T.RowePrice®

2021

ESG

INVESTING ANNUAL REPORT

How ESG impacts our investment decisions

Sustainability With Substance™

Environmental, Social, and Governance (ESG) Annual Report. Issued May 2022.

"Environmental, social, and governance [ESG] factors can impact the sustainability and long-term success of businesses. Identifying, analyzing, and integrating information about ESG risks and opportunities help enhance our ability to make better investment decisions and pursue better outcomes for our investors. We also believe that our clients should be able to invest in a way that aligns with their values on ESG issues."

Rob Sharps,
CEO and President,
T. Rowe Price

OUR ESG JOURNEY

2021

Impact Strategies
T. Rowe Price launches equity and fixed income impact strategies

United Nations Global Compact (UNGC)
T. Rowe Price becomes a signatory

RIIM T. Rowe Price Investment Management, Inc. (TRPIM)[1]
RIIM developed to support strategies managed by TRPIM

2020

Responsible Investing Indicator Model (RIIM) Municipal Bonds
RIIM Securitized Bonds
Rollout of proprietary ESG rating system for municipal bonds and securitized bonds

Socially Responsible Strategies
The firm launches its first socially responsible strategies in Europe

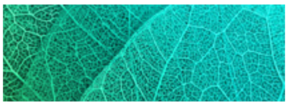
ESG Reporting
Implemented portfolio-level ESG reporting

TCFD Sponsor
Commenced sponsorship of the Task Force on Climate-Related Financial Disclosures

2019

RIIM Sovereigns
The firm rolls out proprietary ESG rating system for sovereigns

2018



RIIM Corporates
Proprietary ESG rating system for equity and credit rolled out

2017

Responsible Investing
Established in-house responsible investing research capabilities (environmental and social)

2014

Sustainalytics
Sustainalytics ESG ratings are embedded in company note templates

2013

“E” and “S” Research
Sustainalytics appointed as specialized ESG data and research provider

2012

CSR Report
First Corporate Social Responsibility Report issued

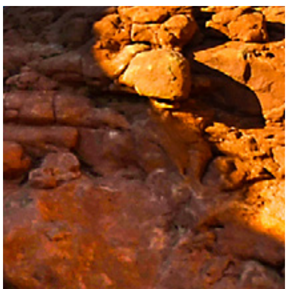
2010

Principles for Responsible Investment (PRI)
T. Rowe Price becomes signatory to the the PRI (an independent investor initiative supported by, but not part of, the United Nations)

2008

Corporate Responsibility
Investment policy on corporate responsibility established

2007



Governance
Established in-house governance research capabilities

[1] On March, 7, 2022, T. Rowe Price Associates, Inc. (TRPA), transitioned 6 of our well-established U.S. equity and fixed income investment strategies to a new, separate, SEC-registered U.S. investment adviser, T. Rowe Price Investment Management. The implementation and oversight of the RIIM for TRPA and TRPIM differ. The TRPIM RIIM covers equity and corporate bonds only.

Foreword

The past year has been another eventful one at T. Rowe Price as we continued to grow our ESG capabilities. We launched our first impact strategies and grew the number of investment staff dedicated to ESG analysis, as well as the technology team that supports them. Ahead of the creation of our new wholly-owned investment adviser, T. Rowe Price Investment Management, Inc. (TRPIM), we built a parallel set of ESG capabilities, including a team of ESG specialists and a proprietary rating framework. Last, following a strategic review, we decided to consolidate responsibility for ESG under one Management Committee member and substantially increase our investment in operational infrastructure dedicated to supporting ESG. I'm excited to take on that role, with oversight of our ESG activities, including investing, operations, and corporate undertakings.

ERIC VEIEL
Head of Global Equity and CIO

Delivering excellence in financial performance and client service remain our primary objectives. We believe that integrating ESG into our investment process—evaluating how ESG factors positively or negatively affect the performance of securities—can help our portfolio managers make sounder decisions. In 2021, we fortified the year-end evaluation criteria for analysts and portfolio managers around their effectiveness in using ESG to drive investment outcomes. The importance of considering these factors has been heightened by evolving legislative action to address issues such as climate change and other social matters—which have accelerated dramatically in the wake of the coronavirus pandemic and the COP26 conference.

“We believe in ESG investing with substance and believe our capabilities and offerings live up to this ideal.

An increasing number of our clients are asking for investment products that feature environmental and/or social characteristics. Globally, we manage USD 95 billion[1] in socially responsible and impact products that cater to these investors. While we intend to grow the number of products with sustainable objectives, it is crucial they are based on substantive ESG criteria. The level of excitement and growth in ESG-oriented investment products in the asset management industry has been unprecedented, but we are concerned about the potential for greenwashing—a lack of transparency and substance behind the ESG promises of some participants in the marketplace.

Several jurisdictions are addressing ESG product classifications to tackle the greenwashing problem. While regulators are demanding improved transparency on ESG metrics, asset managers must deliver products with ESG merit. Doing this is challenging, as environmental and social factors are complex and often not binary—they are not easily broken down into a single rating or statistic. As a predominantly active manager, we believe we are well positioned. Our analysts and portfolio managers can thoughtfully and practically consider ESG data in the context of their investment decisions, and our ESG specialist teams build value-added ESG datasets to support them. We are committed to ESG investing with substance and believe our capabilities and offerings live up to this ideal.

ESG-oriented products are vulnerable to greenwashing in part due to a lack of industry standards. We are vocal advocates of standard setting in the ESG space, for both policy-setting and industry-led initiatives. It is with this spirit that we recently decided to join the Net Zero Asset Managers initiative. We are excited to be a part of this important initiative—and you can read more about our approach on page 39 of this report.

[1] As at December 31, 2021. AUM includes assets managed by T. Rowe Price Associates, Inc., and its investment advisory affiliates. AUM includes funds and separate accounts across all regions.

2021 IN REVIEW

Responsible Investing

Over the past two years, we have seen three critical junctures that we believe will have a lasting impact on the investment landscape—the coronavirus pandemic, the UN climate change conference (COP26), and Russia's invasion of Ukraine in February 2022. These are stark examples of how the health of people and the planet affect economic prosperity. All three are catalysts for international cooperation. Yet, at the same time, we believe each will ultimately contribute to deglobalization trends.

Globalization has been a defining dynamic over the past three decades, facilitated by the liberalization of foreign trade and financial markets, the development of supranational regulatory bodies, and an acceleration of international expansion by corporations. The World Bank estimates that around 50% of value chains have globalized and their adoption has contributed to lifting over 1 billion people out of poverty.

However, momentum has stagnated over the past decade. Globalization's downsides and vulnerabilities are being more widely recognized—among them environmental degradation and national security. On the environmental front, global value chains require more transportation, leading to higher emissions and excess waste from the packaging of goods. On the security front, global value chains drive hyper-specialization and are dependent on shared know-how and technology with partners in the value chain—so any breakdown in trade relations can leave a country in a vulnerable position.

The pandemic has forced many countries to look inward and provide social protection (usually in the form of jobs), while COP26 has the potential to drive an unprecedented level of public and private spending to decarbonize the economy. It is our view that these twin pressures will prompt select parts of the global economy to re-localize. Russia's invasion of Ukraine was a bleak reminder to world leaders of how quickly value chains can break down. Understanding the environmental and social dynamics of affected industries gives our investment teams insights into how and when this may occur—ultimately helping to put them in a better position to pick the winners and losers.

Of course, transitioning the economy will be much more efficient if investors and regulators are able to adequately measure it. The level of disclosure of environmental and social data has improved in the past year, but there is divergence among regulators on which data points will be required from corporations and the standards they must employ when disclosing. Global alignment will be critical for investors to accurately measure ESG factors across multi-regional portfolios.

Maria Elena Drew

MARIA ELENA DREW
Director of Research,
Responsible Investing

> "Globalization's downsides and vulnerabilities are being more widely recognized—among them environmental degradation and national security.

Governance

In past editions of this report, our introductory letters have served to draw readers' attention to highlights of the prior year and lay out some expectations for the coming one. In 2022, it is exceedingly difficult to make any predictions. The Russian invasion of Ukraine, in addition to the devastating human toll, will continue to reverberate across the investment landscape, upending investors' assumptions around energy security, supply and demand of fossil fuels, human rights, and geopolitical stability, among many other themes. At this moment in time, there is no certainty around the array of ESG matters that will emanate from current events, or how they will manifest in the corporate and sovereign investments held by our clients.

DONNA ANDERSON
Head of Corporate Governance

As these events unfold, companies (and the boards that oversee them) continue to face an ever-evolving landscape of ESG-related developments in other respects. The pandemic stretches into its third year and continues to have a disruptive impact across regions and industries. Increased regulation on ESG disclosure and corporate governance is spreading quickly across major markets. A rise in engagement by employees and customers across a multitude of social issues has prompted companies to reexamine whether their corporate values, their public statements, and their political advocacy are properly aligned. Pressure continues to grow on corporate issuers—and chief executive officers in particular—to speak out on social and environmental issues that are important to the companies' key stakeholders.

> Perhaps not surprisingly, the use of shareholder resolutions has grown as a mechanism for stakeholders to harness investors' voting power...

Perhaps not surprisingly, the use of shareholder resolutions has grown as a mechanism for stakeholders to harness investors' voting power to express perspectives on human capital issues, climate risk, supply chain, political spending, lobbying, ethical use of technologies, the energy transition, proper alignment of incentives, and boards' oversight of all these issues. The evidence indicates these trends will gain even more momentum this year. As we explain on page 44 of this report, T. Rowe Price continues to apply a highly contextual, company-specific approach to arrive at our proxy voting decisions on these matters.

In addition to the growing body of ESG regulation globally, there are currently numerous securities rule amendments proposed in the U.S. market that could have a significant impact on liquidity, shareholder activism, executive incentive programs, and investors' ability to assess climate risk. T. Rowe Price is fully engaged in the public discussion around these proposed changes. Through direct advocacy and participation in investor associations, in 2022 we intend to continue to make the case for timely, relevant disclosures and basic investor protections that promote fairness, liquidity, and resilience in our capital markets.

Donna F. Anderson

OUR ESG INVESTING APPROACH

ESG Integration

Environmental, social, and governance (ESG) analysis is one of many building blocks that make up our global investment research platform. We have built specialist teams and technology to evaluate and integrate ESG factors across a range of asset classes.

Three Tenets of ESG Integration

INTEGRATED

- ESG analysis is embedded in the investment process.
- Analysts and portfolio managers are responsible for integrating ESG factors into decision-making.

COLLABORATIVE

- Specialists in ESG and regulatory research support integration.
- They work with analysts and portfolio managers to deepen insights into significant ESG issues.

MATERIAL

- ESG research is targeted for materiality.
- We focus on ESG factors we consider most likely to have a material impact on the performance of the investments in each portfolio.

ESG Specialists

A team of 18 investment professionals (as of March 31, 2022) is dedicated to environmental, social, and governance research. They are organized across three specialist teams—responsible investing (RI), governance, and regulatory research. Each helps our analysts and portfolio managers identify, analyze, and integrate the ESG factors we consider most likely to have a material impact on an investment's performance.

Our ESG specialist teams are supported by an operations team focused on proxy voting execution and a technology team focused on ESG data integration.

Responsible Investing Indicator Model (RIIM)

Compared with traditional financial data, integrating ESG factors into the investment process brings distinct challenges. This is because many ESG factors are qualitative in nature and due to many quantitative data sets being underdeveloped (i.e. limited disclosure and lack of standardization).

To address these issues, we developed the Responsible Investing Indicator Model—our propriety framework designed specifically to help portfolio managers and analysts integrate ESG factors into their investment process. RIIM has two key advantages:

Broad, proactive coverage
RIIM proactively searches large universes of ESG data and presents an easy-to-digest profile of a specific security, portfolio, or benchmark.

Systematic evaluation
RIIM provides a systematic framework for measuring and comparing the ESG characteristics of individual securities and portfolios.

RIIM frameworks are tailored across asset classes, covering equities and corporate bonds, sovereign bonds, municipal bonds, and securitized bonds.

RIIM EQUITIES AND CORPORATE BONDS

- Creates a responsible investing profile for approximately 15,000 companies and issuers.[1]
- Provides our portfolio managers and analysts with a framework to measure ESG factors in a systematic way—giving a common language for comparing the ESG profiles of companies.
- Framework leverages external quantitative datasets to scan for factors that could positively or negatively influence our investments.
- Also incorporates datasets we have built in-house.
- After the quantitative analysis, ESG specialists conduct fundamental research on select companies.

RIIM SOVEREIGN BONDS

- Creates a responsible investing profile for approximately 200 sovereign issuers.[1]
- Provides our portfolio managers and analysts with a framework to measure ESG factors in a systematic way—giving a common language for comparing the ESG profiles of sovereign issuers.
- Framework leverages external quantitative datasets and our own issuer research.
- Sovereign RIIM scores are incorporated into the overall sovereign issuers' scores, which include factors such as gross domestic product, inflation, and other traditional factors.

RIIM MUNICIPAL BONDS

- Municipal bond analysts create an ESG rating for issuers by evaluating specific criteria for individual issuers.
- Municipal bond analysts conduct research in-house, leveraging external data sources as well as their own direct research.
- Environmental and social analysis leverages geospatial research tools.

RIIM SECURITIZED BONDS

- Securitized bond analysts create an ESG rating for issuers by evaluating specific criteria for individual issuers.
- Securitized bond analysts conduct research in-house, leveraging external data sources as well as their own direct research.
- Where there is overlap on issuers, the securitized bond analysts can leverage RIIM scores from other asset classes.

[1] As of April 2022.

A three-step process works to proactively identify ESG factors that may positively or negatively impact an investment thesis.

Our process for identifying, analyzing, and integrating ESG factors for equities and corporate bonds is illustrated below. Variations to the framework exist for other asset classes such as sovereign, municipal, and securitized bonds.

1 IDENTIFICATION

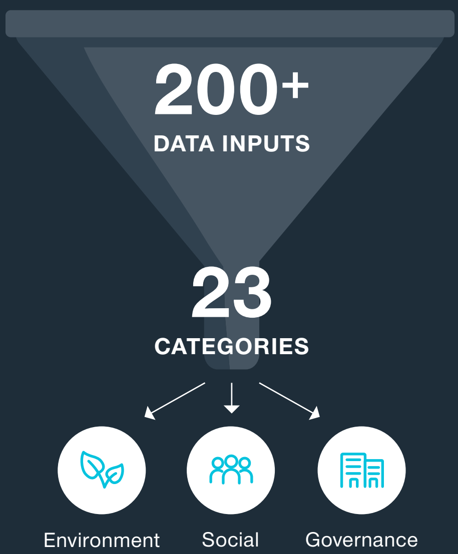
Data sources: Sustainalytics, T. Rowe Price databases, and company reports.

Data inputs: selected based on their materiality.

Data categorization: data inputs allocated to one of 23 categories, resulting in a weighted category score.

ESG profile: category scores are assigned to one of three key pillars—environment, social, or governance—to produce an overall RIIM score.

RIIM is currently able to analyze the ESG profile of approximately 15,000 companies and issuers.



QUANTITATIVE RIIM SCORE*
(Approx. 15,000 companies)

2 ANALYSIS

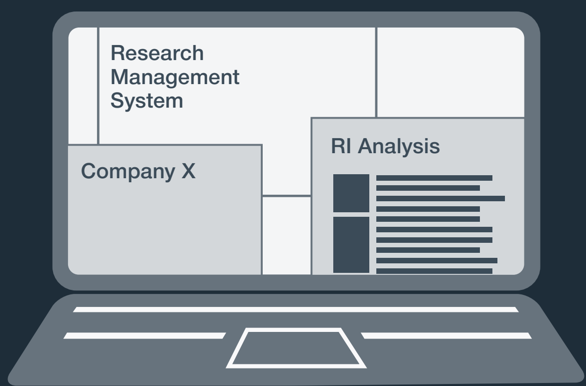
Securities **flagged in RIIM** undergo fundamental analysis by the responsible investing team, including engagement and proxy voting recommendations.

