Investments" of BlackRock's 10-K) which primarily resulted from co-investments and seed investments in its sponsored investment funds.
38. See Recommendations of the Task Force on Climate-related Financial Disclosures, page 25 (June 2017). Available at: <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf>
39. BlackRock's Enterprise Resilience Team separately conducts assessments of our physical locations to create individual site risk models and plans for our offices and data centers. These risk models consider physical climate risks, including severe weather, wildfires, and flooding. BlackRock uses predictive weather modeling to assess risks from natural disasters across multiple phases, including site selection, facility design processes, and routine facility management operations.
40. Other scenarios considered were the International Energy Agency ("IEA") Sustainable Development Scenario ("SDS") and the Intergovernmental Panel on Climate Change ("IPCC") Representative Concentration Pathway ("RCP") 2.6 – Decisive Action. See the Appendix for more detail.
41. See UN PRI, Vivid Economics and Energy Transition Advisors, [IPR Forecast Policy Scenarios Full Report](https://www.unpri.org/download?ac=9835), (December 2019) Available at: <https://www.unpri.org/download?ac=9835>
42. In November 2020, the IPR released a paper entitled, "[The Inevitable Policy Response Under Biden's Climate Plan – The Stage is Set](https://www.unpri.org/download?ac=12103)", which details potential climate policy implications under the Biden Administration and potential implications for the IPR. The paper also notes that IPR is reviewing its policy forecasts and will make the results available in the first quarter of 2021. Available at: <https://www.unpri.org/download?ac=12103>
43. See Task Force on Climate-related Financial Disclosures, [2020 Status Report](https://www.fsb.org/2020/10/2020-status-report-task-force-on-climate-related-financial-disclosures/) (October 29, 2020). Available at: <https://www.fsb.org/2020/10/2020-status-report-task-force-on-climate-related-financial-disclosures/>.
44. RCPs are representative concentration pathways commonly used as scenarios in climate modeling, as defined by the IPCC. "No climate action" (known as RCP 8.5) assumes ongoing fossil fuel use, with atmospheric CO<sub>2</sub> concentrations reaching 940 ppm by 2100. In "some action" (RCP 4.5), CO<sub>2</sub> concentrations stabilize at around 550 ppm. Decisive action (RCP 2.6) sees aggressive policy action resulting in negative net emissions by late in the century, with CO<sub>2</sub> concentration of 384 ppm by 2100. See "[Getting Physical](#)" (page 7) for more information.
45. Serviced Offices are offices and co-located data centers for which landlords have full operational control.
46. Environmental attribute certificates ("EACs"), also known as renewable energy certificates ("RECs") in the US, are tradeable instruments that represent the legal rights to the environmental attributes of one megawatt-hour ("MWh") of renewable electricity generation. EACs and RECs are issued when one MWh of electricity is generated and delivered to the electricity grid from a renewable energy resource. Currently, all green power supply options involve the generation and retirement of EACs or RECs.
47. BlackRock's support for this initiative is made via grants recommended to and paid by the BlackRock Charitable Trust, a donor-advised fund.
48. BlackRock, [Sustaining BlackRock through COVID-19](https://www.blackrock.com/co/literature/publication/sustaining-blk-through-covid-19.pdf) (May 27, 2020). Available at: <https://www.blackrock.com/co/literature/publication/sustaining-blk-through-covid-19.pdf>.
49. Electricity consumption, square footage, and headcount figures are as of December 31, 2019.
50. Our data centers consume 75% less energy than the typical enterprise data center does for cooling and electrical support. Our enterprise data centers operate at a Power Usage Effectiveness ("PUE") of 1.1 and 1.2; the financial services industry average data center PUE is 1.8.



