

Guidance on Environmental Management Disclosures

Addressing Deforestation Risk in Supply Chains

Key Takeaways

- Global deforestation is a major driver of biodiversity loss and climate change, and has significant environmental, social and financial implications for ecosystems, communities, companies and investors.
- Deforestation presents a risk to companies with material links to this practice in their supply chains and investments, and should be disclosed and managed like any other business risk.
- In response to heightened regulatory, reputational, and financial risks, boards and management teams of companies which source and produce commodities at high risk of deforestation, or finance these activities, should respond accordingly. This includes managing deforestation and land degradation risk in their supply chains and enhancing disclosure on these efforts.
- There is no standard framework among companies to establish deforestation policies or disclose related oversight practices, risk management efforts, targets and commitments, or performance KPIs, making it difficult for investors to assess exposure to material deforestation-related risks.
- Partnerships with regional policymakers and local stakeholders are a critical component of managing deforestation-related risks in the supply chain. Successful approaches include public-private partnerships with local policymakers, inclusive training of the local workforce in more sustainable practices, protection of human rights and the respect of Free, Prior and Informed Consent (“FPIC”) of local communities.
- While nearly 80% of the companies we engaged with acknowledge the value of forests in their public disclosures, only 21% formally recognize deforestation as a business risk.
- Among the companies engaged, 58% are signatories to initiatives tackling deforestation. To achieve effective management of deforestation risk, companies should consider following this first step with enhanced sustainable business practices, supply chain risk mitigation, robust board oversight and disclosure of these efforts.

Background

Deforestation is a major driver of biodiversity loss and climate change, and has significant environmental, social and financial implications for ecosystems, communities, companies, and investors. Globally, forests are disappearing at increasing rates. Since 2015, an estimated 10 million hectares of forests have been lost every year, primarily driven by commercial agriculture and production of commodities, including palm oil, soy and cattle.¹

Forests represent environmental and social value, providing habitat for over 80% of the world's terrestrial biodiversity and supporting livelihoods for human populations living in and near these forests.² As critical carbon sinks, forests also play an important role in climate change mitigation, absorbing up to 30% of carbon emissions from industry and fossil fuels every year.³

Article 5 of the Paris Climate Agreement⁴ recognizes deforestation as a key component of mitigating greenhouse gas (GHG) emissions with the IPCC stating that deforestation and conversion of natural ecosystems to human uses contributes 11% of global GHG emissions.⁵ Tropical deforestation alone contributes 7%, mostly driven by the production of agricultural and forest commodities. As the world moves toward achieving net-zero emissions by midcentury, our portfolio companies exposed to deforestation and land degradation in their value chains must consider these topics when adopting long-term climate ambitions.

Deforestation can also have human rights-related implications, resulting in headline, human capital and legal risk for companies with exposure to land degradation practices in their supply chain. This includes the potential displacement of local communities and destruction of areas that provide cultural importance or essential resources such as food, fuel and medicine.⁶ A growing body of evidence has also linked deforestation to outbreaks of infectious disease among local communities and workforces,⁷ as native animal species are forced out of their habitats to live among human populations.

Global momentum around addressing deforestation and nature loss has accelerated with the launch of the Task Force on Nature-related Financial Disclosures (TNFD)⁸ and the focus on nature as part of the COP 26 agenda. Among the various nature-related commitments to come out of the summit, the most pertinent to addressing deforestation was the [Glasgow Leaders' Declaration on Forest and Land Use](#). Countries hosting 90% of global forests, along with financial institutions and companies, signed a pledge to “halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation.”⁹

For companies contributing to deforestation through their supply chains and investments, these trends represent a significant shift requiring a renewed approach to their services, products and engagement culture with stakeholders. Aside from presenting an inherent business risk, companies with deforestation exposure are facing heightened regulatory, reputational, and financial risk. At State Street Global Advisors, we believe it is important for boards and management to work to manage risks related to deforestation and land degradation in their supply chains and to enhance disclosure around these efforts.

Stewardship Focus
Area: Land Use
& Biodiversity

Deforestation is an increasingly important area of focus for the State Street Global Advisors' Asset Stewardship program. Environmental management — spanning topics that include land use, biodiversity, natural resources and the circular economy — has been a thematic stewardship priority for our program for several years. Effective environmental management encompasses all environmental impacts, within both a company's operations and its supply chain. In 2022, our team will deepen our focus on land use and biodiversity, conducting targeted engagement campaigns, providing guidance to our investee companies and publishing thought leadership on these subjects.