FUNDAMENTAL RIIM SCORE*
(500–700 companies annually)

3 INTEGRATION

Analysts and portfolio managers incorporate ESG factors (as appropriate to their strategy) into:

- Investment thesis
- Company ratings
- Price targets
- Engagements
- Position sizing
- Proxy voting decisions



For illustrative purposes only. As of April 2022.

*Green (circle) indicates no/few flags, amber (square) indicates medium flags, and red (triangle) indicates high flags.

Evaluating ESG-Labeled Bonds

The extraordinary growth of ESG-labeled debt issuance in recent years has driven a need for more robust evaluation of the environmental and social credentials backing up these issuances. Given the nascency of the ESG-labeled bond market, we have seen wild variations in the quality of green, social, ESG, and sustainability-linked bonds.

These bonds generally price at a premium (often referred to as the "greenium") and are purchased by investors specifically looking to orient fund flows toward sustainable activities. So, it is vital that issuers provide adequate evidence and are accountable for delivering on their sustainable objectives.

We have built our own proprietary framework for evaluating the credentials of ESG-labeled bonds. Our ESG bond framework provides more robust analysis and ongoing monitoring of bonds within this category.

ESG-Labeled Bonds—Evaluation Framework

ESG-Labeled Bond

ISSUER ESG PROFILE
- RIIM score
- Environmental and social commitments

POST-ISSUANCE REPORTING
- Detail on reporting plans
- Availability of audit report for allocation and/or impact reporting

USE OF PROCEEDS
- Credibility of use of proceeds or sustainability performance targets (SPTs)
- Unallocated proceeds
- Refinancing
- Time frame
- Provisions for unmet SPTs

FRAMEWORK AND STANDARDS
- Alignment to International Capital Market Association (ICMA)
- Second-party opinion verification
- Governance structure for project selection

Identifying Impact Investments

In 2021 we launched our first impact strategies. These investments embed sustainable objectives alongside financial performance.

All investments in our impact strategies start with an assessment of their alignment with the delivery of positive environmental and social impacts. This considers both materiality and measurability. To aid this assessment, we have built a proprietary framework which we call our Impact Lens. This framework helps to ensure we deploy a consistent standard for identifying impact activities, which feature three impact pillars and eight sub-pillars outlined below.

1 Climate and Resource Impact

- Reducing Greenhouse Gases
- Promoting Healthy Ecosystems
- Nurturing Circular Economies

2 Social Equity and Quality of Life

- Enabling Social Equity
- Improving Health
- Enhancing Quality of Life

3 Sustainable Innovation and Productivity

- Sustainable Technology
- Building Sustainable Industry and Infrastructure

We also leverage our own RIIM analysis and an Impact framework to ensure we comprehensively evaluate the potential of significant harm by a prospective investment, alongside other ESG risks. Lastly the use of an exclusion list helps us avoid certain areas of the global economy that we do not believe generate positive impact.

Importantly, generating impact goes beyond simply owning certain types of companies. It draws on our efforts in active ownership and encouraging change through impact-oriented company engagements and proxy voting.

T. Rowe Price uses a proprietary custom structure for impact pillar and sub-pillar classification.
Impact strategies may not succeed in generating a positive environmental and/or social impact. A strategy's incorporation of environmental and/or social impact criteria into its investment process may cause a strategy to perform differently from a strategy that uses a different methodology to identify and/or incorporate environmental and/or social impact criteria or relies solely or primarily on financial metrics.

Aligning to Global ESG Frameworks

United Nations Sustainable Development Goals

The UN Sustainable Development Goals (SDGs) are a blueprint for a more sustainable world. Signatory countries are expected to establish a national framework for achieving each of the 17 SDGs.

While the SDGs are a tool to allow countries to implement sustainability regulations, they are also commonly adopted as a framework for identifying ESG-related pressure points that can impact corporate and other securities. Indeed, the goals are represented across the range of factors that we analyze within RIIM.

Companies are likely to face greater scrutiny in relation to the sustainability objectives of the SDGs over time. This could include greater regulatory burdens, taxation, litigation, and/or consumer dissatisfaction. Conversely, companies that provide solutions are likely to have much more sustainable business models. It makes sense, therefore, that our RIIM analysis is aligned with the SDGs.

Source: United Nations
The trademarks shown are the property of their respective owners.

United Nations Global Compact

T. Rowe Price is a signatory to the United Nations Global Compact (UNGC). Established in 1999, the UNGC has 10 principles built around human rights, labor standards, the environment, and anticorruption. In addition to capturing whether companies are signatories to the UNGC, RIIM measures UNGC values at multiple levels:

- **Human Rights and Labor Standards:** Management of human capital is assessed through supply chain analysis for human rights violations, as well as an evaluation of employee treatment that looks at labor-related incidents, accident rates, and other factors.
- **Environment:** This is assessed via energy use and emissions, water and waste outputs and targets, sustainable sourcing of raw materials, and end-product sustainability and impact on the environment.
- **Anticorruption:** Programs in place and company track records are evaluated within the model's ethics analysis.

Sustainability Accounting Standards Board (SASB)

T. Rowe Price is a member of the SASB Alliance. We advocate for our investee companies to utilize the reporting framework.

Task Force on Climate-Related Financial Disclosures (TCFD)

T. Rowe Price is a supporter of the TCFD. We advocate for our investee companies to utilize the reporting framework.

International Capital Market Association (ICMA)

We adhere to ICMA's Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines, and Sustainability-Linked Bond Principles frameworks for the evaluation of sustainable bonds.

ESG Accountability

Accountability for ESG Starts at the Top

ESG specialists report to the Board of Directors on an annual basis.

T. Rowe Price Group Board of Directors

T. Rowe Price Funds/Trusts Board of Directors/ Management Companies/ Investment Advisers

ESG Committee provides a report on proxy voting, exclusion policies, and procedures.

ESG specialist teams report into members of the Management Committee.

Management Committee

Oversees T. Rowe Price corporate strategy and implementation

Investment Steering Committees

U.S. Equity, International Equity, Fixed Income, Multi-Asset

Oversee investment activity, including T. Rowe Price investment products and strategies and implementation of ESG integration across the investment platform

ESG Committee

Oversees ESG integration activities, including framework of ESG policies, proxy voting, and exclusion lists

Investment Platform

ESG Specialists support analysts and portfolio managers in the integration of ESG factors

Investment Analysts are accountable for integrating ESG factors into their research process, investment thesis, ratings, targets, and engagements

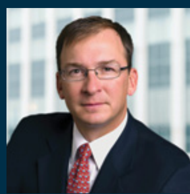
Portfolio Managers are accountable for integrating ESG factors into portfolio holdings and proxy voting as appropriate to their mandate

"The Nominating and Corporate Governance Committee takes an active role in engagement with T. Rowe Price's investment teams and other stakeholders on ESG matters. We also oversee the sustainability initiatives of the corporation. In 2021, we invested in additional human capital and technology resources in these areas. We also upgraded our level of transparency in our Corporate ESG Report. This is one way we hold ourselves accountable for the commitments we have made in the areas of responsible investing, environmental impact, community engagement, diversity, equity, and inclusion.

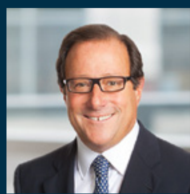
Dr. Freeman Hrabowski III
Chair, Nominating and Corporate Governance Committee

T. Rowe Price Group Board of Directors

WILLIAM J. STROMBERG
Non-Executive Chair of the Board, T. Rowe Price Group, Inc.



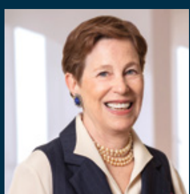
ROBERT W. SHARPS
Chief Executive Officer and President, T. Rowe Price Group, Inc.



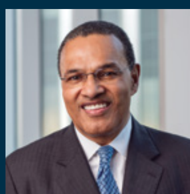
GLENN R. AUGUST
Founder and Chief Executive Officer, Oak Hill Advisors, L.P.

MARK S. BARTLETT
Retired Managing Partner, Ernst & Young

MARY K. BUSH
Chairman, Bush International, LLC



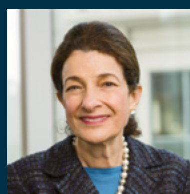
DINA DUBLON
Retired Executive Vice President and Chief Financial Officer, JPMorgan Chase & Co.



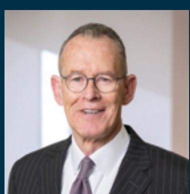
DR. FREEMAN A. HRABOWSKI III
President, University of Maryland, Baltimore County

ROBERT F. MACLELLAN
Non-Executive Chairman, Northleaf Capital Partners

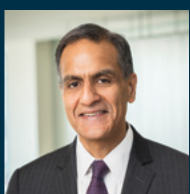
EILEEN ROMINGER
Former Senior Advisor, CamberView Partners



OLYMPIA J. SNOWE
Chair and Chief Executive Officer, Olympia Snowe, LLC

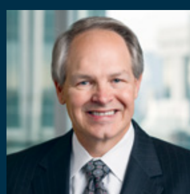


ROBERT J. STEVENS
Retired Chairman, President, and Chief Executive Officer, Lockheed Martin Corporation



RICHARD R. VERMA
General Counsel and Head of Global Public Policy, Mastercard

SANDRA S. WIJNBERG
Former Partner and Chief Administrative Officer, Aquiline Holdings LLC



ALAN D. WILSON
Retired Executive Chairman, McCormick & Company, Inc.

ESG INTEGRATION IN ACTION

Integration in Action—Circular Economies

The vast majority of economic activities are built on a linear model, where raw materials are taken from the earth, used to make products, and eventually discarded. Economic and global population growth have created impacts that mean this linear model cannot be sustained. If global economies are to prosper and support the world's burgeoning population, a shift to a circular economy is needed.

The circular economy is based on three principles—eliminating waste and pollution, circulating products and materials, and regenerating nature. It is underpinned by a transition to renewable energy and materials, helping to decouple economic activity from the consumption of finite resources.

In this ESG Integration in Action section, we demonstrate how our in-house research and stewardship activities evaluate three principal themes within the circular economy:

SUSTAINABLE AGRICULTURE

PLASTICS

ENERGY TRANSITION

Sustainable Agriculture

Sustainability in the agricultural sector is a challenging web of considerations. On the one hand, agriculture accounted for 18.4% of global greenhouse gas (GHG) emissions (in 2016),[1] alongside ecosystem loss, and land degradation. It also accounts for 70% of all freshwater withdrawals[2] and is the largest contributor to nutrient runoff (a process that creates toxic algal blooms as well as "dead zones" in aquatic ecosystems). On the other hand, agriculture is a powerful force for good. It provides the food we all need to survive and has an outsized role in reducing poverty.

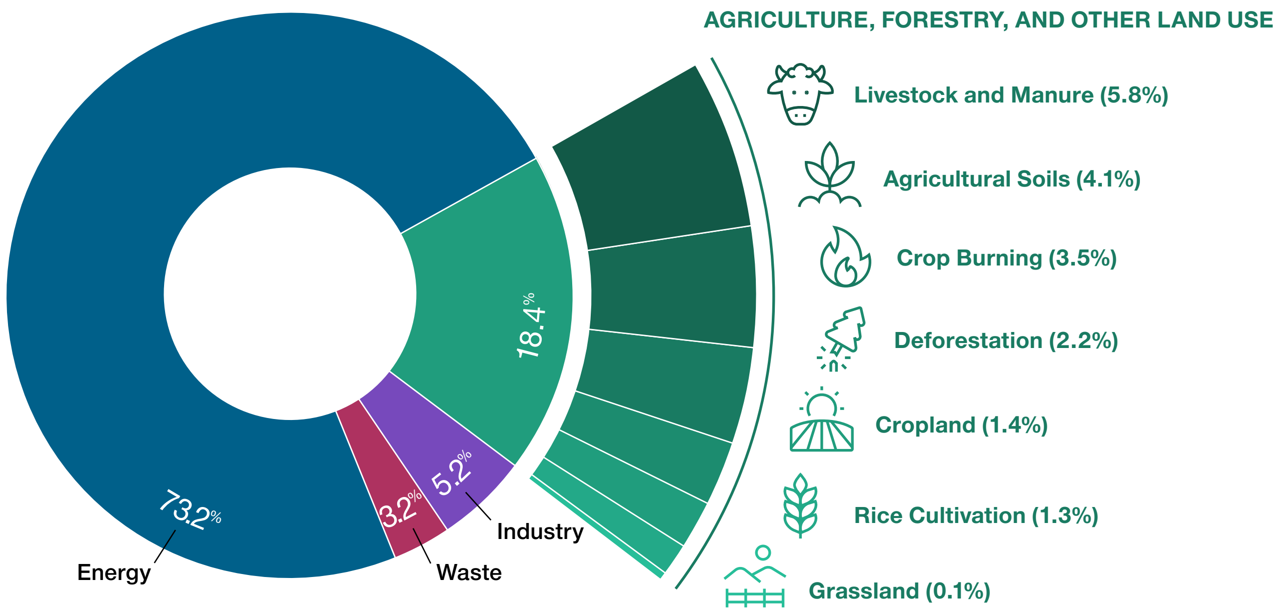
The United Nations forecasts food demand to increase more than 50% by 2050, if the global population grows to an expected 9.8 billion (from 7.7 billion in 2021) and incomes increase across emerging markets. As investors, we can play a role in directing capital toward agricultural projects that can help close that food gap, but we also must ensure that our investment is being deployed sustainably. Investing in the same agricultural practices of the past 50 years will only serve to exacerbate the sector's negative impacts—eventually leaving both society and investors to suffer the consequences.

Increasing food production by more than 50% without a radical change in traditional farming practices would require an enormous amount of land conversion and a sizable increase in GHG emissions. Neither is compatible with limiting global warming to a maximum target rise of 1.5°C. Indeed, most scenarios imply that agricultural emissions need to contract by half from 2016 levels, alongside reforesting 585 million hectares of land.

There are a range of sustainability issues that we believe will impact companies, and each can vary substantially in how they impact the business (such as a binary event or compounding pressures). For example, a food company may face earnings volatility driven by a commodity shock resulting from physical climate risk, or it may face a steady, gradual shift in consumer preferences.

At T. Rowe Price, our equity and credit analysts consider sustainability issues related to agriculture, forestry, and other land use (AFOLU) as part of their fundamental investment research. Often, they receive support from our ESG specialists when considering how AFOLU issues may impact specific industries or securities.

Greenhouse Gas Emissions by Source (2016)[3]



[1] Climate Watch, The World Resources Institute (2016)—most recent data available
[2] World Bank (2020)
[3] Source: Our World in Data (September 2020). Data as at 2016—most recent available.

Sustainable Agriculture in RIIM

In addition to our investment analysts' fundamental research, sustainable agricultural factors are systematically identified in our Responsible Investing Indicator Model (RIIM). They are key factors in our ESG analysis of the food, beverage, and related retail industries and the chemicals sector. They also come into play in sectors contributing to new agricultural technologies like industrials and information technology.

Building a RIIM Profile—Bunge (Case Study, June 2021)

Evaluating a company's practices concerning sustainable agriculture isn't always straightforward. Given the scale, complexity, and diversity of agricultural supply chains, we regularly see evidence of corporate management of the issues coupled with controversies.

In 2021, we found one company, Bunge, in such a situation. Bunge is an American agribusiness with international operations in soybean exports, food processing, grain trading, and fertilizer. External ESG ratings providers took very different views on the company, with one giving Bunge top marks (AAA rating) and another giving the company its second-worst possible rating (high risk). Our RIIM analysis, meanwhile, rated Bunge as green overall with its score having improved gradually over past years. However, multiple categories in our model flagged orange due to Bunge's exposure to deforestation controversies. Its environment and social scores also fell toward the bottom of green-rated territory.