51. Echoing Green's approach and portfolio statics are available at <https://echoinggreen.org/issues/climate-change/>. Draper Richards Kaplan Climate Change Fellows' organizations are available by filtering for "Environment & Climate Change" at <https://www.drkfoundation.org/portfolio/>.
52. See Press Release from the IIF, "Private Sector Voluntary Carbon Markets Taskforce Established to Help Meet Climate Goals" (September 2, 2020). Available at: <https://www.iif.com/tsvcm/Main-Page/Publications/ID/4061/Private-Sector-Voluntary-Carbon-Markets-Taskforce-Established-to-Help-Meet-Climate-Goals>.
53. See Measuring Portfolio Alignment: Assessing the position of companies and portfolios on the path to Net Zero (November 9, 2020) Available at: <https://www.tcfdfhub.org/wp-content/uploads/2020/10/PAT-Report-20201109-Final.pdf>.
54. See G30 Working Group on Climate Change and Finance, "Mainstreaming the Transition to a Net Zero Economy." (October 2020). Available at: [https://group30.org/images/uploads/publications/G30\\_Mainstreaming\\_the\\_Transition\\_to\\_a\\_Net-Zero\\_Economy\\_2.pdf](https://group30.org/images/uploads/publications/G30_Mainstreaming_the_Transition_to_a_Net-Zero_Economy_2.pdf).
55. See the CRRF guide to climate-related financial risk management (June 29, 2020). Available at: <https://www.fca.org.uk/transparency/climate-financial-risk-forum>.
56. See Press Release from Vatican's Dicastery for Promoting Integral Human Development and the University of Notre Dame (June 13-14, 2019). Available at: <http://www.humandevlopment.va/content/dam/sviluppo/mano/comunicati-stampa/Oil%20&%20Gas%20Press%20Release%2014-06-2019.pdf>.
57. See BlackRock Letter to FCA, "Proposals to enhance climate-related disclosures by listed issuers and clarifications of existing disclosure obligations" (October 5, 2020). Available at <https://www.blackrock.com/corporate/literature/publication/fca-proposals-to-enhance-climate-related-disclosures-by-listed-issuers-and-clarifications-of-existing-disclosure-obligations-100520.pdf>.
58. See BlackRock's Response to DWP Consultation, "Taking action on climate risk: improving governance and reporting by occupational pension schemes" (October 8, 2020). Available at: <https://www.blackrock.com/corporate/literature/publication/dwp-consultation-on-taking-action-on-climate-risk-improving-governance-and-reporting-by-occupational-pension-schemes-100820.pdf>.
59. See "Sustainability Reporting: Convergence to Accelerate Progress" and BlackRock Investment Stewardship Q3 2020 Report for more information.
60. See IFRS Consultation paper on Sustainability reporting (September 2020). Available at: <https://cdn.ifrs.org/-/media/project/sustainability-reporting/consultation-paper-on-sustainability-reporting.pdf>. See here for more information on IFRS Sustainability Reporting project. Available at: <https://www.ifrs.org/projects/work-plan/sustainability-reporting/#current-stage>
61. See ICI, Funds' Use of ESG integration and Sustainable Investing Strategies: An Introduction (July 2020). Available at: [https://www.ici.org/pdf/20\\_ppr\\_esg\\_integration.pdf](https://www.ici.org/pdf/20_ppr_esg_integration.pdf)
62. See IIF, Sustainable Finance Working Group Report, The Case for Simplifying Sustainable Investment Terminology (October 2019). Available at: <https://www.iif.com/Portals/0/Files/content/IIF%20SFWG%20-%20Growing%20Sustainable%20Finance.pdf>.
63. Investment Company Institute, Letter to SEC, Proposed Rule 30e-3's Vital Importance to Fund Shareholders (Jul. 8, 2016), available at <https://www.sec.gov/comments/s7-08-15/s70815-610.pdf> at 4
64. U.S. Securities and Exchange Commission, Asset Management Advisory Committee Meeting Transcript (November 5, 2020). Available at: <https://www.sec.gov/files/amac-110520-transcript.pdf>
65. See "Digital Investment Advice: Robo Advisors Come of Age" (September 2016). Available at: [www.blackrock.com/corporate/literature/whitepaper/viewpoint-digital-investment-advice-september-2016.pdf](https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-digital-investment-advice-september-2016.pdf).