Deforestation
Engagement Campaign

In 2021, we initiated a series of targeted engagements with our investee companies with direct exposure to deforestation in their supply chains — primarily those that source agricultural and forest commodities. Our objective was to learn more about how these companies exercise oversight of their supply chains and how they are managing the various material risks stemming from deforestation.

We relied on existing frameworks, including those from the CDP,¹⁰ Sustainability Accounting Standards Board (SASB),¹¹ United Nations Environment Program (UNEP),¹² United Nations Global Compact (UNGC),¹³ and Ceres¹⁴ to identify high-impact sectors, and engaged 15 of our significant holdings in those sectors to request in-depth engagements (see the Appendix for a list of companies engaged).

We chose to focus on engaging companies in the Food & Beverage and Consumer Goods sectors, due to their usage or production of the core commodities and activities responsible for the majority of agriculture-related deforestation. This includes, but is not limited to, cattle, palm oil, cocoa, leather, rubber, soy, timber and mining.

Our conversations with companies centered on topics including:

- Supply chain risk management;
- Product certifications & industry organizations;
- Participation in the policymaking process;
- Land rights preservation and community stakeholder engagement;
- Human rights and FPIC of local communities;
- Ingredient traceability and identifying high-risk commodities;
- Reputational risk and evolving consumer preferences;
- The shifting regulatory context; and
- Board oversight of deforestation-related risks.

We also engaged with external experts including non-governmental organizations, issue advocates, academic institutions and industry coalitions to understand their perspectives on managing risks related to deforestation. The individuals from these groups helped inform our engagement approach and contextualize our insights gleaned from these conversations.

Engagement Insights

As a result of our engagements and review of company disclosure practices, we identified the following key challenges that companies face and some potential best practices they have adopted to identify and address deforestation risks in their supply chain. These insights are discussed in further detail in the sections below.

- **Supply Chain Risk Management** While many of the engaged companies have established supplier code of conducts, ongoing monitoring and non-compliance protocols differentiate leaders from laggards. Challengingly, a lack of industry consensus exists regarding how to engage non-compliant suppliers, stalling the implementation of no-deforestation commitments and allowing product produced on deforested lands to enter global supply chains.
- **Integrity of Auditing Process During the Pandemic** Due to safety concerns of conducting in-person audits during the ongoing pandemic, companies have had to pivot and virtually engage in innovative ways, including satellite monitoring and wearable technology. While the pandemic catalyzed innovation, this remote monitoring should be coupled with a return to recurring on-the-ground engagement to be most effective.
- **Product Certification** Several industry standard-setters play a critical role in defining industry best practices for product certification, but our investee companies echoed the belief that membership and certification are a floor for risk management, not a ceiling.
- **Government Relations and Policymaking Process** Challenges arise for companies when working with local governments with weak land use policies and lax enforcement by authorities. Pragmatic public-private partnerships with local policymakers and international organizations can fortify company efforts to create a more resilient supply chain, protect shareholder value, and benefit local stakeholders.
- **Community Engagement & Protection of Human Rights** While often characterized as an environmental risk, deforestation also presents a number of social risks that companies must consider. Companies should adopt policies that address indigenous rights such as FPIC and broader human rights topics, such as forced or child labor. Strong policies on these topics should be supported by stakeholder engagement in the value chain so that companies will have access to unfiltered information and perspectives from key communities.
- **No-Deforestation Commitments, Metrics & KPIs** In our earlier publication, "[Effective Climate-Risk Disclosure in the Agricultural and Forestry Sectors through the Lens of the Task Force on Climate-related Financial Disclosures](#)" we highlighted the need for companies in high-impact sectors to set goals to reduce their carbon emissions. Similar timebound goals should be considered when managing deforestation-related risks stemming from key commodities in the supply chain.

Disclosure Insights

The 15 companies we engaged disclose the following information related to deforestation:

- 79% acknowledge the value of forests;
- 58% are signatories to initiatives tackling deforestation;
- 50% have established senior-level oversight and reporting structures for deforestation-related risks;
- 21% formally recognize deforestation as a business risk; and
- 14% have integrated performance metrics related to deforestation-linked commodities into their executive compensation and broader performance evaluation programs.