RIIM puts a high level of materiality (the ESG factors we consider to matter most) on the company's supply chain management (both environmental and social), as well as raw materials procurement, product sustainability, and society and community relations. RIIM flagged nongovernment organization (NGO) reports alleging multiple incidents of deforestation and biodiversity loss throughout the company's supply chain, especially in sensitive regions of South America and Indonesia. RIIM also pulled in quantitative data evidencing Bunge's supply chain management practices, which we fortified with our own fundamental assessment and stewardship activities.

Bunge RIIM Profile

RIIM INDICATOR

— Not Material | Medium Flags | No/Few Flags | High Flags

Sustainable Agriculture Factors

			Sustainable Agriculture Factor
Environment	Operations (No/Few Flags)	Supply chain (environment) (Medium Flags)	Yes
		Raw materials (Medium Flags)	Yes
		Energy and emissions (Medium Flags)	
		Land use (No/Few Flags)	Yes
		Water use (No/Few Flags)	Yes
		Waste (No/Few Flags)	
		General operations (No/Few Flags)	
	End Product (Medium Flags)	Environmental product sustainability (Medium Flags)	Yes
		Products and services environmental incidents (Not Material)	
Social	Human Capital (No/Few Flags)	Supply chain (social) (No/Few Flags)	
		Employee safety and treatment (No/Few Flags)	
		Diversity, Equity & Inclusion (DEI) (No/Few Flags)	
	Society (Medium Flags)	Society and community relations (Medium Flags)	
	End Product (Medium Flags)	Social product sustainability (Medium Flags)	
		Product impact on human health and society (Not Material)	
		Product quality and customer incidents (Medium Flags)	
Governance		Business ethics (No/Few Flags)	
		Bribery and corruption (No/Few Flags)	
		Lobbying and public policy (Medium Flags)	
		Accounting and taxation (Medium Flags)	
		Board and management conduct (No/Few Flags)	
		Remuneration (High Flags)	
		ESG accountability (Medium Flags)	Yes

Data privacy incidents (No/Few Flags)

The security identified and described is intended to illustrate the RIIM and does not necessarily represent securities purchased or sold by T. Rowe Price. No assumptions should be made that the security analyzed, or other securities analyzed, purchased, or sold, was or will be profitable. The RIIM profile is not a recommendation to buy or sell any security and is not indicative of a company's potential profitability. It measures ESG factors only. The RIIM profile is as of June 2021, is provided as a historical example only, and is subject to change.

ENGAGING WITH BUNGE

In May 2021, we engaged Bunge on deforestation and supply chain management. We wanted to better understand Bunge's ambitions and convey that deforestation and human rights are material in our investment analysis.

The Intergovernmental Panel on Climate Change estimates that agriculture, forest, and other land use (AFOLU) accounted for about 13% of the world's carbon emissions and 23% total GHG emissions between 2007 and 2016. AFOLU activities are the dominant contributors to deforestation, which impedes the ability for the world's land sinks (forests, croplands, and wetlands) to absorb carbon from the atmosphere. Between 2007 and 2016, natural terrestrial carbon sinks are estimated to have offset 28% of human-generated emissions.[4]

OUTCOME

We learned that Bunge had an ambitious target for a deforestation-free supply chain by 2025, including legal deforestation. The company established a palm oil dashboard providing robust disclosure on its palm oil mills and addressing accusations of deforestation or biodiversity loss. Beyond disclosure, Bunge discussed its engagement with suppliers, demonstrating a commitment to cut ties with suppliers that fail to address breaches in policy compliance.

On social supply chain management, the company demonstrated strong standards, but it scored poorly in this category in RIIM due to shortcomings in applicability to indirect suppliers and lack of audits. The score was further compounded by repeated reports of forced and child labor use among suppliers. Encouragingly, however, Bunge indicated that it plans to conduct a human rights assessment to improve supply chain management and committed to supplier audits starting in 2021.

We were encouraged by the measures to eliminate deforestation and human rights abuses in its supply chain. As Bunge is an agribusiness, these are two significant ESG risks we continue to monitor.

Before the company's May 2021 annual shareholder meeting, we had another opportunity to engage with Bunge on the topic of deforestation. The company had received a shareholder resolution seeking additional reporting on its exposure to deforestation risk related to soy production. As the company spoke with its largest investors about the issue, the board understood our interest in additional disclosure on this topic and elected to recommend in favor of the shareholder resolution. With the company's support, the resolution received overwhelming support from 98% of shares voted.

Agriculture, forest, and other land use account for about 13% of the world's carbon emissions and 23% total GHG emissions.[4]

[4] Climate Change and Land, Intergovernmental Panel on Climate Change (IPCC), 2019.

The security identified and described is intended to illustrate the ESG security evaluation process and RIIM and does not necessarily represent securities purchased or sold by T. Rowe Price. No assumptions should be made that the security analyzed, or other securities analyzed, purchased, or sold, was or will be profitable. This is not a recommendation to buy or sell any security and is for informational purposes only. The views and opinions above are as of June 2021 and are subject to change.

Collaborative Engagement on Food Sustainability

In 2021, AFOLU issues featured prominently across our stewardship activities. We held 75 engagements with 65 companies during the year covering issues such as deforestation and sustainable agriculture.

These included collaborative engagements. One was conducted through the Farm Animal Investment Risk and Return (FAIRR) initiative, a global network of investment organizations that actively engages with the world's largest food retailers and manufacturers about ESG risks within the global food sector, particularly those associated with intensive livestock production. Another was conducted through the Emerging Markets Investors Alliance (EMIA), a not-for-profit organization that enables institutional emerging market investors to support good governance, promote sustainable development, and seek to improve investment performance in the governments and companies in which they invest.

PROTEIN DIVERSIFICATION

In a collaborative engagement, conducted through FAIRR, we signed letters to many of the world's major food retailers urging them to grow their share of sustainable, plant-based proteins and build out their strategy.

The companies we engaged with included Conagra, Costco, Walmart, Wm. Morrison, Carrefour, Casino, Kerry Group, Sainsbury, Ahold Delhaize, Nestle, Tesco, Unilever, Woolworths, Kraft Foods, Kraft Heinz, and Coles.

Protein diversification involves the transformation of portfolio composition by shifting away from an over-reliance on resource-intensive animal proteins toward lower-impact protein ingredients and products. These include plant-based, cell-cultured, fungal-based, and whole-plant alternatives to meat, dairy, seafood, and other animal proteins.

We have been pleased to see many of these companies set board-level, public commitments around portfolio transformation.

All 25 companies within FAIRR's scope of engagement now recognize protein diversification as a material issue for their business, compared with none five years ago.

SUPPLY CHAIN MONITORING IN THE AMAZON

In a collaborative engagement, conducted through EMIA, we sought to:

- Engage protein producers about material ESG issues
- Provide protein producers with a forum to communicate their policy intentions and actions and receive feedback
- Highlight hurdles to the implementation of best practices and discuss the role investors can play in changing government policy

The companies included JBS, Marfrig, and Minerva.

Ruminant livestock (cattle, sheep, and goats) account for roughly half of agriculture's greenhouse gas emissions and use about two-thirds of global agricultural land.[5] Deforestation has caused almost half of Brazil's carbon emissions in the last 30 years, with the loss of more than 780,000 square kilometers of forest and 2,000 species. Pasture expansion for cattle production has been linked to 80% of clearing.[6]

The engagement informed our research and allowed us to impart the message that supply chain monitoring is a material factor in our investment analysis for the sector.

The specific securities identified and described are for informational purposes only and do not represent recommendations.

[5] Creating a Sustainable Food Future, World Resources Institute (July 2019)

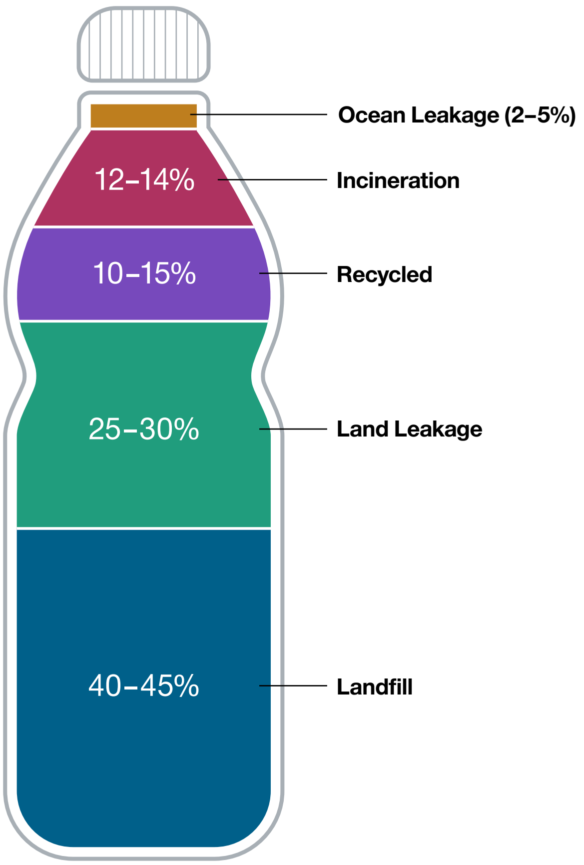
[6] Cattle ranchers and deforestation in the Brazilian Amazon: Production, location, and policies, Skidmore, Moffette, et al (2021)

Plastics

Plastics can play a positive role in some sustainability issues, including reducing food waste, reducing product weight to enable more efficient transportation, improved building materials, or better hygiene. However, their sheer volume of production and non-degradable nature means they have come to epitomize the problems of the end-to-end or linear economy.

When thinking about the three principles of the circular economy—eliminating waste and pollution, circulating products and materials, and regenerating nature—many tend to associate plastics with the first two. They view the plastics problem from the perspective of recycling and product life-cycle design. Yet, plastics fundamentally violate the third principle as they introduce a non-degrading substance into the natural world.

Global Plastics Ultimate Disposal*



Less than 2% of plastics currently come from bio-based materials. The remainder are derived from fossil fuels, which are broken down with energy-intensive processes and then mixed with chemicals to create different types of plastics. The resulting synthetic product is not found anywhere in nature and does not easily decompose. Plastics can break into smaller parts but cannot break apart. The large-scale production and poor practices around disposal have made plastic a ubiquitous substance in nature—so much so that plastics are a marker of the current geological era[7] and have given rise to a new microbial habitat known as the plastisphere.[8]

After climate change, plastic pollution may be the next biggest environmental crisis. Due to the multiple and cascading risks posed by plastic pollution, it is seen as a multiplier that can act in tandem with other stressors like climate change and overexploitation of marine resources to cause far greater damage than if each occurred in isolation.[9]

The Ellen MacArthur Foundation estimates that 95% of plastic packaging material is lost to the economy after its first use. As such, plastic packaging has become an enemy of the circular economy and has prominently entered the crosshairs of consumers and regulators. Over one-third of global plastic use is in the packaging sector. As regulators address the plastics issue and consumers become more aware of the sustainability pressures plastic packaging presents, we expect the single-use plastics space to be radically reshaped in the coming decade as companies use alternative materials (paper, aluminum, etc.), innovate better plastics (bioplastics, etc.), and use less packaging material altogether.

International collaboration plays a crucial role in the fight against plastic pollution. That's why the outcome of a recent United Nations Environment Assembly is a positive step forward toward tackling the problem. In March 2022, 175 countries agreed to draw up a global and legally binding treaty to end plastic pollution—with a view to finalizing the treaty by the end of 2024.

*Source: The New Plastics Economy, Ellen MacArthur Foundation, 2018. Most recent data available.
[7] Zalasiewicz, et al. (2016)
[8] Amaral-Zettler, et al. (2020)
[9] United Nations Environment Programme (2021). From Pollution to Solution: A global assessment of marine litter and plastic pollution.

Plastics in RIIM

One of our internally developed databases feeding our RIIM analysis is devoted to packaging statistics and targets for consumer products companies. The database has a strong focus on household and personal care (HPC) companies, where consumer preferences have been most pronounced. Over half of the HPC companies in the MSCI All Country World Index specifically mentioned that they were motivated to improve the sustainable profile of their products due to increased consumer interest in the environmental footprint of their purchases. Many see sustainable packaging as a way to meet consumer expectations.

We expect companies that disclose targets and progress related to sustainable packaging will likely see greater growth and returns in the long run as consumers increasingly consider the environmental impact of packaging in purchasing decisions. These companies will also be less financially impacted by regulation and taxation that seek to restrict plastic use and increase recyclability.

As an input into RIIM, data related to packaging targets are readily available to our equity and credit analysts covering the consumer products industries. Importantly, we recognize that the change needed to address the environmental crisis created by plastic packaging is not as simple as switching materials, nor can the long-term solution sit squarely with recycling. Understanding a company's long-term packaging plans is an important part of our analysis.

Plastics-Related Factors Featured in RIIM

Primary plastics-related data inputs (non-exhaustive list)

Many leading companies within the HPC industry expect to complete full overhauls of their packaging between 2025 and 2030. Businesses have responded to changing consumer preferences and expectations by switching to alternative materials such as aluminum or paper. Meanwhile, others have adopted new policies, like eliminating plastic bags entirely, as they simultaneously make other changes to their products or supply chains. More meaningful changes will come with the help of technological breakthroughs and rethinking of the packaging equation (including reusable/refillable solutions).

Plastic-Intensive Industries Are Responding in Different Ways[10]

Within the HPC sector, innovations are broadly focused on three different outcomes

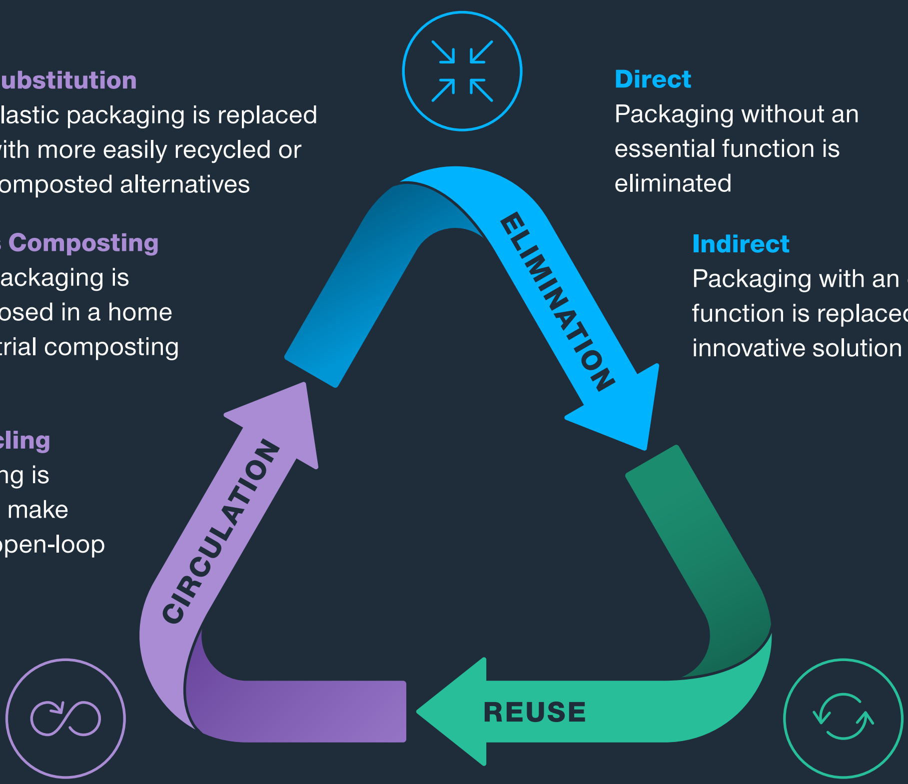
Substitution
Plastic packaging is replaced with more easily recycled or composted alternatives

Plastics Composting
Plastic packaging is decomposed in a home or industrial composting facility

Plastics Recycling
Plastic packaging is broken down to make new products (open-loop or closed-loop)

Direct
Packaging without an essential function is eliminated

Indirect
Packaging with an essential function is replaced with an innovative solution



Refill at Home
Reusable container is refilled at home

Refill on the Go
Reusable container is refilled away from home/in store

Return From Home
Packaging is picked up from home by a collection service

Return on the Go
Users return the packaging at store/drop-off point

B2B Packaging and Reuse
Inter-industry reuse systems

[10] Source: Original diagram sourced from the Ellen MacArthur Foundation website, September 2021. The diagram is reproduced by T. Rowe Price specifically for inclusion in this article, and its use does not reflect the views of the Ellen MacArthur Foundation, nor does it reflect or imply the foundation's endorsement.

