NEUBERGER BERMAN

Climate-related Corporate Strategy

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Founded in 1939, Neuberger Berman is a private, 100% independent, employee-owned investment manager. From offices in 34 cities worldwide, the firm manages a range of strategies—including equity, fixed income, quantitative and multi-asset class, private equity and hedge funds—on behalf of institutions, advisors and individual investors globally. With more than 500 investment professionals and over 2,000 employees in total, Neuberger Berman has built a diverse team of individuals united in their commitment to delivering compelling investment results for our clients over the long term. Our culture has afforded us enviable retention rates among our senior investment staff and has earned us a citation from *Pensions & Investments* as a Best Place to Work in Money Management for six consecutive years. We have also been awarded the highest score, A+, in the most recent UN-supported Principles for Responsible Investment assessment report for our overarching approach to ESG strategy and governance.*

*See back cover for disclosure.

Summary:

- Our climate-related corporate strategy covers investment risk and opportunity, as well as the operational resilience of our business
- We seek to protect our clients' assets from material climate-related risks and to identify opportunities as appropriate on behalf of our clients
- We plan to continue to innovate and seek to improve our investment approach, particularly through the use of scenario analysis

"...As an asset manager with a long-term perspective, we believe that it is important to our clients to assess the potential implications of climate change for the companies in which we invest...."

– GEORGE WALKER
Chairman and Chief Executive Officer

TCFD | TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Neuberger Berman is a formal supporter of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) because we believe that climate change is a material driver of investment risk and return across industries and asset classes.

I. INTRODUCTION

As a firm, Neuberger Berman believes that material environmental, social and governance (ESG) characteristics are an important driver of long-term investment returns from both an opportunity and a risk mitigation perspective. We also understand that for many of our clients the social and environmental impact of their portfolio is an important consideration in conjunction with investment performance.

We are committed to understanding our climate-related risks and opportunities, and managing risks that are material to our business.

Chairman and Chief Executive Officer (CEO) George Walker stated: "Climate change is real and will impact risk and return across industries and asset classes. As an asset manager with a long-term perspective, we believe that it is important to our clients to assess the potential implications of climate change for the companies in which we invest. We will continue to engage with management teams and clients on this important topic."

This document describes Neuberger Berman's climate-related corporate strategy in line with voluntary disclosure recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). Neuberger Berman is committed to integrating climate-related factors into our business and investment risk assessments. We plan to continue to align our monitoring of material climate-related risks with the recommendations outlined by the TCFD.

This climate-related corporate strategy will be reviewed annually and amended as needed.

II. GOVERNANCE

1. Oversight

Neuberger Berman's Board of Directors (the "Board") oversees climate-related risks as a subset of all enterprise-wide risks. The Board reviews climate-related enterprise risk and the firm's approach to climate-related risks and opportunities at least once a year. The Board's oversight supports the firm's long-term objectives and influences firm behavior to consider potential effects of climate change.

2. Senior Management

Senior management is responsible for overseeing the firm's operations, risk department and investment professionals, with climate-related risks and opportunities as a subset of overall management of the enterprise. The CEO is ultimately responsible for updating the Board on material updates and relevant climate-related risks and opportunities, and is supported in this by the Head of ESG Investing, Chief Risk Officer, Chief Investment Officers and Chief Operating Officer.

The Head of ESG Investing works with the CIOs and the CRO to ensure appropriate climate expertise and analytical capabilities are in place to support portfolio managers and research analysts in understanding the potential implications of climate change for security analysis and portfolio construction.

The COO and CRO play an especially active role in managing the firm's business operations and resiliency to climate-related risks. This includes improvements to the firm's operational efficiencies and carbon footprint or adaptation and mitigation actions with respect to both transition and physical risk.

3. Portfolio Managers and Investment Teams

We believe ESG analysis should be based on materiality and customized by asset class and investment style by systematically modeling climate-related risk and opportunity. This approach enables each portfolio manager to integrate climate-related risk analysis into her/his respective investment process in a manner they deem appropriate for investment decision-making. We believe that climate change is a risk and opportunity for all strategies, but the degree and mechanism by which it may be material will vary between asset classes, individual strategies and investment time horizons. Therefore, depending on the holding period, the short-, medium- and long-term risks will be considered accordingly.