Disclosure Expectations for Companies

Companies with material exposure to deforestation in their value chain and/or investments should continue to improve their disclosure in the following areas:

- Board-level oversight and accountability for deforestation and land use-related risks
- Reporting and targets to reduce emissions linked to deforestation
- Conservation or reforestation activity taken by the company
- How deforestation is managed as a business risk
- Quantitative and qualitative metrics covering high-risk commodities across value chain

Identifying and Mitigating Risks in the Supply Chain

Supplier Engagement An end-to-end approach to ongoing supplier engagement is an essential component of risk management for companies with exposure to deforestation-related commodities. In our engagement with **Conagra Brands**, an American consumer packaged goods company, we learned how its Supplier Excellence Program facilitates engagement with the company's vendors. Conagra assesses key suppliers at least annually on ESG risk-related performance and disclosure. This annual sustainability assessment is supplemented by quarterly performance discussions and risk analyses, and regular consultation between all parties to address any operational issues or gaps in disclosure.

Supplier Monitoring

While many of the engaged companies have established supplier code of conducts, ongoing supplier monitoring for compliance with these codes can prove difficult to implement and requires regular independent review. At **Hormel Foods Corporation**, an American food processing company, the company's South American beef suppliers have ensured their compliance with relevant requirements by creating monitoring systems for farms supplying cattle, leveraging satellite images and geo-referenced maps of farms, deforestation data and information from public agencies regarding embargoed areas and human rights. This oversight is coupled with independent audits of all environmental monitoring systems.

Supplier Non-Compliance

Companies without a defined protocol for dealing with non-compliant suppliers may have greater exposure to deforestation risk and may suffer reputational and/or legal consequences by working with suppliers that are misaligned with policy expectations. We found a lack of consensus on how companies engage with non-compliant suppliers, which can delay the termination of relationships with suppliers that fail to adequately address deforestation. **Post Holdings, Inc.**, an American consumer packaged goods company, requires its suppliers to follow an annually reviewed code of conduct, and any potential breach of this conduct is reviewed in a consistent and transparent manner. Industry organizations like the Global Food Safety Initiative (GFSI) ensure that third-party operations audits assist in identifying non-compliant suppliers and share this information among members.

High Risk Commodity Exposure

The investee companies we engaged with shared a variety of approaches to identifying key ingredients in their products, as well as which commodities were most exposed to deforestation risk. These prioritization frameworks were generally holistic, science-based, and dependent on robust supply chain audits. The results of the identification process are paramount, as they inform the metrics and key performance indicators of companies' deforestation policies and commitments. We learned how **The Kraft Heinz Company**, an American multinational food company partnered with the Rainforest Alliance, an NGO, to expand its forest risk commodities supply chain assessment to include soy. This work included surveying their suppliers, evaluating sustainable product certifications and better understanding sourcing risks based on counties of origin. The findings from this exercise were material, with over a third of the company's global soy volume sourced from potential high-risk counties of origin.

COVID-19 Supply Chain Auditing Challenges

The global COVID-19 pandemic limited abilities to conduct in-person audits of suppliers, catalyzing innovation in virtual monitoring, while raising questions about the effectiveness of this method in the long-term. Some of our investee companies reported investing further in satellite monitoring capabilities, while others explored new solutions like wearable technology. **Post Holdings, Inc** equipped on-site employees with Google Glasses to connect with virtual teams to complete multi-party audits in real time. Several of the engaged companies also emphasized the need to maintain employee privacy and ensure that these remote tools don't breach these obligations or trust. Safely fast-tracking the adoption of these new technologies, while preserving employee privacy and protecting against cybersecurity threats, were both expressed as continued focus areas for our investee companies.

Product Certifications & Industry Organizations

Many of our investee companies emphasized the importance of participating in industry organizations to mitigate risk and work with their suppliers. These organizations provide certifications for companies who fulfill the required environmental and social criteria. Organizations frequently cited in our engagements included:

- the Roundtable on Sustainable Palm Oil (RSPO);
- the Forest Stewardship Council, (FSC);
- the Sustainable Forest Initiative (SFI);
- the Program for Forest Endorsement (PEFC); and
- USDA Organic

These standard-setters play a critical role in defining industry best practices and encouraging stronger oversight practices, but our investee companies echoed our belief that membership and certification are a floor for risk management, not a ceiling. Compliance with the standards and receiving certification are a strong initial step, but companies cannot be overly reliant on this process and take this as a proxy for total risk mitigation.