Plastics and Stewardship Activity

In 2021, we engaged with 27 companies on the topic of single-use plastics and packaging. These companies were based in the Americas; Europe, Middle East, and Africa; and Asia Pacific regions, and included sectors such as consumer, industrials, materials, and energy.

Company	Country	Date
Myers Industries	U.S.	January
Hillenbrand	U.S.	February
Alibaba Group	China	March
Avantium	Netherlands	March
Danone	France	March
Indorama Ventures	Thailand	March
Turkiye Sise ve Cam Fabrikalari	Turkey	March
Alicorp	Peru	April
British American Tobacco	UK	April
Budweiser Brewing Co. APAC	Hong Kong	April
Estee Lauder	U.S.	May
Dollar General	U.S.	June
Galaxy Entertainment Group	Hong Kong	June
Braskem	Brazil	July
Britvic	UK	July
Applied Materials	U.S.	October
China Mengniu Dairy Co.	Hong Kong	October
Petco Health & Wellness Co.	U.S.	October
PTT Global Chemical	Thailand	October
Red Robin Gourmet Burgers	U.S.	October
Repsol	Spain	October
Thai Oil	Thailand	October
Westlake	U.S.	October
Fortinet	U.S.	November
Kraft Heinz	U.S.	November
Oxford Nanopore Technologies	UK	November
Carnival Corp.	U.S.	December

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Energy Transition

A cornerstone of the circular economy is that it needs to be underpinned by a shift to renewable energy. Energy transition is an issue that permeates all sectors and asset classes.

To limit global warming to a maximum rise of 1.5°C, carbon dioxide emissions must be contained to defined levels over a period of time—this is known as the world's carbon budget. Assuming a two in three probability of staying within the 1.5°C scenario and with greenhouse gas emissions at 2021 levels, the world's carbon budget will be exhausted in just six years. The figure jumps to 16 years assuming a one in three probability.

The finite nature of the carbon budget emphasizes the urgency for the energy transition effort and the need to bend the emissions curve quickly. The upshot is that, to stay within a 1.5°C global temperature rise, the world needs to reduce greenhouse gas emissions by 50% by 2030 and achieve net zero emissions by 2050.[11]

> To stay within a 1.5°C global temperature rise, the world needs to reduce greenhouse gas emissions by 50% by 2030 and achieve net zero emissions by 2050.[11]

For Europe, Russia's invasion of Ukraine has only added to this sense of urgency, with the conflict resulting in oil and gas price shocks and sparking fears over security of supply from Russia.

The Russia-Ukraine conflict has proved deeply concerning. First and foremost is the humanitarian crisis and the egregious impact that events have had on the well-being of people caught in the midst of the combat. While we continue to assess the overall, long-term ESG implications, one thing has become clear: The conflict has the potential to accelerate the energy transition—particularly in Europe. Russia accounts for 12% of global oil production and 18% of global natural gas production.[12] Given its proximity, the European Union's (EU) dependence on Russian oil and gas supplies is high. In 2020, more than half of Russia's oil exports and about 85% of its natural gas exports went to Europe.[12]

It is not easy to switch energy supply quickly without incurring higher costs and hurting the economy. However, the EU is arguably better positioned to do so today given the availability of economical non-fossil fuel alternatives, more innovation in energy consumption patterns, concerns that foreign energy reliance could be used as a weapon, and consumer awareness of the climate and security crises.

This gives the EU a strong reason to push the energy transition harder and faster. In our view, this will mean increased investment in renewables and, perhaps more importantly, in energy efficiency (such as smart appliances and green buildings), electrification, and other innovations.

Several countries have been reconsidering their path to reducing reliance on Russian oil and gas following Russia's invasion of Ukraine. However, stepping back from Russian gas raises salient questions over whether there is an alternative to gas for building the base for electricity supply. Nations can certainly ramp up the growth of renewables and other fossil-free alternatives but will need to take a pragmatic approach to changing the pace of phasing out legacy fuels—until renewables, hydrogen, and storage technology can reliably and economically deliver. While this will mean short-term disruption, the long-term outlook for clean energy looks more positive.

[11] Net zero means achieving a balance between the greenhouse gases put into the atmosphere and those taken out. This state is also referred to as carbon neutral.

[12] Source: International Energy Agency (based on 2020 production levels).

Energy Transition in RIIM—Disclosure Improvements in 2021

T. Rowe Price equity and credit analysts consider energy transition as a key part of their normal fundamental analysis. They draw upon the analysis of our ESG specialists, who provide a more granular view of the environmental characteristics of specific companies and industries. Areas of focus include greenhouse gas (GHG) emissions; decarbonization strategy; investment in renewable energy sources; physical risks; environmental track record, such as oil spills; and overall ESG accountability and transparency (particularly in relation to climate change). These factors are systematically identified in RIIM.

In last year's ESG Annual Report we wrote about a step-change in corporate attitudes toward disclosure. The tone of our interactions with company management teams had changed dramatically, with more actively seeking guidance on what ESG data to disclose and how best to go about it. In 2021, we continued to see improvement, with the level of reported data growing—particularly GHG emissions and other relevant climate data. We also have seen an uptick in companies setting net zero targets.

The improvement in disclosure has enabled an upgrade to some of the quantitative data indicators that feed into our RIIM analysis to measure performance in the energy and emissions category. Whereas historically we included factors related to emissions or renewable energy programs, we can now focus analysis more precisely on performance indicators (e.g., renewable energy use), targets (e.g., scope and quality of emissions reduction targets), and controversies/incidents.

At year-end 2021, roughly USD 1.2 trillion of our AUM resided in portfolios holding equities or corporate bonds.[13] We found that just under 60% of securities within the benchmarks of this universe were reporting scope 1-2 emissions.[14] (This calculation used the weighted average reported data for the benchmarks of our portfolios). For the equity benchmarks, the figure was slightly higher than 60%, while the weighted average for the fixed income benchmarks was dramatically lower, coming in at less than 20%. The range of reported data was extreme across both asset classes (4-93% for equity benchmarks and 3-77% for fixed income benchmarks).

As of year-end 2021, just under 60% of securities in the equity and fixed income benchmarks aligned with our equity and corporate bond portfolios reported scope 1-2 emissions.[14]

[13] As at December 31, 2021. AUM includes assets managed by T. Rowe Price Associates, Inc., and its investment advisory affiliates. Includes Oak Hill Advisors (OHA).

[14] Scope 1 (direct emissions from owned or controlled sources), scope 2 (indirect emissions from the generation of purchased electricity, steam, or cooling), scope 3 (all other indirect emissions).
Source: Sustainalytics. Analysis by T. Rowe Price using index data.

Energy Transition in Stewardship Activity

In 2021, we held 207 engagements where greenhouse gas emissions were a topic for discussion. We continue to guide companies toward industry best practice disclosure standards—including advocating for disclosures aligned to the Sustainability Accounting Standards Board (SASB) and the Task Force on Climate-Related Financial Disclosures (TCFD). These are globally recognized frameworks that emphasize financial materiality. We also continued to emphasize the importance of reporting of scope 1–3 GHG emissions data.

Proxy voting played an important role in our stewardship activities around energy transition in 2021. Climate-related shareholder resolutions were prominent, particularly within high-impact industries, such as the energy, industrials, and financials sectors. According to data from sustainability organization Ceres, there were 136 climate-related shareholder proposals tabled between July 1, 2020, and March 31, 2021,[15] with just under half of these progressing to a vote at the respective company annual general meetings (AGM).

Climate-Related Resolutions—Voting Examples

ExxonMobil
AGM-May 26, 2021

T. Rowe Price Voted—For

- ExxonMobil faced a contested director election and seven shareholder resolutions, six of which related in some measure to environmental issues. This highly unusual meeting was the result of many factors, not least being the company's general resistance to genuine investor engagement and a perception by investors that it is an outlier on climate transition strategy.
- T. Rowe Price supported three of the four board nominees proposed by the dissident investor. We also supported a shareholder resolution seeking independent board leadership, one for increased shareholder authority to convene meetings, one for climate scenario analysis reporting, and three seeking better transparency on the company's lobbying on climate issues and general political giving. We did not support a resolution brought by an investor who opposes any efforts to mitigate climate risk.
- Apart from the anti-environmental proposal, all the resolutions received strong support from shareholders. In addition, three incumbent directors were replaced.

Mitsubishi UFJ Financial Group
AGM-June 29, 2021

T. Rowe Price Voted—Against

- Kiko Network, a Japanese NGO,[16] along with three individual shareholders, filed a proposal requesting that Mitsubishi UFJ Financial Group (MUFG) amend its articles to disclose a plan to align the company's strategy with the goals of the Paris Agreement.
- Subsequent to the filing of this shareholder resolution, MUFG announced a Carbon Neutrality Declaration, aiming for net zero emissions from its finance portfolio by 2050 and in its own operations by 2030. To facilitate this goal, MUFG became the first Japanese bank to join the Net Zero Banking Alliance.
- T. Rowe Price is an active member of the Asian Corporate Governance Association (ACGA). The ACGA-hosted dialogue between the company and the proponent, Kiko Network, informed our vote decision.
- The company's commitments meant that the resolution had effectively already been addressed, so we did not support it. At the AGM on June 29, 2021, the item received 23% support.

[15] As of March 31, 2021
[16] Non-government organization. A nonprofit organization that operates independently of any government, typically with the purpose of addressing a social or political issue.

The securities identified and described are intended to illustrate the case-by-case analysis of climate-related shareholder proposals by T. Rowe Price's governance and responsible investing teams and do not necessarily represent all of the securities purchased or sold by T. Rowe Price. No assumptions should be made that the securities mentioned were or will be profitable. This is not a recommendation to buy or sell any security. The views and opinions above are as of the AGM date noted and are subject to change.

The analysis of climate-related shareholder proposals by our governance and responsible investing teams is conducted on a case-by-case basis. To reach a vote recommendation, we consider:

- The specific circumstances of each company (including the current level of disclosure)
- The company's climate strategy
- The materiality of the issue for the company, i.e., the extent to which it relates to the company's operations

We are unlikely to support resolutions that are excessively prescriptive (be they climate-related proposals or otherwise), as this usually equates to the proponent, in essence, attempting to micromanage the company. Similarly, if we think that the company is already taking sufficient action to address the stated concerns, we will likely withhold our support.

While the nature of our assessment of a company's actions can vary according to the region and industry, specific measures we consider include those detailed on the right.

In 2022, T. Rowe Price plans to step up its current voting against directors who fail in the oversight of material environmental, social, or governance risks. Companies in sectors that are highly exposed to the impact of climate change and that have failed to demonstrate sufficient preparedness for a low-carbon transition will be in scope for a vote against the board chair or other relevant committee member.

Framework for Assessment of Climate-Related Action

ASSESS LEVEL OF DISCLOSURE

- Identify if GHG emission disclosures are TCFD-aligned.
- At a minimum, report scope 1 and 2 GHG emissions.

IDENTIFY EMISSIONS TARGETS

- Seek GHG emission reduction targets.
- Ideally, targets are aligned with goals of the Paris Agreement.

EVALUATE CLIMATE STRATEGY

- Assess if company has a credible decarbonization plan.
- Best practice includes a net zero 2050 carbon emissions target (or national/regional equivalent). A path to achieving the target is key.

CONSIDER ENGAGEMENT ACTIVITY

- Assess responsiveness to stakeholder concerns, including willingness to engage and reflect feedback.
- Determine if company demonstrates robust governance procedures around direct and indirect policy advocacy, including board oversight.

For illustrative purposes only and subject to change.

ESG INTEGRATION IN ACTION—PORTFOLIO MANAGEMENT

Impact Investing in an Era of Change

How do you think of ESG factors within your investment process?

It is important to state at the outset that impact investing is not ESG integration, and it is also a different discipline from sustainable investing. It incorporates both, but takes it a step further. Impact investing's modus operandi is to target positive, measurable social and environmental impact, alongside an excess financial return when compared with recognized global equity indices (for example, the MSCI All Country World Index). Impact investing directly aligns and measures investments according to their ability to contribute to particular social and environmental outcomes.

We leverage our ESG integration process to help understand environmental and social risks, alongside the dynamics related to a company's conduct. At the stock level, all our investments begin with a clearly defined positive impact thesis, which proactively and systematically integrates ESG considerations. We believe that ESG factors aren't tangential parts of a traditional investment thesis. Company fundamentals, including the consideration of environmental, social, and governance factors, play a critical role in the stock selection process.

HARI BALKRISHNA
Portfolio Manager,
Impact Investing

How important are ESG factors in the global equity market?

We believe that ESG is crucial to reaching the right investment decision. Large shareholders especially can move the ESG debate forward by actively engaging with companies on issues that are material to their activities. Many companies are already moving to actively shift investments and policies to address distinct regulatory changes and environmental and societal pressure points. Either through compulsion or a desire to influence positive change, these trends are rapidly shaping the way companies behave, invest, and innovate.

However, if we aspire to accelerate these and other initiatives that target social and environmental transitions, it is essential to fund them at scale and in a liquid manner—so public equity markets will be critical to that effort. The enormity of issues like the clean energy transition will not be possible without the backing of large and well-funded publicly listed firms.

Alongside investing in companies making distinct impacts as a direct consequence of their actions, we aim to be additional through our stewardship program, which includes company engagement and a custom proxy voting policy. In our view, active engagement is a key to the ultimate delivery of impact. The journey to change takes time, however, so a long-term investment horizon is essential. Given the time required to achieve measurable environmental and social impacts, patience and resilience are key requirements to help monitor and evaluate change.

"The enormity of issues like the clean energy transition will not be possible without the backing of large and well-funded publicly listed firms.

Foundations to Building and Managing an Impact Portfolio

For illustrative purposes only.

MATERIAL

Stocks evaluated based on corporations' activities and alignment to clearly defined impact criteria.

MEASURABLE

Impact outcomes quantified individually and collectively to translate impact intentionality into a measurement framework.

ADDITIONAL

Use of scale and resources to promote and progress the impact agenda.

RESILIENT

In an era of disruption and extreme outcomes, positive change has to be durable. Learning, patience, and collaboration are key to pursuing good client outcomes.

What are the ESG trends to watch within global equities?

Excitingly, the opportunity to own businesses that create a positive environmental or social impact is greater than ever before in public equity markets, as companies evolve to address environmental and societal pressure points. Striving to be on the right side of this societal and environmental change creates a real opportunity to select stocks that convey a positive impact profile and, with it, the added return potential that this can bring.

One way of targeting these types of impacts is to align and anchor investments according to globally recognized frameworks such as the UN SDGs. This identifies pressure points and targets the companies whose activities are working to address them by 2030. The potential investment opportunity set that the UN SDGs open is, however, vast and complex. This means an active, high-conviction, and forward-looking perspective is essential to screen, identify, and capture desired positive impacts and to target the financial returns they can generate.