As part of its broader oversight of the firm's ESG Policy, the ESG Committee is responsible for providing overall oversight of the integration of climate-related risks and opportunities by portfolio managers. The ESG Investing team is responsible for working with portfolio managers on the implementation of the ESG Policy and the integration of climate-related risks and opportunities.

III. STRATEGY

Our climate-related corporate strategy is based on three core pillars:

1. **Climate-related Risk Management:** Integrating climate-related risks into our overall risk management framework across investments and business operations
2. **Climate-related Opportunities:** Identifying attractive investment opportunities related to climate change and innovating new investment solutions for our clients
3. **Communicating Metrics and Targets:** Communicating to clients and stakeholders about climate-related risks and opportunity, including monitoring and reporting relevant metrics and targets

1. Climate-related Risk Management

We can segment climate-related risks into two categories:

- **Transition Risk:** The global transition to a low-carbon economy will cause policy, legal, technology and market shifts as the world addresses the mitigation and adaptation requirements related to climate change over the short, medium and long term. We have identified four types of risks that could potentially affect our business:
  – Investment value chain
  – Financial impact due to policy risks
  – Financial impact due to legal risks
  – Reputational risks
- **Physical Risk:** Physical risks resulting from climate change will be both event-driven (acute) and longer-term shifts (chronic) in climate patterns. These risks may have direct financial implications, such as through weather-related damage to our assets, as well as indirect impacts such as through disruption to our operations via our supply chain.

Transition and physical risk may affect both (a) our **investment portfolios** and (b) our **business operations**.

a) Investment portfolios

i. *Scenario Analysis:* Neuberger Berman has implemented top-down scenario analysis for modelling transition and physical risks at the company level in line with the recommendations of the TCFD. Multiple scenarios estimate the impact of warming average temperatures at levels of less than 1.5°C and less than 2°C, for example. This scenario analysis currently focuses on our listed public equity and corporate-issuer fixed income holdings in the firm's U.S. mutual funds and international UCITS range. The portfolio analytics output helps us understand the Climate Value-at-Risk for the portfolio. Over time, we will seek to expand this analysis to holdings in other client portfolios.

Scenario analysis considers both transition and physical risks. Different securities and companies will have varying levels of exposure to physical risk depending on the nature of their businesses, real asset holdings and locations of key assets. Additionally, the analysis considers potential regulatory costs, as well as technology opportunities related to low-carbon technology solutions for companies that need to comply with GHG reduction requirements.

The conclusions drawn from this analysis can be used by portfolio managers to more accurately price securities in their investment selection process. Additionally, portfolio managers can use this information in the construction of more resilient portfolios that can help protect client value over the long term.

ii. *Engagement Efforts:* We use engagement as a tool to mitigate exposure to transition and physical risks by encouraging companies to evaluate and make changes where necessary. Examples include:

- Between January 1, 2018 and November 30, 2018, our equity teams undertook 124 ESG engagements focused on environmental risks and opportunities.
- Between April 1, 2017 and September 30, 2018, our developed market corporate credit teams undertook 107 ESG engagements related to environmental issues, of which half were specific to climate change.
- Our proxy voting guidelines generally support shareholder proposals on material climate issues and we supported 100% of material climate-related shareholder proposals in 2017.
- Our Sustainable Equity team engaged with all of its portfolio companies on implementing science-based targets in 2018.
- We are a lead investor in the Climate Action 100+, a five-year initiative coordinated by the UN-backed Principles for Responsible Investment and other groups.
- We are a founding signatory to the Global Investor Statement on Climate Change, which urges governments to step up their ambition to achieve the goals of the Paris Agreement, support investment in the low-carbon transition and improve climate-related financial disclosures.

b) Business operations

i. *Transition Risks:* Within our business operations, Neuberger Berman recognizes that transitioning to a low-carbon economy presents both opportunities and challenges. As the implicit price on carbon increases, we may face additional costs. There may also be disruptions to the business models of our suppliers as the global economy transitions away from fossil fuels. Both our clients and our employees expect Neuberger Berman to be prepared for these scenarios, and we have already begun taking the following steps to reduce our own operational footprint:

- Neuberger Berman is committed to voluntarily gathering and disclosing our operational energy statistics on an annual basis, and has created the associated processes to continually report and analyze our own operational impact to inform decision-making and ultimately reduce our own carbon footprint.
- Neuberger Berman anticipates regulation and policy changes by proactively preparing ourselves to meet such changes before being subjected to any potential consequences.
- We have invested in technology to make our data centers far more efficient. These investments have resulted in a reduction of energy use from 275 kilowatts (kw) in 2009 to 100 kw in 2018.