Engaging with Policymakers and Local Governments

Participating in industry coalitions and obtaining certification are valuable in creating more sustainable and resilient supply chains, and mitigating social and reputational risk. However, these mechanisms are largely voluntary, and their effectiveness for member companies depends on the jurisdiction their supply chains are located in. Several investee companies told us of the challenge posed when working with local governments with weak land use policies and lax enforcement by authorities. To achieve the systemic change required to meet the 2030 Glasgow pledge, and to mitigate continued environmental and social risk stemming from deforestation practices, companies may need to consider how to best participate in the policy-making conversation.

Highlighting the outsized impact one company's efforts can have in this process, **Mondelez International, Inc.**, an American multinational confectionery, food, holding and beverage and snack food company, has spent ten years fostering multi-lateral public-private partnerships in one of its critical supply chain domiciles, sub-Saharan Africa. In Ghana, the company developed "Cocoa Life",¹⁵ a program which incentivizes cocoa farmers to adopt more sustainable practices through increased economic benefits like achieving higher yields using less fertilizers and land. Mondelez built on this progress by announcing a formal partnership with the Forest Commission of Ghana, Cocoa Board and United Nations Development Program ("UNDP") to reduce deforestation and forest degradation in the country while simultaneously reducing emissions in its cocoa supply chain.

Pragmatic public-private partnerships with local policymakers and international organizations can fortify company efforts to improve supply chain resilience, protect shareholder value, and benefit local stakeholders.

Addressing Evolving Shareholder & Stakeholder Expectations

In recent years, evolving consumer preferences and increased awareness of deforestation's impacts — particularly its contribution to biodiversity loss and climate change — have led issue advocates and investors to demand enhanced disclosure from companies exposed to deforestation risk. Since 2016, 11 deforestation-related shareholder proposals have been submitted to a shareholder vote, with two of them receiving majority support for the first time in 2021.¹⁶ Following the submission of one such proposal at **Procter & Gamble**, an American multinational consumer goods corporation, requesting that the company report on efforts to eliminate deforestation from its forest pulp and palm oil supply chain, Procter & Gamble responded across several fronts. These actions included implementing public grievance reporting, strengthening its palm oil sourcing policy, advancing company conservation and restoration efforts and accelerating its RSPO certification targets to 2021 from 2022. Investors, issue advocates and consumers will likely continue to hold companies accountable through deforestation-related shareholder proposals moving forward, and boards should prepare to strengthen their disclosure efforts and management oversight accordingly.

Preserving Land Rights and Engaging with Community Stakeholders

Effective approaches to acting on deforestation-related commitments must consider the land rights and livelihoods of local people, particularly indigenous communities. As part of **Bunge Limited's** commitment to reaching deforestation-free value chains by 2025, we learned how the American agribusiness and food company engages with farmers to protect native vegetation and establishes incentives to support this shift to more sustainable value chains. This process includes fairly compensating farmers who commit to sustainable agricultural practices and avoid negative conversion, discouraging the practice of converting forested land to agriculture in favor of expanding across areas already open for production.

Protecting Human Rights and Respecting FPIC of Local Communities

A critical component of fostering sustainable value chains is the protection of human rights and respect of FPIC of local communities. Responding to feedback from issue advocates, **Kellogg Company**, an American multinational food manufacturing company, materially revised its deforestation-related commitments to protect local stakeholders in the communities with exposure to its supply chain. These pledges include immediately suspending company groups which perpetrate threats and violence towards human rights advocates, communities and workers. The company also committed to participate in and fund jurisdictional and landscape approaches which fully respect the FPIC of local communities.

Establishing Deforestation Policies and Commitments

Several of the companies we engaged with have committed to establishing no-deforestation ambitions within their supply chains covering key commodities. These policies tend to have time horizons ranging from 2025 to 2030, in line with the global pledge made at COP26. In the absence of a common industry disclosure framework on this subject, the implementation and associated disclosure of these plans varies by company. **The Kroger Co.**, an American retail company that operates supermarkets and multi-department stores, articulated its commitment to source from deforestation-free processes across its four key commodities of palm oil, beef, soy and pulp/paper/timber, with varying implementation mechanisms and certifications for each commodity.

