Vanguard has a clear mission: to take a stand for all investors, to treat them fairly, and to give them the best chance for investment success. Tens of millions of individual investors have chosen to entrust Vanguard with their money to save for important goals, such as education, the purchase of a home, or retirement. As a result, Vanguard takes seriously our responsibilities to safeguard our investors’ assets and promote long-term value creation for investors. One way we do this is by engaging with the portfolio companies held by Vanguard-advised funds to understand boards’ efforts to identify, disclose, and mitigate material risks to shareholder value. Engaging with portfolio company leaders and voting on portfolio company proxy ballots are important ways that Vanguard expresses our perspective on the importance of boards taking steps to mitigate material risks, including any material climate-related risks, to long-term shareholder value. On behalf of the funds, Vanguard’s Investment Stewardship team engages directly with portfolio company directors and executives to better understand how specific material risks to company shareholders are addressed.1 Investment Stewardship’s role is to promote long-term value creation for investors in our Vanguard-advised funds, leaving decisions regarding strategy and operations to company directors and executives. We do not look to affect broader issues of public policy, as that is the role of elected officials and regulators.

Vanguard research has shown climate change—and the evolving global responses to it—to be financially material to companies and to their shareholders’ long-term financial success. As with other material risks, Investment Stewardship has ongoing conversations with portfolio company leaders to understand how companies are addressing material climate-related risks, including risks that companies themselves have publicly identified. We support effective disclosure of such material financial risks so that these risks can be reflected in company share prices and investors are equipped to make informed decisions. We believe that investors and markets benefit when material risks—and strategies for mitigating them—are appropriately disclosed.

What Vanguard-advised funds look for with respect to material climate risks

Vanguard-advised funds look for portfolio company boards to effectively oversee material risks, including material climate risks, and to disclose their approaches to oversight of these risks to shareholders so that the market can price in the associated risks and opportunities. We believe that boards have a responsibility to be aware of material risks and opportunities (including those associated with climate change) as they make informed, long-term decisions on behalf of company shareholders.

1 Vanguard’s Investment Stewardship program is responsible for proxy voting and engagement on behalf of the quantitative and index equity portfolios advised by Vanguard (together, “Vanguard-advised funds”). Vanguard’s externally managed portfolios are managed by unaffiliated third-party investment advisors, and proxy voting and engagement for those portfolios are conducted by their respective advisors. As such, throughout this document, “we” and “the funds” are used to refer to Vanguard’s Investment Stewardship program and Vanguard-advised funds, respectively.
We believe that boards should consider the implications of both physical risks (such as severe weather events, rising sea levels, and temperature changes) and transition risks (such as regulatory changes and technological disruption) and plan for their impacts.

We believe that boards that are most effective in safeguarding long-term investors’ interests from material climate-related risks demonstrate:

- Relevant risk competence.
- Robust oversight and mitigation of material climate risks.
- Effective disclosure of material climate risks and attendant oversight practices.

**Relevant risk competence**

Boards of directors should understand their company’s material risks. Where climate matters are material to a company, we look for boards to be competent in relevant risks so that they can foster healthy debate on climate topics, challenge management assumptions, and make informed decisions regarding this category of material risks.

We have observed that effective climate-competent boards often seek multiple perspectives from internal and external stakeholders to inform the board’s perspectives on material climate-related risks. We have also observed that climate-competent boards often look to build their climate knowledge by:

- **Appointing directors with relevant experience.** While some directors may bring direct experience with climate risks or business adaptation, relevant experience does not necessarily mean deep climate science expertise. Some directors bring distinct qualifications that are relevant to climate risk but are derived from a range of sources: change-management skills, a background in pivoting a business model to take advantage of new technology, or experience navigating changing regulatory environments.

- **Seeking diverse perspectives.** Collectively, we look for boards to have a range of perspectives regarding material risks, including climate risk. For example, a North American director may have a different sense of the global regulatory and consumer landscape than a European director. The perspectives of a director with consumer goods experience may differ from those of one with a utilities background. Engaged discussion among directors with a variety of backgrounds and experiences may detect risks and uncover opportunities that might otherwise be missed.

- **Participating in ongoing education.** We observe that effective boards often proactively build their knowledge base and stay current on evolving risks affecting their industry, including material climate risks. This could include regular engagement with external experts or stakeholders in the boardroom, or through governance or industry groups.

**Robust risk oversight and mitigation**

We look to understand boards’ processes for overseeing and mitigating material risks on behalf of shareholders. Highly engaged and effective boards are well positioned to ensure that material risks, including material climate risks and opportunities, are considered in both short- and long-term planning.