- In an effort to reduce Neuberger Berman's travel-related carbon footprint, we closely monitor the number of miles flown and have committed to offset 100% of our estimated greenhouse gas emissions from global travel. The offsets we purchase support carbon reduction projects and ultimately contribute to mitigating climate change. We have also added video technology in all conference room spaces to encourage collaboration while limiting the need for travel.
- Neuberger Berman leases all office space globally, which in many cases limits the amount of control we have in reducing our carbon footprint. However, in anticipation of a low-carbon economy, when possible we select buildings with high energy-efficiency standards and consider the lifecycle benefits of retrofitted buildings versus new build. Neuberger Berman has also recently completed several energy-saving initiatives:

  – Exterior
    - 60% of our employee population is located in New York, our firm headquarters. In 2016, we completed the move of our headquarters to a LEED Silver-certified building and selected a building management company focused on sustainability.
    - In 2016, the building management company set goals to reduce landlord-controlled carbon emissions by 40% by 2026, below a 2009-year base. All of their New York buildings, including ours, are enrolled in the NYC Carbon Challenge for Commercial Landlords and Tenants.

  – Interior
    - Within the new headquarters space, Neuberger Berman has achieved 75% of the WELL Certification through the International WELL Building Institute, a public benefit corporation whose mission is to improve human health and well-being through the built environment. WELL is third-party certified by Green Business Certification Inc. (GBCI), which administers the LEED certification program and the LEED professional credentialing program.
    - To lessen the use of plastic water bottles, we installed water refill stations on all floors of our New York office.
    - All food scraps from our kitchen in the new headquarters are locally composted.
    - In an effort to reduce our electric output/footprint, we are using light-harvesting techniques as well as high-efficiency LED lighting, and have installed automatic lighting controls throughout the New York office.
    - The Chicago office will be renovated in 2019 to update the interior to WELL standards with the expectation that this will also reduce the operational impact.

ii. *Physical Risks*

- We actively seek to identify and monitor our potential exposures to climate-related physical risks, and are aware that the firm's facilities, data centers and key locations may be at risk. Both acute and chronic physical risks are evaluated for the firm's physical presence. Acute risk is event-driven, including increased severity of extreme weather events. Chronic risk is associated with longer-term shifts in climate patterns (e.g., sustained higher temperatures) that may cause sea-level rise or heat waves. Severe weather-related outcomes stemming from climate change are of importance for Neuberger Berman's operations. For instance, sea-level rise could expose the firm's headquarters and stakeholders to flooding risks, having the potential to affect our operations in the long term.
- In addition to our headquarters in New York, Neuberger Berman has regional headquarters in Hong Kong, London and Tokyo, as well as global offices in more than 30 cities. We have assessed the acute physical risk associated with our office locations and will continue to monitor in case mitigation or adaptation measures are necessary.
- Our Business Continuity management team has developed a plan to respond to significant business disruptions that render any Neuberger Berman location inaccessible. Since the timing and impact of disasters and disruptions are unpredictable, the plan allows for flexibility in responding to events as they occur. Neuberger Berman Incident Response Guide outlines specific procedures to follow during an event or business disruption. The guide further addresses: data backup and recovery for all mission-critical systems; financial and operational assessments to determine impact caused by the disruption event; alternative communications with customers, employees and

regulators; alternate physical location of employees; critical supplier, contractor, bank and counter-party impact protection of the firm's books and records in support of client, financial and regulatory reporting; and continued prompt access by clients to funds and securities. The firm stores both physical and electronic copies of its data with third party agents and is currently dependent on multiple data centers in the United States to make our data highly available and resilient. Mission-critical systems have their data replicated between data centers in real time. This is designed to allow Neuberger Berman to failover and continue processing in the event of a large-scale climate-related disaster.