We look for impact beyond the obvious. We are well versed in areas such as renewables or health care, but a range of market areas feature underappreciated impact. For example, they include industrial gases companies solving our future decarbonization needs with green hydrogen, health care firms that reduce the cost of and accelerate the pace of innovation, and companies that improve social equity through financial inclusion and digital connections. We also look to own companies that offer technological solutions to social or environmental issues as well as those engaged in smart city infrastructure or smart manufacturing business models.

This is an illustrative example of how ESG factors could be incorporated into the investment process. The views expressed may differ from those of other investment professionals at T. Rowe Price.

How ESG Helps Make Us Better Value Investors

How do you think of ESG factors within your investment process?

Investors are increasingly alert to the impacts of environmental events linked to climate change, social issues such as diversity and employee treatment, and the influence of regulatory change related to these and other ESG factors.

For value investors, this brings distinct challenges. Indeed, some would suggest that the very nature of value investing—and the characteristics of the investment universe—fall foul of some fundamentals commonly associated with ESG objectives. Many of the industries that feature heavily in the value investment universe can screen negatively on ESG factors, especially in areas like energy, materials, and utilities, which are historically high carbon emitters. But we will not achieve CO_2 emissions reduction goals without their participation and improvement.

By integrating ESG factors into decision-making, new stock opportunities or risks not fully appreciated by the market can be uncovered. Sometimes, the very features of stocks or sectors that make them laggards in the ESG space also mean that they have the potential to make a powerful contribution as they develop technologies, unlock resources, and channel finances that can help drive change.

How important are ESG factors in the global value equity space?

We have long taken ESG considerations into account when investing in stocks. It is our job to analyze risk and reward, and we can only do this to the best of our ability if we consider all the potential risks around any investment.

Relative to some other sectors or styles in the market, a greater proportion of ESG laggards exist within the value space. Utilities, energy, industrials, and materials—sectors that typically rank poorly in terms of environmental characteristics—make up almost 90% of the carbon footprint of the MSCI World Index, according to our internal models.

But while the companies that mine and generate energy may be responsible for much of the pollution we are trying to combat, they are also integral to the transition process. As value managers, we are in a unique position to help push for change. Rather than divest from extractive industries (e.g., mining and energy), we can guide and support change. Starving companies of capital is not the answer. Our job as fundamental stock pickers is to find companies that can thrive in this new world of cleaner energy.

At T. Rowe Price, we have the benefit of significant resources, which allows us to carry out thousands of company meetings every year. Discussing ESG helps us to understand management's thinking and gives us an opportunity to voice concerns and encourage positive behavior. One of the key foundations to our investment success in recent years has been the ability to stay engaged with stocks during periods of weak sentiment to help us potentially benefit from the transition to a better outlook.

SEBASTIEN MALLET
Portfolio Manager,
Global Value Investing

> "Relative to some other sectors or styles in the market, a greater proportion of ESG laggards exist within the value space.

What are the ESG trends to watch within global value equities?

We are increasingly identifying ESG-related mispricing, where risks have been insufficiently discounted. On the flip side, a company's share price may have been punished for bad behavior historically, despite evidence of progress toward improvement. We find that companies that are working to better their ESG standards will often eventually benefit from improved investor sentiment.

From a more defensive perspective, an awareness of ESG risks can also be an additional weapon against the value manager's ubiquitous enemy, the "value trap." Many companies can appear very cheap and have solid long-term upside potential based on traditional financial factor analysis. However, by including analysis of nonfinancial ESG factors, it can become clear that some of these companies are cheap for good reason. That said, it is not always appropriate to assume the worst. Sometimes it can simply be a matter of disclosure, with company management not really understanding why ESG factors are of such importance to investors. Encouragingly, we are seeing an increasing appetite for engagement among company management teams and a willingness to understand more about ESG practices. This is underscored by the growing number of companies reaching out to us for guidance on disclosure levels.

How do ESG factors influence your investment decisions?

Our philosophy is to choose stocks that trade at a significant discount to our estimate of intrinsic value. ESG data represent an important source of information to help us accurately estimate this intrinsic value, even if it has not been factored in by the market. Identifying change within a company's structure amid controversy can also create opportunity. But understanding how improvement and transition will work in terms of timing and necessary investment is key to understanding the impact on profitability.

Ultimately, value investing is about buying mispriced stocks where we think the potential reward is greater than the risks. In analyzing the risk part of that trade-off, we consider everything that helps us reach the most considered conclusions, and ESG has become a crucial part of that process.

This is an illustrative example of how ESG factors could be incorporated into the investment process. The views expressed may differ from those of other investment professionals at T. Rowe Price.

Areas Where We Have Identified Improving ESG Profiles

MATERIALS
Paper and packaging companies are positioning for more sustainable options.

STEEL
Companies are making net zero pledges.

JAPAN
Bank of Japan is leading the way in green financing.

EMERGING MARKETS
Underappreciated value in EM companies with improving ESG profiles.

EUROPEAN CAR MANUFACTURERS
European companies investing for transition to electric vehicles

Why ESG Factors Matter in Asia Credit

How do you think of ESG factors within your investment process?

Our philosophy is that ESG factors are another key input into the decision-making process—they are not the sole driver of an investment decision, nor are they considered separately from more traditional financial analysis.

In terms of the Asia credit asset class, we believe that integrating ESG considerations into a fundamental, bottom-up research framework can help to identify high-quality, forward-thinking companies—businesses with greater prospects for long-term sustainability and, in turn, improved credit risk profiles. Importantly, the integration of ESG factors, alongside traditional financial factor analysis, can also help manage downside credit risks.

While ESG considerations are fast becoming mainstream in Asia, an inevitable divergence is emerging between countries in terms of promoting ESG awareness and increasing company disclosure requirements. This reaffirms the importance of a robust, dedicated ESG research platform that can keep pace with new developments.

SHELDON CHAN
Portfolio Manager,
Asia Credit

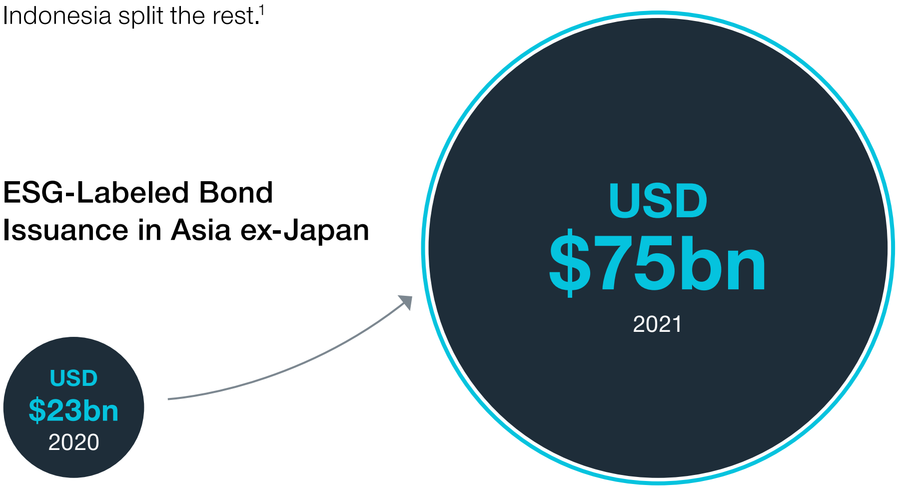
> While ESG considerations are fast becoming mainstream in Asia, an inevitable divergence is emerging [within the region]...

How important are ESG factors in the Asia credit space?

Although Asia has been a relative laggard in adopting ESG integration or applying sustainable objectives to investment mandates, the region has been at the forefront of socially responsible investing (incorporating values into investment mandates) with regard to Islamic finance. Malaysia, for example, established a law in 1983 to regulate banking compliant with Islamic tradition, while Indonesia, which boasts the world's largest Islamic population, is also one of the world's leading issuers of these types of socially responsible investments.

The issuance of ESG-labeled bonds in Asia ex-Japan totaled USD$75 billion in 2021, trebling the issuance volumes in 2020. China and South Korea combined account for 70% of the total, while Hong Kong and countries like India and Indonesia split the rest.[1]

ESG-Labeled Bond Issuance in Asia ex-Japan



As of December 31, 2021.

[1] Source: BNP Paribas and Bloomberg Finance L.P. Data analysis by T. Rowe Price. Sustainable issuance is defined as the combined total of green bond and social and sustainability bond issuance.

Improving ESG Disclosure Trends in Asia

ESG disclosure requirements mandatory for publicly listed companies: **Hong Kong, Singapore, Thailand, and the Philippines**

Updated voluntary recommendations to enhance ESG reporting: **India and South Korea**

New ESG risks disclosure requirements for listed companies and bond issuers: **China**

What are the ESG trends to watch within Asia credit?

We anticipate that sustainable credit issuance will continue to increase rapidly in Asia as ESG considerations become an ever-greater priority for asset managers and owners alike. From an investment perspective, however, there are still plenty of growing pains to push through, creating opportunities for strategic investors to capitalize on potential price dislocations.

Asian credit issuers have also tended to screen poorly in terms of ESG disclosure, making it more difficult to form a comprehensive picture of their potential liabilities and any steps they might be taking to overcome them. However, there is evidence of improvement. ESG disclosure requirements are now mandatory for publicly listed companies in Hong Kong, Singapore, Thailand, and the Philippines. The China Securities Regulatory Commission recently introduced new requirements mandating all listed companies and bond issuers to disclose ESG risks associated with their operations. Elsewhere, India and South Korea have updated voluntary recommendations to enhance ESG reporting.

Further ESG disclosure requirements are also expected to emerge amid growing pressure on most countries across the region to shrink their carbon footprints and curb the use of fossil fuels. China, for example, by far the world's largest emitter of greenhouse gases, has pledged to peak its carbon emissions by 2030 and achieve carbon neutrality by 2060. The trend toward increased engagement by companies in Asia, with many looking to better understand and improve their level of disclosure, is a clear step in the right direction.

We also expect that Asia's increasing push toward sustainability and reducing its reliance on fossil fuels could provide a structural tailwind for higher sustainability issuance. Currently, the investment universe is skewed toward capital- and commodity-intensive industries. Areas like the technology and consumer sectors make up a far smaller weighting when compared with the regional equity market where they represent more than a third of the benchmark combined. In our view, this is set to change and should create opportunities across a broader credit opportunity set through fundamental, bottom-up research.

This is an illustrative example of how ESG factors could be incorporated into the investment process. The views expressed may differ from those of other investment professionals at T. Rowe Price.

FOCUS THEMES

Understanding ESG Ratings

The rapid growth of ESG and sustainable investing has meant that ESG data providers have gone from being somewhat of a cottage industry to becoming big business. As a result, a plethora of ESG ratings have emerged, designed to help evaluate, rate, and compare company performance across ESG criteria. While these ratings have gained strong traction in the marketplace, it is not unusual to find that the mechanics of these ratings are not well understood by participants across the market.

ESG Ratings have Low Correlations

An important constraint to consider is that there is little correlation between the ratings generated by the various providers. Numerous academic studies have been conducted on the topic, including prominent work by the MIT Sloan School of Management's long-standing project that evaluates ESG ratings—known as the Aggregate Confusion Project. The work, conducted by Berg, Koelbel, and Rigobon,[1] reflects the problems that arise when a nascent and underdeveloped dataset suddenly gains mass adoption.

The study evaluated the ratings of six ESG data vendors—Sustainalytics, RobecoSAM (now owned by S&P), Vigeo Eiris (now owned by Moody's), Asset4, KLD, and MSCI. It found that correlations[2] between ESG ratings were just 0.54 on average and ranged from 0.38 to 0.71. Within the environment, social, and governance categories, environment ratings averaged a correlation of 0.53, social 0.42, and governance 0.30. Such low correlations mean that ratings of any given security can vary markedly between vendors and therefore warrant close scrutiny when used as part of investment research and decision-making.

Divergence at the Margins—Identifying Leaders and Laggards

Many asset managers look to construct portfolios that either include ESG leaders or exclude ESG laggards. The MIT study illustrated how using different ratings for security inclusion or exclusion decisions could yield markedly different outcomes.

Based on the 2014 ratings of the six providers in the study, the universe of companies covered equated to a quintile consisting of 184 companies. Just 15 companies made it into the top 20% of all six ratings providers, and only 23 companies made it into the bottom 20%. Given that correlations between ratings were only 0.54 on average, we knew that divergence between ratings was substantial. However, MIT's analysis showed that the divergence in ratings was even stronger for firms ranked within the top quintile of each ratings provider.

To determine the reason for this divergence, the study broke down the three main components of ESG ratings:

- Scope (range of measurements included),
- Measurement (technique), and
- Weight (proportion applied to each factor).

It found that measurement was the main driver of divergence, closely followed by scope. The study found that weight divergence was the least significant of the three, which is not a surprise given the well-developed concept of materiality in ESG analysis.

[1] Massachusetts Institute of Technology Sloan School of Management 2019

[2] Correlation measures how one asset class, style, or individual group may be related to another. A perfect positive correlation means that the correlation coefficient is exactly 1. This implies that as one security moves, either up or down, the other security moves in lockstep, in the same direction. A perfect negative correlation (-1) means that two assets move in opposite directions, while a zero correlation implies no relationship at all.

Accounting for Ratings Divergence

As a user of ESG data and ratings, we find these results to be completely intuitive. It reinforces the notion that RIIM provides an ESG profile for a security and is designed as a research tool to aid fundamental analysis (rather than being the only ESG analysis conducted). It also underlines the importance of having our own ESG views.

There are several reasons for variations between ESG ratings. Some should start to conform over time, while others will likely remain structurally different.

MATERIALITY LENS

The first step in establishing an ESG framework is to determine the ESG topics the rater believes are relevant to financial performance. In some sectors we see much greater alignment among raters in determining what is material, while it varies in others.

TYPES OF DATA INPUTS

The next step is determining the data inputs that can provide the right insights on the ESG topics the rater has deemed material. There are many types of ESG data points—preparedness, performance, targets, and controversies. Different results will arise depending on whether a rater decides to find insights on a specific ESG topic through the types of programs or policies a company has in place versus their targets, performance, or track record.

MEASUREMENT/COLLECTION OF DATA INPUTS

The absence of ubiquitous and standardized ESG disclosure means that many raters depend on using preparedness indicators. The way the same policy or program is collected through raters' artificial intelligence (AI) tools and then graded internally may vary substantially. Differences also exist in the thoroughness and frequency of data collection (i.e., one rater's AI tool may have done a better job of capturing data points from a company's sustainability report, or perhaps they have more recently updated their assessment of a company).

RATING CONSTRUCTION

Some ratings providers have absolute ratings, while others are more strongly biased toward a sector-relative approach.

RATING OBJECTIVE

While all the major ESG ratings have an objective of financial materiality, there can be assumptions about financial materiality that sway into the objective-setting territory. For example, a ratings provider could have a view of financial materiality with an underlying premise that the world is transitioning to a more sustainable economy.

The Road to Net Zero

As the world looks to tackle climate change, we are seeing net zero targets emanating from many different types of entities, including federal and regional governments, corporations, and universities, as well as investors. Net zero means achieving a balance between the greenhouse gases put into the atmosphere and those taken out. This state is also referred to as carbon neutral. The focus on net zero targets accelerated in 2021 and was one of the key objectives of COP26. Coming out of the summit, more than 140 countries accounting for 90% of global greenhouse gas emissions had established net zero targets.[1]

The fact that so many countries have made this commitment makes energy transition an important factor from a fiduciary responsibility perspective. The net zero emissions reduction trajectory is a severe one—it requires a 50% reduction in GHG emissions between 2020 and 2030 and reaching net zero by 2050. It is incomparable to any energy transition that has ever taken place in modern history. Even if governments only partially achieve their goals, it will be highly disruptive to industry and macroeconomic trends.