Measuring Success

As companies navigate the aforementioned challenges, there are a range of deforestation-related metrics and KPIs being used to measure success. High-level goals are typically supported by commodity-specific objectives on varying timelines, and progress against these objectives is shared with management, the board and shareholders. For example, **The Campbell Soup Company**, an American processed food and snack company is focused on reaching 100% of its suppliers passing a social compliance audit by 2025, while achieving equal success in determining accurate country of origin traceability on products derived from high-risk commodities. **Mondelez International Inc.** continues to report on 10 KPIs associated with its Cocoa Life project, covering target topics in the value chain, including elimination of child labor, supplier compliance certification, and ingredient traceability. **Clorox Company**, an American global manufacturer and marketer of consumer and professional products has committed to halve the amount of virgin plastic and virgin fiber used in packaging by 2030.

To build on these initial efforts, stakeholders in our engagements expressed the need for a standardized disclosure framework that provides added transparency on how companies are performing against any deforestation-related targets and commitments. Benefits cited include defining relative and absolute performance thresholds and incentivizing the adoption of better practices among industry peers.

Conclusion

At State Street Global Advisors, we believe that global deforestation — namely its direct linkage to biodiversity loss and climate change — presents a risk to companies with material exposure to this practice in their supply chains and investments, and should be disclosed and managed like any other business risk. This perspective, along with our fiduciary duty to act on behalf of our clients' long-term interests, informs our asset stewardship efforts on this topic. By sharing these insights from our targeted engagement campaign and analysis of public disclosures, our intention is to equip Boards to more effectively respond to the threat of deforestation.

Companies in high-exposure sectors are taking various steps to address risks related to global deforestation in their supply chain and investments, but there are a number of challenges they face while identifying and remediating these issues. We will continue to engage with companies to inform our ongoing efforts in this space. Please reach out to our team at GovernanceTeam@ssga.com to request an engagement on this important topic.

Appendix: Companies Engaged as Part of Deforestation Engagement Campaign

Company Name	Market/Country	Sector
AGCO Corporation	United States	Resource Transformation
Bunge Limited	United States	Food & Beverage
Campbell Soup Company	United States	Food & Beverage
Conagra Brands, Inc.	United States	Food & Beverage
Darden Restaurants, Inc.	United States	Food & Beverage
Hormel Foods Corporation	United States	Food & Beverage
Kellogg Company	United States	Food & Beverage
Mondelez International, Inc.	United States	Food & Beverage
Post Holdings, Inc.	United States	Food & Beverage
The Clorox Company	United States	Consumer Goods
The J.M. Smucker Company	United States	Food & Beverage
The Kraft Heinz Company	United States	Food & Beverage
The Procter & Gamble Company	United States	Consumer Goods
The Kroger Co.	United States	Food & Beverage
Weyerhaeuser Company	United States	Renewable Resources & Alternative Energy