Although the funds are not prescriptive regarding how a board oversees and mitigates any given material risk and do not believe in “one size fits all” approaches, it may be helpful for boards to consider certain practices:

- **Assign clear responsibilities.** Where climate risks are material, board-level responsibility for climate risks can be assigned to the full board or to relevant board committees. These committees can serve to closely oversee material climate risks and make recommendations about climate-related matters; when appropriate, the committee can share key matters with the full board. Clearly disclosing the board’s overall process for overseeing material climate risks can be beneficial for shareholders.
• **Set goals and targets.** The board can set or approve clear climate-related goals related to the company’s comprehensive strategic and financial planning. The goals set forth in the Paris Agreement are used as benchmarks by countries and companies aiming to address climate change.² It is also helpful for investors to understand whether and how companies and their boards are planning for resiliency in the face of various climate scenarios. Where climate change is a material risk, the funds encourage companies to set targets that reflect the company’s strategy for addressing that risk as well as to clearly disclose progress against that strategy over time.

• **Seek the best information.** Engaged boards often get information from diverse sources, both internal and external. We believe that directors should have unfettered access to internal specialists and the authority to access relevant external subject matter experts.

• **Harness analytics.** Analytical tools such as scenario or sensitivity analyses can support rigor and mitigate bias in an oversight process.

**Effective disclosure**

The funds look for companies to disclose to the market how their board oversees material climate risks and related climate strategies. We look for companies to provide quantitative disclosure of their performance metrics and progress against the company’s own established strategies and targets. The funds also seek qualitative disclosures of governance and risk management processes. Our interest is in transparency that enables accurate security pricing and clear information for investors.

We view climate disclosures through the lens of materiality and focus on the risks most relevant to a particular company, industry, and business model.

We believe that a number of widely recognized industry frameworks provide useful guidelines for companies that seek to improve their climate disclosure. The funds support the framework created by the Task Force on Climate-related Financial Disclosures (TCFD) for disclosing governance, strategy, risk management, and metrics and targets. The funds also support the Sustainability Accounting Standards Board (SASB) framework, which produces useful industry-specific, materiality-oriented sustainability disclosure standards. Both frameworks promote clear, consistent, and comparable disclosure that can better enable pricing of material risks into securities, a key feature of a healthy and efficient stock market upon which investors depend.

**Typical questions for boards**

Direct engagement with company leaders enables us, as stewards of Vanguard-advised funds, to hear from company directors and executives how they are overseeing material risks, including material climate risks. Below are the types of questions Investment Stewardship representatives might ask during an engagement regarding oversight of material climate-related risks:

- How does the board oversee the company’s climate strategy and related risk management? Is it handled at the full board level or committee level?

- What does the board view as material climate-related risks for the company? How does the board determine the materiality of risks?

- How does the board assess the effectiveness of the company’s management of material climate risks?

- What does board or director education related to material climate matters entail?

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² The Paris Agreement sets goals of holding the increase in global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels. It does not prescribe a single pathway to reach those goals. Rather, it is a binding international treaty that requires all countries to commit to, communicate, and maintain national-level greenhouse gas budgets to achieve the global temperature goal. Vanguard-advised funds do not dictate company strategy. As shareholders, Vanguard-advised funds seek to understand whether and how companies and their boards are planning for resiliency against the backdrop of this stated policymaker goal. We believe that boards are responsible for determining risk mitigation approaches to maximize shareholder value in their companies and planning for an uncertain future. Where there are legally binding or government-designated budgets for different industry sectors associated with the agreement, we believe that companies should disclose how their targets and strategies are appropriate in the context of those factors.
The TCFD’s 11 recommended disclosures

The TCFD has made recommendations that it believes will help investors understand how companies assess climate-related risks and opportunities.

<table>
<thead>
<tr>
<th>Governance</th>
<th>Strategy</th>
<th>Risk management</th>
<th>Metrics and targets</th>
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<tbody>
<tr>
<td>Disclose the organization’s governance around climate-related risks and opportunities.</td>
<td>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.</td>
<td>Disclose how the organization identifies, assesses, and manages climate-related risks.</td>
<td>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</td>
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<tr>
<td>1. Describe the board’s oversight of climate-related risks and opportunities.</td>
<td>2. Describe management’s role in assessing and managing climate-related risks and opportunities.</td>
<td>3. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.</td>
<td>6. Describe the organization’s processes for identifying and assessing climate-related risks.</td>
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<tr>
<td>4. Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning.</td>
<td>5. Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</td>
<td>7. Describe the organization’s processes for managing climate-related risks.</td>
<td>9. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</td>
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<td>10. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.</td>
<td>11. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</td>
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Available at: https://assets.bbhub.io/company/sites/60/2022/10/2022-TCFD-Status-Report.pdf