Looking at the enormity of the task at hand, many want to do their part to aid energy transition. At T. Rowe Price, we see this in demand for products that invest in companies that finance climate solutions, commit to GHG reduction targets, or both. To this end, we have joined the Net Zero Asset Managers initiative and are committed to developing investment products with net zero objectives to help meet the needs of these clients.

Politics: What's Happened, and What to Expect

The COP26 summit held in Glasgow last November was driven by climate urgency. The impact of climate change has become much more real to politicians as major storms and other weather events are becoming more prominent. Whether or not the summit was successful is in the eye of the beholder. Technically, success should have been gaining agreement for all parties to limit global warming to 1.5°C, backed up with nationally determined contributions (NDCs)—plans submitted by each nation that detail how they will deliver on GHG reductions. That did not happen as the aggregate NDCs fell well short of net zero 2050, but, given the enormity and difficulty of the task at hand, that was probably not a realistic expectation for COP26.

While politicians may have done well for the hand they were dealt, COP26 can only be viewed as a failure through the lens of climate change math. A range of estimates have come out regarding the commitments made at Glasgow, which imply a warming scenario of at least 1.8°C–2.1°C at the end of the century. The 1.8°C estimate comes from the International Energy Agency (IEA) and has been criticized for making some heroic assumptions.[2] The 2.1°C estimate assumes full implementation of the NDC targets and has a heavy reliance on strong progress being made between 2030 and 2050. More realistically, the Climate Action Tracker highlights that the 2030 targets are not ambitious enough and would put us on course for 2.4°C of warming.

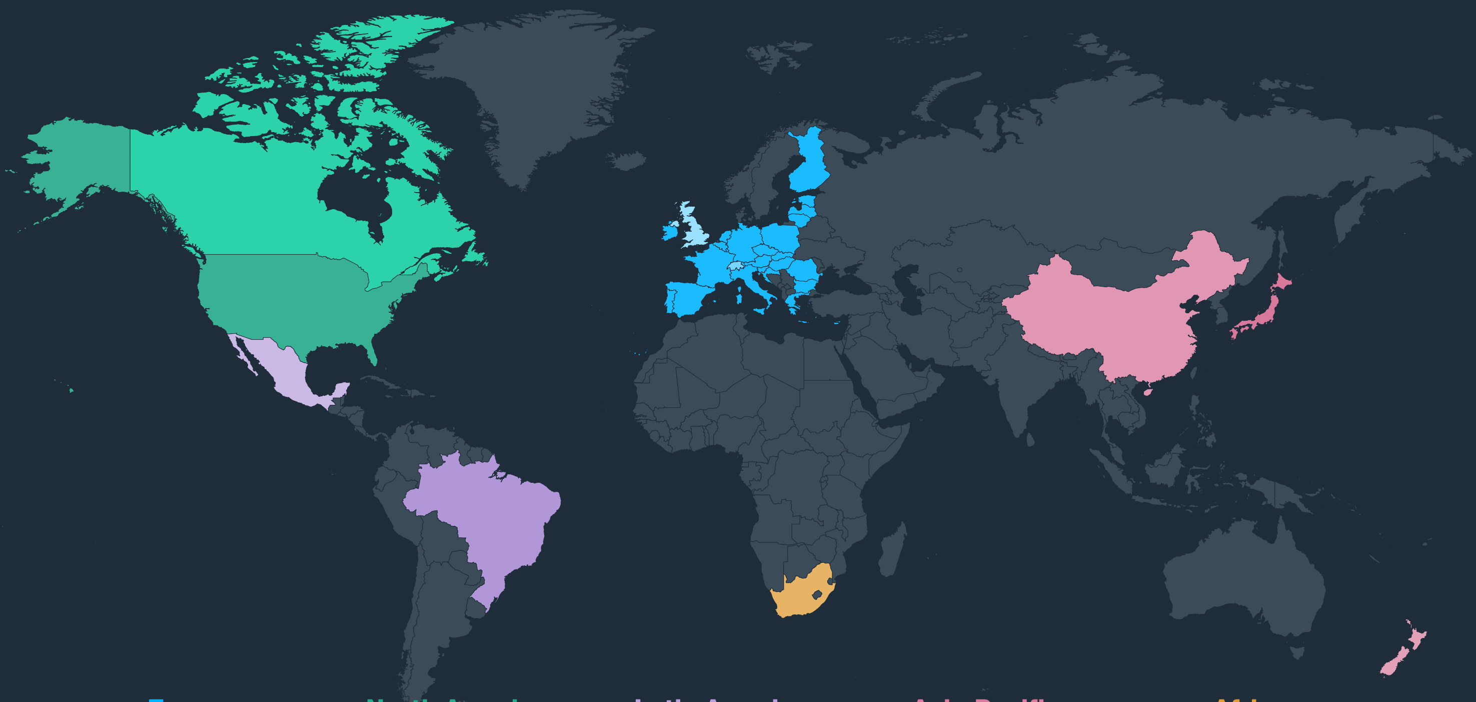
As part of the Glasgow agreement, countries will resubmit their NDCs ahead of COP27 and have specifically been asked to improve their 2030 targets. A key takeaway from the talks is an acceptance that countries will meet more frequently to review their targets and measure progress against them.

Another giant gap in the equation for investors is corporate disclosure of GHG emissions data, something we also discussed in last year's ESG Annual Report. Data availability has continued to improve from a year ago in that more companies are choosing to report, but a lack of standardization is still an issue (which means when two companies report their GHG emissions, the comparison may not be apples to apples). Regulators are starting to address the issue, but reporting GHG emissions is still not mandatory in most places.

[1] Source: The Climate Action Tracker—an independent scientific analysis that tracks government climate action and measures it against the globally agreed Paris Agreement aim of "holding warming well below 2°C, and pursuing efforts to limit warming to 1.5°C."
[2] The International Energy Agency. As of November 4, 2021

Will Mandatory Climate Reporting Become the Norm?

Governments are moving toward compulsory climate reporting, but more progress is needed.



Europe

The European Union
Sustainable Finance Disclosure Regulation (SFDR) to be complemented by the Corporate Sustainability Reporting Directive in January 2023.

Switzerland
Federal Council plans to introduce mandatory climate reporting and is preparing a draft consultation due in Summer 2022.

United Kingdom
From April 2022, 1,300 of the largest UK registered companies and financial institutions must make climate related disclosure in line with the TCFD requirements.

North America

United States
The Securities and Exchange Commission has proposed that US-listed companies will have to disclose climate-related data based on TCFD requirements.

Canada
The Canadian Securities Administrators released a proposal to require all companies that issue debt or equity to the public to disclose climate-related information.

Latin America

Brazil
Brazil's central bank outlined new rules for banks to incorporate climate change-related risks in their stress tests from July 2022.

Mexico
The Banco de México has recommended the development of a regulatory strategy that follows TCFD recommendations.

Asia-Pacific

China
In 2021, the central bank announced plans to introduce mandatory disclosure of climate-related information.

Japan
Council of Experts proposed enhancing climate-related disclosure based on the TCFD framework for prime market listed companies.

New Zealand
Using the TCFD framework, certain large financial institutions must make climate-related disclosures from 2022.

Singapore
Singapore Exchange Regulation's roadmap for climate-related disclosures will be mandatory from 2023.

Hong Kong
Hong Kong's Green and Sustainable Finance Cross-Agency Steering Group plans to make TCFD-aligned disclosures mandatory by 2025.

Africa

South Africa
The National Treasury recommended standards for ESG and climate risk monitoring and reporting at portfolio and transaction level. The Johannesburg Stock Exchange has issued draft guidance, based on the TCFDs.

Source: S&P Global Sustainable; Allen & Overy; Norton Rose Fulbright; Sustainable Stock Exchange Initiative; Analysis by T. Rowe Price as of March 31, 2022

Evaluating Climate in Investments

With more than 140 countries (accounting for 90% of global greenhouse gas emissions) having established net zero targets, understanding how our investments are positioned in this changing landscape is essential to fulfilling our role as an asset manager. Similarly, many of our clients recognize this potential investment risk and want to understand how their portfolios are positioned regarding the energy transition.

To this end, we generate quarterly greenhouse gas footprint profiles for a range of investment portfolios we manage, where enough data are available.

Global Commitments to Greenhouse Gas Reductions

Current aggregate Nationally Determined Contributions (NDCs) fall short of what is needed to reach net zero by 2050.

83

COUNTRIES

(representing 74.2% of global GHG emissions) have **communicated a net-zero target**

157

COUNTRIES

(representing 83.2% of global emissions) have submitted a **new or updated Nationally Determined Contributions**

Of these,

93

COUNTRIES

(representing 65.3% of global emissions) have increased their **emissions reduction targets** compared to their previous Nationally Determined Contributions

Source: Climate Watch. 2020. Washington, DC: World Resources Institute. Available online at: https://www.climatewatchdata.org. World Bank. 2017. Nationally Determined Contributions (NDCs). Available at: http://spappssecext.worldbank.org/sites/indc/Pages/INDCHome.aspx.

Of course, isolating climate into a single factor like GHG footprint can be misleading—it would be akin to financial analysis only taking the income statement into account and ignoring valuable insights from the balance sheet and cash flow statement. A GHG footprint gives you a "point in time" analysis and misses key items such as the historical and forward trajectory of emissions and exposure to climate solutions. More importantly, a myopic view on GHG footprints could lead an investor to only invest in low emitters, thereby ignoring the prospect of GHG reductions in the real economy.

> In recognition that net zero is a complex topic that cannot be boiled down to a single data point, we are committed to expanding transparency around climate reporting.

In recognition that net zero is a complex topic that cannot be boiled down to a single data point, we are committed to expanding transparency around climate reporting. Due to data availability and other limitations, this will take time—but we are committed to continued progress.

Investment Products Targeting Net Zero

Some clients want to go further than considering energy transition as an investment risk by specifically targeting GHG reduction as an investment goal. A good example is the Net Zero Asset Owner Alliance. The UN-convened alliance includes 71 asset owners controlling more than USD 10 trillion that are committed to transitioning investment portfolios to net zero greenhouse gas emissions by 2050.

We have been working with clients that are members of the Net Zero Asset Owner Alliance as well as other clients looking to set GHG reduction targets on their portfolios. This is something that can be more easily accomplished when the client (typically institutional) has set up their own separate account. Committing to a specific GHG reduction target limits the investment universe and by default prioritizes an environmental target over financial performance—not every client in an existing pooled asset would want this to take place.

Nevertheless, we recognize that there are many clients who wish to apply net zero targets to their investment portfolios, but for various reasons need to rely on pooled investment vehicles. For this reason, we are seeking to develop investment products with net zero objectives to meet their needs.

Ultimately, by signing up to the Net Zero Asset Managers initiative we are illustrating our commitment to developing products with net zero objectives. It also underlines our intention to help promote best practices and create industry standards around net zero portfolios.

THE NET ZERO ASSET MANAGERS INITIATIVE

As of April 25, 2022, T. Rowe Price has become a signatory of the Net Zero Asset Managers initiative (NZAMI).

NZAMI is an international group of asset managers committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner, in line with global efforts to limit warming to 1.5°C. It launched in December 2020 as a sibling organization to the Net Zero Asset Owners Alliance, with the aim of galvanizing the asset management industry to provide products suitable for asset owners committing to net zero goals.

NZAMI has grown to include 236 signatories with USD 57.5 trillion assets under management (as of December 31, 2021).[1]

[1] Source: netzeroassetmanagers.org

Corporate Political Involvement

The Need for Deeper Engagement

In 2021, we increased our engagement with issuers on the topic of corporate political involvement. Our decision to explore this issue more deeply arose from two issues:

First, a small number of companies held in our portfolios experienced significant value depreciation due to corruption charges stemming from political activity.

Second, we became concerned about inconsistencies observed between some issuers' stated ESG objectives and the lobbying being conducted on their behalf by trade associations.

Corporate political activity is a complex topic. The regulations around corporate political giving and disclosure of such donations vary widely across geographies. Also, the activity itself takes many different forms. For example:

- Direct donations to candidates, such as through political action committees
- Memberships in trade organizations that conduct lobbying
- Public statements on social issues by company leadership
- Participation in public comment periods regarding new legislation
- Influencing public perception of societal issues through media channels or issue-oriented think tanks

Our engagement on this subject has been primarily in the U.S. and Australian markets, where the investor community has been most active in seeking reform or improved alignment of corporate political involvement and ESG commitments.

We continue our work on the topic of corporate political involvement. We are currently building a tool that we believe will enable us to more easily identify situations where corporate messaging on a range of ESG issues conflicts with the company's lobbying priorities.

Evaluating and Mitigating Risk

Involvement in the political process can be appropriate and beneficial for investors in markets where the activity is permitted and where the company takes a principled, business-focused approach to its political activities. However, there is no question that such participation also opens the potential for significant misuse, conflicts of interest, inappropriate use of corporate funds, and furthering the interests of the corporation ahead of those of its stakeholders.

Better Risk Mitigation

OVERSIGHT

The Board of Directors actively monitors for consistency between corporate values and those espoused by the elected representative or lobbying organization.

TRANSPARENCY

Beyond the legal reporting requirements, the company discloses its policies for political participation and its memberships in significant trade associations.

COMMUNICATION

A company's public affairs and sustainability teams communicate their priorities and commitments to avoid conflicting objectives.

ADVOCACY

When there is a gap between the company's values and those of its trade association, there should be an escalation plan.

CLIMATE RISK AND CORPORATE LOBBYING

In relation to climate-related risk specifically, some situations require tailored approaches.

There is an imbalance in corporate lobbying on potential climate change regulation. While many companies are committing to net zero emissions targets for their own businesses, they do not collectively advocate for governments to adopt restrictions, tax incentives, or other mechanisms to enable economies to de-carbonize on a realistic timetable. However, there are multiple influential business associations that advocate strongly for the interests of fossil fuel producers and other high-emissions industries.

Engagement Approach

When we find companies that describe climate change as a serious risk to their business yet are also members of trade associations known to resist legislative solutions to the problem, we ask how they prioritize these competing objectives. We also inquire about their efforts to escalate the conflict within the trade organization and, if they deem it unresolvable, whether they might elect to leave the association.

CORPORATE ENGAGEMENT

2021 Engagement Activity

At T. Rowe Price, we are fortunate to manage USD 1.687 trillion[1] of assets for our clients, predominantly in actively managed portfolios. We believe the scale and scope of our business puts us in a powerful position compared with many of our peers when we carry out our ESG engagements with companies. The sheer size of our assets under management has clout. Simply put, it gives us better access to company management.

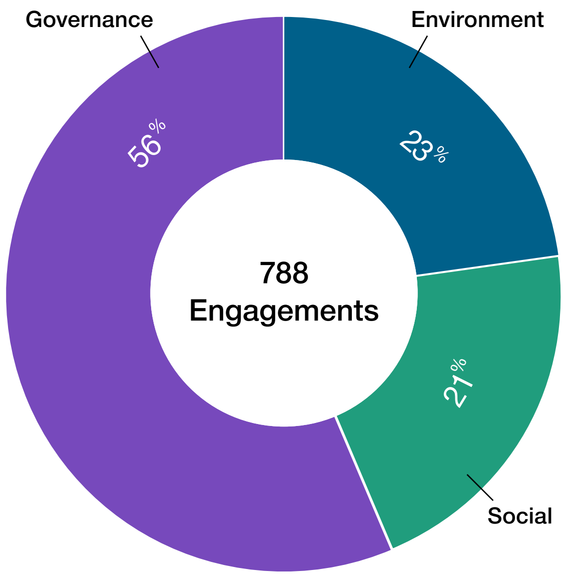
Our active investment approach also affords us real influence. In most cases, if we see an impediment to reaching our investment goals, such as a company's poor business practices or disclosure, we have the option not to invest. This contrasts with managers of passive portfolios, who typically have no choice but to hold an investment despite any evidence of business practice or disclosure concerns.