2. Climate-related Opportunities

In addition to climate-related risk, there are also potential opportunities from climate change. Identifying and developing these opportunities is a critical pillar of the firm's climate-related corporate strategy.

a) Investment portfolios

i. *Existing Investment Strategies*

Our proprietary ESG ratings consider energy efficiency, carbon emissions intensity and low-carbon opportunities where it is material at the sub-sector level. These ratings are used by equities and fixed income analysts, and a similar methodology is used in due diligence by private equity investors. This allows our existing investment strategies to assess the potential opportunity from tilting an existing portfolio toward issuers that are better positioned for the low-carbon transition.

ii. *New Investment Strategies*

As clients increasingly seek to align their investment portfolios with positive outcomes for people and the planet, demand is growing for social or environmental impact-oriented investment strategies. To meet this demand, we are continually evaluating our investment offerings and developing new strategies. For example, we recently added an insurance-linked strategy that seeks to provide property insurance companies with innovative risk mitigation solutions against extreme storms, hurricanes and other natural disasters. A key focus of the investment process is proprietary analysis of both short-term weather variables and longer-term climate trends, and the associated insurance risks, while delivering returns that are uncorrelated to traditional asset classes.

Generally, climate solutions are an important theme for our impact investing strategies, which intentionally seek to generate additional positive social and environmental outcomes alongside market-rate financial returns.

b) Business operations

We continue to focus on capturing the benefits associated with operational efficiencies in our own operations, including through reduced energy and water usage in our facilities, and the replacement of air travel with video conferencing.

3. Communicating Metrics and Targets

Neuberger Berman has the ability to disclose climate-related metrics to our clients to help them understand the potential risks and opportunities associated with publicly listed corporate equity and bond portfolios:

a) Weighted average carbon intensity

b) Climate value-at-risk analysis using 2-degree scenarios

c) Climate-related engagement and proxy voting records

In addition, for clients of impact investing strategies, we disclose metrics related to the positive climate-related outcomes that those strategies are generating for people and the planet.

For our operational impact, we are committed to collecting, evaluating and disclosing relevant metrics annually.

IV. CONCLUSION

Neuberger Berman is committed to continue expanding top-down and bottom-up climate risk analysis across investment portfolios and business operations, and engaging our clients to align their portfolios with climate-related opportunities. We believe this approach will ultimately create value for our clients.

FOR MORE ABOUT OUR APPROACH TO ESG & IMPACT INVESTING, PLEASE VISIT [WWW.NB.COM/ESG](http://www.nb.com/esg).

*PRI grades are based on information reported directly by PRI signatories, of which investment managers totaled 1,120 for 2018. All signatories are eligible to participate and must complete a questionnaire to be included. The underlying information submitted by signatories is not audited by the PRI or any other party acting on its behalf. Signatories report on their responsible investment activities by responding to asset-specific modules in the Reporting Framework. Each module houses a variety of indicators that address specific topics of responsible investment. Signatories' answers are then assessed and results are compiled into an Assessment Report. The Assessment Report includes indicator scores—summarizing the individual scores achieved and comparing them to the median; section scores—grouping similar indicator scores together into categories (e.g. policy, assurance, governance) and comparing them to the median; module scores—aggregating all the indicator scores within a module to assign one of six performance bands (from E to A+). Awards and ratings referenced do not reflect the experiences of any Neuberger Berman client and readers should not view such information as representative of any particular client's experience or assume that they will have a similar investment experience as any previous or existing client. Awards and ratings are not indicative of the past or future performance of any Neuberger Berman product or service. Moreover, the underlying information has not been audited by the PRI or any other party acting on its behalf. While every effort has been made to produce a fair representation of performance, no representations or warranties are made as to the accuracy of the information presented, and no responsibility or liability can be accepted for damage caused by use of or reliance on the information contained within this report. Information about PRI grades is sourced entirely from PRI; and Neuberger Berman makes no representations, warranties or opinions based on that information.

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