## Metrics & Targets Section (pages 34 to 41)

1. Please see [LQRA Independent Assurance Statement Relating to BlackRock, Inc. GHG Inventory](https://www.blackrock.com/corporate/literature/continuous-disclosure-and-important-information/lqra-assurancestatement-2019-blackrockinc.pdf). Available at: <https://www.blackrock.com/corporate/literature/continuous-disclosure-and-important-information/lqra-assurancestatement-2019-blackrockinc.pdf>.
2. A portion of the funds for which we are making ESG metrics available do not have sufficient CO<sub>2</sub>e data coverage to support GHG emissions data reporting. We expect coverage to improve over time.
3. See "Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures". Available at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/12/FINAL-TCFD-Annex-Amended-121517.pdf>. In addition, we note that the TCFD is currently consulting on additional financial sector metrics, see [https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD\\_Consultation-Forward-Looking-Financial-Sector-Metrics.pdf](https://assets.bbhub.io/company/sites/60/2020/09/2020-TCFD_Consultation-Forward-Looking-Financial-Sector-Metrics.pdf).
4. A portion of the funds for which we are making ESG metrics available do not have sufficient CO<sub>2</sub>e data coverage to support GHG emissions data reporting. We expect coverage to improve over time.

## Appendix: Scenario Analysis (pages 42 to 45)

1. See page 25 in Recommendations of the Task Force on Climate-related Financial Disclosures. Available at: <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf>.
2. Larry Fink, "A Fundamental Reshaping of Finance." January 2020. Available at: <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter>.
3. See Recommendations of the Task Force on Climate-related Financial Disclosures. Available at: <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf>.
4. In addition, we note that BlackRock's Enterprise Resilience Team separately conducts assessments of our physical locations to create individual site risk models and plans for our offices and data centers. These risk models consider physical climate risks, including severe weather, wildfires, and flooding. BlackRock uses predictive weather modeling to assess risks from natural disasters across multiple phases, including site selection, facility design processes, and routine facility management operations.
5. The expected market rates of returns were aligned with firm's CMA's, which are published by the BlackRock Investment Institute ("BII") every quarter (March 2020 CMA's were used for this analysis). Details available at: <https://www.blackrock.com/institutions/en-us/insights/charts/capital-market-assumptions>.
6. The UN PRI IPR market shock assumptions were used to quantify the impact.
7. This could be due to diverging political agendas/priorities, pushback from impacted industries, civil unrest, or another world-wide issue taking priority

# Additional Resources

For further information on our sustainability efforts, please see:

## **2020 Sustainability Commitments & Progress**

- [BlackRock's 2020 Sustainability Actions](#)
- [Open Letter to Clients, Sustainability as BlackRock's New Standard for Investing](#)

## **Investment Stewardship**

- [2021 Stewardship Expectations](#)
- [BlackRock Investment Stewardship 2020 Annual Report](#)
- [BlackRock Investment Stewardship Sustainability Report](#)

## **ESG Integration**

- [BlackRock's approach to integrating sustainability-related factors into portfolio management](#)
- [2020 PRI Report](#)
- [ESG Integration Statement](#)

## **BlackRock Investment Institute Research**

- [Troubled Waters: Financial Risks of Water Scarcity](#)
- [Getting Physical](#)
- [Sustainability: the bond that endures](#)
- [Sustainability: the future of investing](#)

## **Corporate Sustainability**

- [Where We Stand: On the journey to prosperity for more and more people](#)
- [2019 BlackRock Annual Report](#)
- [2019 SASB Disclosure](#)

# 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.

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](http://www.sec.gov) and on BlackRock's website at [www.blackrock.com](http://www.blackrock.com).

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 2020 and BlackRock reserves the right to update its measurement techniques and methodologies in the future.

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