Our investment-driven engagement program frequently identifies targets through our proprietary RIIM analysis, governance screening, and analysts' fundamental research. ESG engagement meetings are carried out by portfolio managers and analysts from our equity and fixed income teams as well as by our ESG specialists.

While we engage with companies in a variety of investment contexts, ESG engagement focuses on learning about, influencing, or exchanging perspectives on the environmental practices, corporate governance, or social issues affecting their businesses.

Throughout the course of 2021, we engaged with companies on 788 separate occasions, sometimes more than once with the same company.

Engagements by Category



Top 5 Engagement Topics by Category

ENVIRONMENT

1. Greenhouse gas emissions
2. Disclosure of environmental data
3. Product sustainability
4. Environmental management
5. Renewable energy

SOCIAL

1. Disclosure of social data
2. Employee safety and treatment
3. Diversity, equity, and inclusion
4. Lobbying activities related to social matters
5. Supply chain

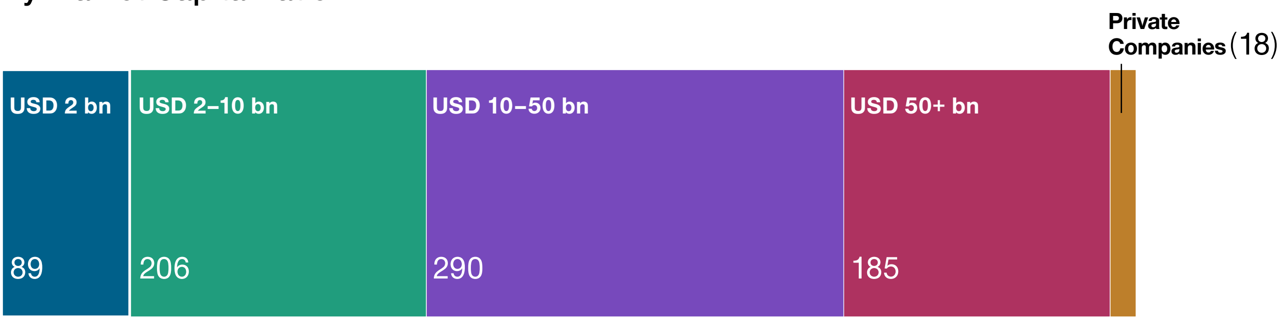
GOVERNANCE

1. Executive compensation
2. Board composition
3. ESG accountability
4. Board diversity
5. Disclosure of governance data

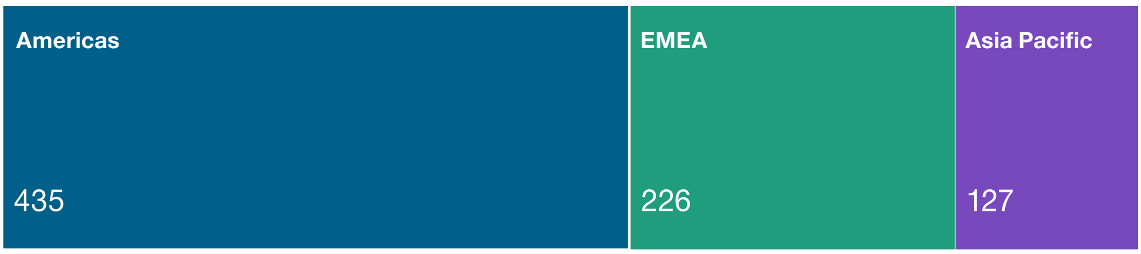
[1] As of December 31, 2021. Firmwide AUM includes assets managed by T. Rowe Price Associates, Inc., and its investment advisory affiliates. The acquisition of Oak Hill Advisors (OHA) completed on December 29, 2021, included $46.9 billion of fee-based AUM, which are reflected in the firm's AUM at December 31, 2021.

Engagement Classifications in Numbers

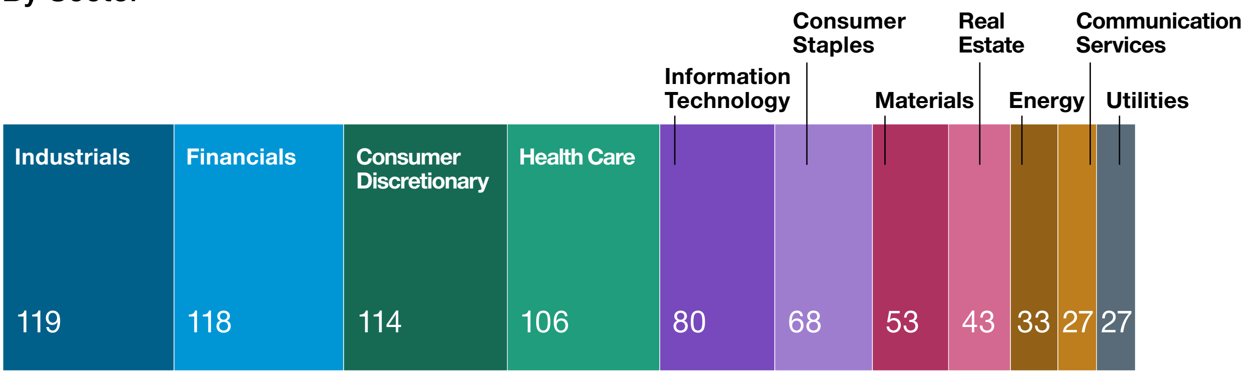
By Market Capitalization



By Region



By Sector



PROXY VOTING

2021 Proxy Voting Activity

61,118
Proposals Voted

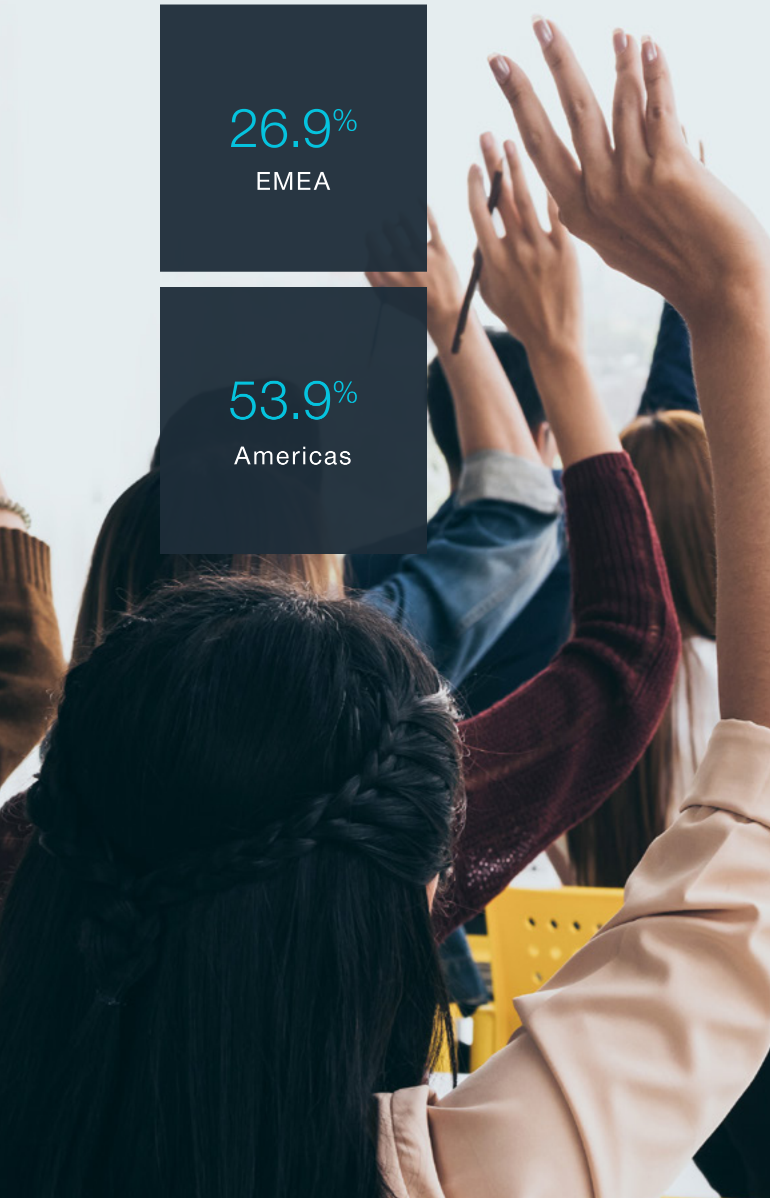
3
Regions

76
Countries

19.2%
APAC

26.9%
EMEA

53.9%
Americas



Highlights

We voted on 61,118 proposals in 2021. Some categories, such as the election of directors, are universal across the markets where we invest. Other voting issues are unique to select regions. The data in the tables on page 45 highlight the top five most common voting issues in each category, including the number of proposals we voted on and the percentage of those that we voted with management.

Approach

Proxy voting is a crucial link in the chain of stewardship responsibilities that we execute on behalf of our clients. We vote our clients' shares in a thoughtful, investment-centered way, considering both high-level principles of corporate governance and company-specific circumstances. Decisions are inclusive, involving our ESG specialists and the investment professionals who follow the companies closely. Our overarching objective is to cast votes in support of the path most likely to foster long-term, sustainable success for the company and its investors.

T. Rowe Price portfolio managers are ultimately responsible for the voting decisions within the strategies they manage.

They receive recommendations and support from a range of internal and external resources:

- The T. Rowe Price ESG Committee
- Our global industry analysts
- Our specialists in corporate governance and responsible investing
- Institutional Shareholder Services (ISS), our external proxy advisory firm

Our proxy voting program serves as one element of our overall relationship with corporate issuers. We use our voting power in a way that complements the other aspects of our relationship with these companies, including engagement, investment diligence, and investment decision-making.

Americas | 32,944 Management and Shareholder Proposals

Management Proposals	# of Proposals	% With Mgmt.
Elect Directors (Uncontested)	22,402	89.9%
Management Compensation: Say on Pay and Equity Plans	4,008	84.3%
Appoint Auditors/Approve Auditor Fees	3,399	99.2%
Routine Business and Operational Matters	1,076	70.5%
Capital Structure Items	740	75.7%
Other	763	70.1%
Total	**32,388**	

Shareholder Proposals	# of Proposals	% With Mgmt.
Social, Political, or Environmental Matters	185	68.1%
Adopt or Amend Shareholder Rights	169	82.2%
Related to Director Policies	103	68.0%
Related to Compensation Policies	28	82.1%
Related to Routine Business and Operational Matters	26	88.5%
Other	45	60.0%
Total	**556**	

APAC | 11,747 Management and Shareholder Proposals

Management Proposals	# of Proposals	% With Mgmt.
Elect Directors (Uncontested)	6,378	93.0%
Routine Business and Operational Matters	1,581	89.8%
Capital Structure Items	1,474	92.3%
Management Compensation: Say on Pay and Equity Plans	1,153	84.0%
Mergers and Acquisitions	482	88.4%
Other	500	98.0%
Total	**11,568**	

Shareholder Proposals	# of Proposals	% With Mgmt.
Social, Political, or Environmental Matters	62	91.9%
Related to Routine Business and Operational Matters	56	85.7%
Related to Auditors	29	100.0%
Related to Compensation Policies	17	76.5%
Capital Structure Items	7	100.0%
Other	8	62.5%
Total	**179**	

EMEA | 16,427 Management and Shareholder Proposals

Management Proposals	# of Proposals	% With Mgmt.
Elect Directors (Uncontested)	5,770	93.9%
Routine Business and Operational Matters	3,883	96.1%
Management Compensation: Say on Pay and Equity Plans	2,746	86.7%
Capital Structure Items	2,656	96.4%
Appoint Auditors/Approve Auditor Fees	832	97.7%
Other	390	94.6%
Total	**16,277**	

Shareholder Proposals	# of Proposals	% With Mgmt.
Related to Routine Business and Operational Matters	59	88.1%
Related to Auditors	34	100.0%
Social, Political, or Environmental Matters	30	63.3%
Related to Director Policies	23	100.0%
Related to Compensation Policies	4	100.0%
Other	-	N/A
Total	**150**	

As of December 31, 2021.

Shareholder Proposals in Focus

In 2021, the T. Rowe Price portfolios voted on 1,098 shareholder resolutions across all markets. Of those, 403 were situations where shareholders were nominating directors to a company's board. Another 372 were resolutions asking companies to adopt a specific corporate governance practice, and 323 were social and environmental resolutions.

Climate Resolutions Prominent

Climate-related shareholder resolutions were again prominent in 2021, particularly within high-impact industries, such as the energy, industrials, and financials sectors. The intensifying focus on climate, alongside new regulatory and industry initiatives, are working to compel greater levels of transparency from asset managers about their voting rationales. The most common resolutions filed in 2021 were those requiring companies to set targets to reduce greenhouse gas (GHG) emissions and to report on climate-related lobbying. Other climate-related topics addressed by these resolutions included subjects like waste management (e.g., plastic waste disposal and recycling initiatives) or proposals linked to deforestation.

> Two prominent themes for climate-related proposals were those requiring companies to set targets to reduce greenhouse gas emissions and to report on climate-related lobbying.

In addition to shareholder resolutions, the 2021 annual general meeting (AGM) season featured a number of "vote no" campaigns instigated at various U.S. utility and energy companies, where shareholders were encouraged to vote against directors at companies seen as laggards on climate issues. None of these ultimately proved successful and gained little support across the board.

Say on Climate

In 2021, we saw a marked increase in "say on climate" votes, where a company asks its shareholders to approve its climate strategy or transition plan via a nonbinding vote.

Under these proposals, companies are asked to provide (i) annual disclosure of emissions and a plan to manage those emissions and (ii) an annual advisory vote on the plan and performance relative to the plan. In practice, we have seen a range of implementation approaches. Some have proposed a triennial vote on the climate strategy instead of an annual vote on the reporting; other companies have offered both. Some companies adopted a "one and done" approach, while others are offering an ongoing commitment to holding a shareholder vote.

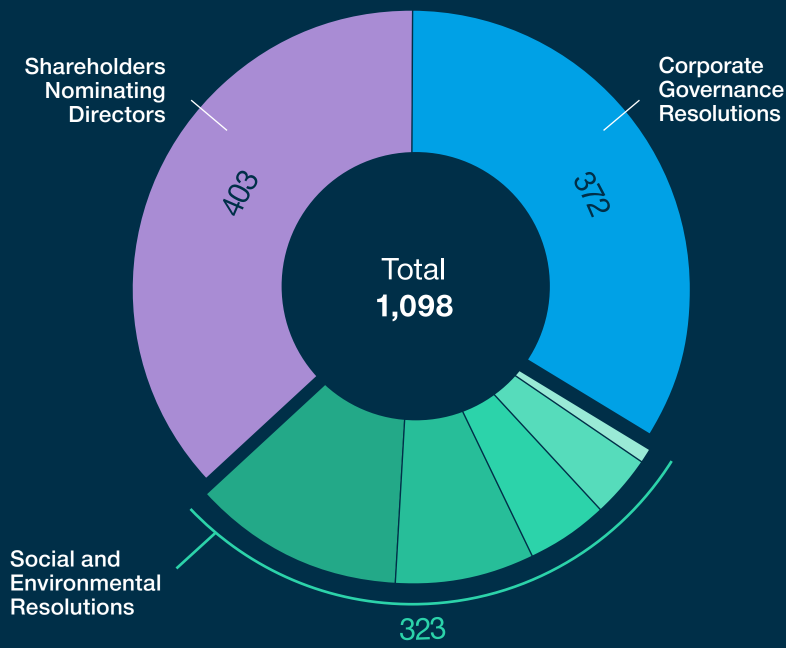
In some instances, the company has already agreed to undertake the say-on-climate exercise, so the vote takes the form of a management-sponsored proposal, with a board recommendation of "for." In other instances, the company has not agreed to implement say on climate, so the vote takes the form of a shareholder resolution. Say-on-climate proposals tended to find greater support in Europe than in North America.