Endnotes

- 1 Global Forest Resources Assessment 2020 — Key findings” *Food and Agriculture Organization of the United Nations*. (2020) <http://fao.org/3/CA8753EN/CA8753EN.pdf>.
- 2 “Forests Sourcebook: Practical Guidance For Sustaining Forests In Development Cooperation” *World Bank-WWF Alliance for Forest Conservation and Sustainable Use* (2008) World Bank Document.
- 3 Labbate, Gabriel. “Deforestation Factsheet”, *United Nations Environment Programme*, (April 2021), <https://wedocs.unep.org/bitstream/handle/20.500.11822/35851/DF.pdf>.
- 4 “Paris Agreement”. *United Nations Framework Convention on Climate Change*. (April 2016).
- 5 “Climate Change and Land: An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems”, *Intergovernmental Panel on Climate Change*, (January 2020), https://ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf.
- 6 “Indonesia: Indigenous Peoples Losing Their Forests” *Human Rights Watch* (September 2019) [hrw.org/news/2019/09/22/indonesia-indigenous-peoples-losing-their-forests#](https://www.hrw.org/news/2019/09/22/indonesia-indigenous-peoples-losing-their-forests#).
- 7 Gross, Anna. Schipani, Andres. Palma, Stefania. Findlay, Stephanie. “Global Deforestation Accelerates During the Pandemic”, *The Financial Times*, (August 2020), <https://ft.com/content/b72e3969-522c-4e83-b431-c0b498754b2d>.
- 8 “The TNFD Nature-related & Opportunity Management and Disclosure Framework” Taskforce on Nature-related Financial Disclosures, (March 2020) <https://tnfd.global/wp-content/uploads/2022/03/220321-TNFD-framework-beta-v01-Exec-Summary-FINAL.pdf>.
- 9 “Glasgow Leaders’ Declaration on Forests and Land Use”, *UN Climate Change Conference UK 2021*, (February 2021), <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>.
- 10 “The Collective Effort to End Deforestation: A Pathway For Companies to Raise Their Ambition”, *CDP*, (March 2021), https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/630/original/CDP_Forests_analysis_report_2020.pdf?1616334771.
- 11 “Processed Foods: Sustainability Accounting Standard”, *Sustainability Accounting Standards Board*, (October 2018) https://sasb.org/wp-content/uploads/2018/11/Processed_Foods_Standard_2018.pdf.
- 12 Labbate, Gabriel. “Deforestation Factsheet”, *United Nations Environment Programme*, (April 2021), <https://wedocs.unep.org/bitstream/handle/20.500.11822/35851/DF.pdf>.
- 13 “A Spotlight on Sustainable Supply Chain & Procurement”, *United Nations Global Compact* (December 2021), <https://unglobalcompact.org/take-action/leadership/integrate-sustainability/roadmap/supply-chain>.
- 14 “The Investor Guide to Deforestation and Climate Change”, *Ceres*, (June 2020), <https://ceres.org/sites/default/files/reports/2020-06/Ceres%20Investor%20Guide%20FINAL%20June%202020.pdf>.
- 15 Van Cutsem, Cedric. “Action Plans to Protect and Restore Forests, with Farmers at the Heart”, *Cocoa Life: Mondelez International*, (March 2019). <https://cocoalife.org/progress/action-plans-to-protect-and-restore-forests-with-cocoa-life-farmers-at-the-heart>.
- 16 Dhanasarnsombat, Sansanee. “Deforestation Shareholder Proposals Wins Signals a Shift”, *Bloomberg Law*, (August 2021). <https://news.bloomberglaw.com/bloomberglaw-analysis/analysis-deforestation-shareholder-proposal-wins-signal-a-shift>.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 29 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's fourth-largest asset manager* with US \$3.48 trillion[†] under our care.

* Pensions & Investments Research Center, as of December 31, 2021.

[†] This figure is presented as of December 31, 2022 and includes approximately \$58.60 billion USD of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

ssga.com

Marketing communications

State Street Global Advisors Worldwide Entities

Abu Dhabi: State Street Global Advisors Limited, ADGM branch is regulated by the Financial Services Regulatory Authority (FSRA).

This document is intended for Professional Clients or Market Counterparties only as defined by the FSRA and no other person should act upon it. State Street Global Advisors Limited, ADGM Branch, Al Khatem Tower, Suite 42801, Level 28, ADGM Square, Al Maryah Island, P.O. Box 76404, Abu Dhabi, United Arab Emirates. Regulated by the ADGM Financial Services Regulatory Authority. T: +971 2 245 9000. **Australia:** State Street Global Advisors, Australia, Limited (ABN 42 003 914 225) is the holder of an Australian Financial Services License (AFSL Number 238276). Registered office: Level 14, 420 George Street, Sydney, NSW 2000, Australia. T: +612 9240-7600. F: +612 9240-7611. **Belgium:** State Street Global Advisors Belgium, Chaussée de La Hulpe 185, 1170 Brussels, Belgium. T: +32 2 663 2036. State Street Global Advisors Belgium is a branch office of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and

regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Canada:** State Street Global Advisors, Ltd., 1981 McGill College Avenue, Suite 500, Montreal, Qc, H3A 3A8, T: +514 282 2400 and 30 Adelaide Street East Suite 800, Toronto, Ontario M5C 3G6. T: +647 775 5900.

France: State Street Global Advisors Europe Limited, France Branch ("State Street Global Advisors France") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors France is registered in France with company number RCS Nanterre 899 183 289, and its office is located at Coeur Défense – Tour A – La Défense 4, 33e étage, 100, Esplanade du Général de Gaulle, 92 931 Paris La Défense Cedex, France. T: +33 1 44 45 40 00. F: +33 1 44 45 41 92. **Germany:** State Street Global Advisors Europe Limited, Branch in Germany, Brienner Strasse 59, D-80333 Munich, Germany ("State Street Global Advisors Germany"). T: +49 (0)89 55878 400. State Street Global Advisors Germany is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John

Rogerson's Quay, Dublin 2. **Hong Kong:** State Street Global Advisors Asia Limited, 68/F, Two International Finance Centre, 8 Finance Street, Central, Hong Kong. T: +852 2103-0288. F: +852 2103-0200. **Ireland:** State Street Global Advisors Europe Limited is regulated by the Central Bank of Ireland. Registered office address 78 Sir John Rogerson's Quay, Dublin 2. Registered Number: 49934. T: +353 (0)1 776 3000. F: +353 (0)1 776 3300. **Italy:** State Street Global Advisors Europe Limited, Italy Branch ("State Street Global Advisors Italy") is a branch of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. State Street Global Advisors Italy is registered in Italy with company number 11871450968 – REA: 2628603 and VAT number 11871450968, and its office is located at Via Ferrante Aporti, 10 - 20125 Milan, Italy. T: +39 02 32066 100. F: +39 02 32066 155. **Japan:** State Street Global Advisors (Japan) Co., Ltd., Toranomon Hills Mori Tower 25F 1-23-1 Toranomon, Minato-ku, Tokyo 105-6325 Japan. T: +81-3-4530-7380. Financial Instruments Business Operator, Kanto Local Financial Bureau (Kinsho #345), Membership: Japan Investment Advisers Association, The Investment Trust Association, Japan, Japan Securities Dealers' Association. **Netherlands:** State Street Global

Advisors Netherlands, Apollo Building 7th floor, Herikerbergweg 29, 1101 CN Amsterdam, Netherlands. T: +31 20 7181 000. State Street Global Advisors Netherlands is a branch office of State Street Global Advisors Europe Limited, registered in Ireland with company number 49934, authorised and regulated by the Central Bank of Ireland, and whose registered office is at 78 Sir John Rogerson's Quay, Dublin 2. **Singapore:** State Street Global Advisors Singapore Limited, 168, Robinson Road, #33-01 Capital Tower, Singapore 068912 (Company Reg. No: 200002719D, regulated by the Monetary Authority of Singapore). T: +65 6826-7555. F: +65 6826-7501. **Switzerland:** State Street Global Advisors AG, Beethovenstr. 19, CH-8027 Zurich. Registered with the Register of Commerce Zurich CHE-105.078.458. T: +41 (0)44 245 70 00. F: +41 (0)44 245 70 16. **United Kingdom:** State Street Global Advisors Limited. Authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 2509928. VAT No. 577659181. Registered office: 20 Churchill Place, Canary Wharf, London, E14 5HJ. T: 020 3395 6000. F: 020 3395 6350. **United States:** State Street Global Advisors, 1 Iron Street, Boston, MA 02210-1641. T: +1 617 786 3000.

The views expressed in this material are the views of SSGA Asset Stewardship Team through the period ended March 23, 2023 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

Investing involves risk including the risk of loss of principal.

The whole or any part of this work may not be reproduced, copied or transmitted or any of its contents disclosed to third parties without SSGA's express written consent.

All information is from SSGA unless otherwise noted and has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or

warranty as to the current accuracy, reliability or completeness of, nor liability for, decisions based on such information and it should not be relied on as such.

The information provided does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. You should consult your tax and financial advisor.

The returns on a portfolio of securities which exclude companies that do not meet the portfolio's specified ESG criteria may trail the returns on a portfolio of securities which include such companies. A portfolio's ESG criteria may result in the portfolio investing in industry sectors or securities which underperform the market as a whole.

This communication is directed at professional clients (this includes eligible counterparties as defined by the appropriate EU regulator) who are deemed both knowledgeable and experienced in matters relating to investments. The products and services to which this communication relates are only available to such persons and persons of any other description (including retail clients) should not rely on this communication.

The trademarks and service marks referenced herein are the property of their respective owners. Third party data providers make no warranties or representations of any kind relating to the accuracy, completeness or timeliness of the data and have no liability for damages of any kind relating to the use of such data.

Responsible-Factor (R Factor) scoring is designed by State Street to reflect certain ESG characteristics and does not represent investment performance. Results generated out

of the scoring model is based on sustainability and corporate governance dimensions of a scored entity.

The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the Markets in Financial Instruments Directive (2014/65/EU) or applicable Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

© 2023 State Street Corporation.
All Rights Reserved.
ID1483402-4641947.2.1.GBL.RTL 0323
Exp. Date: 03/31/2024