Variable Quality of Resolutions

A wide range in the quality of shareholder proposals was again evident in 2021, particularly where the parameters allowing resolutions are less demanding. Resolutions filed by individual investors tend to be lower quality (less substantive, poorly targeted, or address issues that are not material), while those filed by large, institutional investors are usually more substantive and typically warrant more detailed consideration. The quality of the resolutions is often reflected in the overall regional support secured.

2021 Shareholder Resolutions by Topic

Number of shareholder resolutions we voted on in 2021 by proposal topic. For "Social and Environmental Resolutions" we classify the proposals into five separate categories.



	Social	Environmental	Political Spending and Lobbying	Anti-nuclear Power	Anti-ESG
Resolutions	**134**	**89**	**54**	**37**	**9**
Supported	20%	34%	32%	-	-
Opposed	79%	50%	68%	100%	100%
Abstained	-	7%	-	-	-
Elected not to vote due to share blocking*	1%	9%	-	-	-

A Thoughtful, Investment-Focused Framework

The quality, intent, and utility of shareholder resolutions on ESG matters are highly variable. Some well-targeted resolutions are extremely helpful in persuading companies to strengthen their management of certain risks, leading to improved outcomes for investors. Other resolutions are not helpful—we would even call them harmful—if the objectives of the proponent do not align with economically oriented, long-term investors. This is why we believe that the most responsible approach to voting such resolutions is to apply a thoughtful, investment-focused framework.

*Share blocking is a requirement in certain markets that impose liquidity constraints in order to exercise voting rights. We generally do not vote in these markets.
As of December 31, 2021.
Source: T. Rowe Price.

COLLABORATIONS

Collaborative Engagement

Industry collaboration can be a means of escalating a concern we have identified in an individual dialogue. The framework we use to determine participation in a collaborative engagement is illustrated below.

Five Key Considerations for Collaborative Engagement

ALIGNMENT	IMPACT POTENTIAL	RESOURCE FOCUS	PRACTICALITY	TANGIBILITY
How closely aligned is this engagement opportunity with our investment holdings? Does it include companies where we are significant shareholders?	Would our participation help the engagement initiative? Does it need a large asset manager merely to gain attention, or does it already have broad support?	Does the engagement make the most efficient use of our internally dedicated engagement resources?	Have we already undertaken the same engagement or very similar engagements unilaterally with success?	Is the scope of the collaborative engagement clear, and are we confident that it will not change over time?

Collaboration Highlights

In 2021, we joined the International Corporate Governance Network to strengthen our access to governance policy expertise in the international markets and the UK chapter of the 30% Club Investor Group to strengthen our work on diversity, equity, and inclusion.

We began supporting the Sustainability Accounting Standards Board (SASB) Alliance for improved ESG disclosure. We also initiated alignment with the Access to Medicine Index to aid us to hold pharmaceutical companies to account for equitable access to health care.

We joined the Global Impact Investing Network (GIIN) to support the launch of our new impact strategies and help develop our knowledge of market practice in this field.

Together with other members of Associacão Investidores no Mercado de Capitais (AMEC), in December 2021 we co-signed a letter to the president of the B3, the Brazilian stock exchange, and the chairman of the Securities and Exchange Commission of Brazil (CVM). The letter highlighted the increase in technical proxy voting difficulties experienced by foreign investors wishing to vote in the Brazilian market, and it offered specific suggestions for improvement.

In 2021 we increased both the number and the range of collaborative investor initiatives through which we undertook company engagements. For the first time, T. Rowe Price led a collaborative engagement, and we also began a formalized thematic engagement program. As part of the Asian Corporate Governance Association, we led a collaborative dialogue on governance and sustainability topics with a Japanese company and participated in another.

As part of a collaborative engagement with 17 other members of Farm Animal Investment Risk & Return (FAIRR), we issued letters to global food companies asking them to diversify their protein sources. The letters were tailored to each company's level of progress but generally encouraged better disclosure and practices related to sustainable proteins and the related supply chains.

Our head of corporate governance was elected chair of the Investor Stewardship Group in June 2021.

T. Rowe Price Has Joined or Led the Following Initiatives[1]

Organization	Description	Joined
Council of Institutional Investors (CII)	U.S. association of institutional investors, corporate issuers, and asset managers	1989
Principles for Responsible Investment (PRI)	Global initiative for responsible investment	2010
UK Stewardship Code	Public commitment to uphold stewardship principles for UK investors	2010
Japan Stewardship Code	Public commitment to uphold stewardship principles for Japanese investors	2014
Associacão Investidores no Mercado de Capitais (AMEC)	Association for minority investors in Brazil	2015
Asia Corporate Governance Association	Pan-Asian association for institutional investors	2016
UK Investor Forum	Collaborative engagement association for investors in UK companies (founding member)	2016
International Capital Markets Association (ICMA)	Aims to promote resilient well-functioning international and globally coherent cross-border debt securities markets, which are essential to fund sustainable economic growth and development	2017
Investor Stewardship Group (ISG)	Investors advocating for core governance principles for U.S. market participants (founding member)	2017
Japan Stewardship Initiative	Investor forum for stewardship solutions and sharing of best practices (founding member)	2019
Investment Association Climate Change Working Group	Group to direct the work of the UK investment management industry trade body in relation to climate change	2020
Institutional Investors Group on Climate Change (IIGCC)	European membership body for investor collaboration on climate change	2020
Emerging Markets Investors Alliance	Organization that facilitates investor advocacy to improve policies and practices of governments and companies in the emerging markets	2020
Task Force on Climate-Related Financial Disclosures (TCFD)	The Financial Stability Board created the TCFD to improve and increase reporting of climate-related financial information	2020
Responsible Investment Association Australasia (RIAA)	Champions responsible investing and a sustainable financial system in Australia and New Zealand	2020
Farm Animal Investment Risk & Return (FAIRR)	A collaborative investor network that raises awareness of the ESG risks and opportunities caused by intensive animal production	2020
PLSA Stewardship Advisory Group	Investor-led group providing practitioner insight on stewardship topics	2020
Access to Medicine Index	A tool for driving change in the pharmaceutical industry through the identification of best practices, tracking progress, and highlighting where critical action is needed to improve access to medicine for vulnerable populations	2021
TCFD Consortium (Japan)	Supports the TCFD in Japan by furthering the discussion on good practice related to climate-linked disclosures and endorsing better-informed investment decisions	2021
Global Impact Investing Network (GIIN)	Organization dedicated to increasing the scale and effectiveness of impact investing around the world	2021
Sustainability Accounting Standards Board (SASB) Alliance	Program designed for asset managers, asset owners, companies, and service providers to learn about the financial impact of ESG issues. It allows members to explore best practices to integrate material sustainability information into existing processes	2021
UN Global Compact	The world's largest corporate sustainability initiative. Its strategy drives business awareness and action in support of achieving the UN Sustainable Development Goals by 2030	2021
Investment Management Education Alliance (IMEA)ESG Committee	A forum exclusively for investment management firms to discuss multiple aspects of ESG investment and education	2021
30% Club Investor Group–UK Chapter	Global campaign led by chairs and CEOs taking action to increase gender diversity at board and executive committee levels	2021
International Corporate Governance Network (ICGN)	Investor-led initiative to provide highest standards of corporate governance and stewardship worldwide	2021
Net Zero Asset Managers initiative	International group of asset managers committed to supporting investing aligned with net zero emissions by 2050 or sooner	2022
ICMA Principles	Principles include Green Bond Principles, Social Bond Principles, Sustainability Bond Guidelines and Sustainability-Linked Bond Principles	2022

[1] As of April 2022. At least one T. Rowe Price Entity is a member of the above organizations.

RESOURCES

ESG Investment Resources*

Responsible Investing

MARIA ELENA DREW
Director of Research, Responsible Investing (London)

SUHA READ[1]
General Manager (London)

JOE BALDWIN
Associate Analyst (London)

DYLAN COTTER
Associate Analyst (Baltimore)

ASHLEY HOGAN
Associate Analyst (Baltimore)

NATALIE MCGOWEN
Associate Analyst (Baltimore)

IONA RICHARDSON
Associate Analyst (Hong Kong)

DANIEL RYAN
Associate Analyst (London)

DUNCAN SCOTT
Associate Analyst (London)

KAOUTAR YAICHE
Analyst (Baltimore)

MICHAEL RAY[1]
Senior Business Analyst (Baltimore)

Governance Team

DONNA ANDERSON
Head of Corporate Governance (Baltimore)

JOCELYN BROWN
Head of Governance, EMEA and APAC (London)

RYAN CHIANG
Governance Analyst (Baltimore)

KARA MCCOY
Governance Analyst (Baltimore)

Proxy Voting[2]

AMANDA FALASCO
Lead Manager (Baltimore)

PROXY VOTING OPERATIONS TEAM

Regulatory Research

KATIE DEAL
Washington Analyst (Baltimore)

MICHAEL PINKERTON
Associate Analyst (Baltimore)

* As of March 31, 2022. Not pictured - Matthew Lodge, Senior Business Analyst (London).
[1] Focused on operations and liaison with Distribution.
[2] Part of Investment Operations Group.

Impact Investing—Global Equity

HARI BALKRISHNA
Portfolio Manager (London)

CHRIS VOST
Investment Analyst (London)

Impact Investing—Global Credit

MATT LAWTON
Portfolio Manager (Baltimore)

WILLEM VISSER
Associate Portfolio Manager (London)

ELLEN O'DOHERTY
Impact Associate Analyst (London)

Investment Specialists[3]

VERONIQUE CHAPPLOW
ESG Investment Specialist (London)

PENNY AVRAAM
ESG Portfolio Analyst (London)

LAURENCE TAYLOR
Portfolio Specialist—Impact Investing, Global Equity (London)

FATNA CHELIHI
Senior Portfolio Analyst—Impact Investing, Global Equity (London)

MICHAEL GANSKE
Portfolio Specialist—Impact Investing, Global Credit (London)

BENJI BAXTER
Portfolio Analyst—Impact Investing, Global Credit (London)

T. Rowe Price Investment Management, Inc. (TRPIM)[4]

CHRIS WHITEHOUSE
Head of ESG, TRPIM (Washington, D.C.)

KEVIN KLASSEN
ESG Quantitative Analyst (Baltimore)

MOLLY SHUTT
Associate Analyst, Responsible Investing (Washington, D.C.)

BRANDON LEE
Associate Analyst, Responsible Investing (Washington, D.C.)

[3] Support with client interaction and communication.
[4] As of March, 7, 2022, the date that T. Rowe Price Associates, Inc. (TRPA) transitioned 6 of our well-established U.S. equity and fixed income investment strategies to a new, separate, SEC-registered U.S. investment adviser, T. Rowe Price Investment Management (TRPIM).

ESG Committee

The ESG Committee is predominantly composed of portfolio managers, including equity and fixed income. The role of the committee is to oversee the firm's:

- ESG policies (including proxy voting policy and exclusion policies)
- Implementation of ESG in investment processes
- Implementation of proxy voting policy
- Implementation of exclusion lists
- Impact investment framework

Donna F. Anderson
Cochair, Head of Corporate Governance

Maria Elena Drew
Cochair, Director of Research, Responsible Investing

Austin Applegate
Portfolio Manager, Municipal Bonds

Kamran Baig
Director of Equity Research, EMEA and Latin America

Hari Balkrishna
Portfolio Manager, Impact Investing - Global Equity

Oliver Bell
Associate Head, International Equity

R. Scott Berg
Portfolio Manager, Global Growth Equity

Jocelyn Brown
Head of Governance, EMEA and APAC

Archibald Ciganer
Portfolio Manager, Japan Equity

Anna M. Dopkin
Strategic Project Manager

Amanda Falasco
Lead Manager, Proxy Services

Divya Gopal
Credit Analyst

Ryan Hedrick
Associate Portfolio Manager, U.S. Large-Cap Equity

Arif Husain
Head of International Fixed Income

Michael Lambe
Associate Director of Research

Matt Lawton
Portfolio Manager, Impact Investing - Global Credit

Yoram Lustig
Head of EMEA Multi-Asset Solutions

Ryan Nolan
Senior Legal Counsel, Legal

Ken Orchard
Portfolio Manager, Global Fixed Income

Sally Patterson
General Manager, International Equity

Thomas Poullaouec
Head of Multi-Asset Solutions, APAC

Preeta Ragavan
Equity Investment Analyst

John C.A. Sherman
Equity Investment Analyst

Justin Thomson
Head of International Equities and CIO

Mitchell Todd
Portfolio Manager, UK Equity

Eric Veiel
Head of Global Equity and CIO

Willem Visser
Associate Portfolio Manager, Fixed Income ESG

Ernest Yeung
Portfolio Manager, Emerging Markets Discovery Equity

ENGAGEMENT DATA

2021 Engagements

ESG classifications of all company engagements conducted in 2021.

Company Name	Quarter	Environmental	Social	Governance
3M Co	4	●		●
Abcam PLC	1			●
	2			●
ABN AMRO Bank NV	1		●	●
ACADIA Pharmaceuticals Inc	1		●	●
Accenture PLC	3	●	●	●
Adani Ports & Special Economic Zone Ltd	3	●	●	
Adaro Energy Tbk PT	1	●	●	●
Aflac Inc	1	●	●	●
Afterpay Ltd	4			●
AGCO Corp	2			●
	4	●		●
Agile Group Holdings Ltd	4	●	●	●
Air Liquide SA	4			●
AJ Bell PLC	1		●	
Alaska Air Group Inc	1	●	●	●
Albemarle Corp	4	●	●	●
Alcon Inc	2			●
	4			●
Alexandria Real Estate Equities Inc	1		●	●
Alibaba Group Holding Ltd	1	●	●	●
Alicorp SAA	2	●	●	
Alkermes PLC	2			●
Allbirds Inc	3			●
Alnylam Pharmaceuticals Inc	2			●
Alphabet Inc	2			●
ALS Ltd	2	●		●
Amadeus IT Group SA	2			●
Amazon.com Inc	2			●
	4	●	●	●
Ambev SA	4		●	
Ambu A/S	4			●
Ambuja Cements Ltd	3	●		
Amcor PLC	2	●		●
Ameren Corp	1	●	●	●
	4	●		
American Campus Communities Inc	4	●		●
American International Group Inc	2			●
	3	●	●	●
American Water Works Co Inc	4	●	●	
Amgen Inc	4	●	●	●
Amorepacific Corp	1			●
Amphenol Corp	2			●
	2	●	●	●
Analog Devices Inc	4	●		●
Anaplan Inc	1		●	●
Anglo American PLC	2	●		
	3	●	●	
Antofagasta PLC	3			●
APA Corp	4	●	●	●
Apartment Income REIT Corp	1			●
Apple Inc	4		●	
Applied Materials Inc	1			●
	4	●		●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Aptiv PLC	2			●
	4	●	●	●
Argenx SE	1			●
Aristocrat Leisure Ltd	4			●
Armstrong World Industries Inc	4	●		
Array Technologies Inc	2			●
Aruhi Corp	2	●	●	●
Asahi Co Ltd	1	●	●	
Asahi Kasei Corp	4	●		●
Ascendis Pharma A/S	2			●
Ascential PLC	1			●
Ashtead Group PLC	1			●
	2			●
ASML Holding NV	2	●	●	
ASOS PLC	1	●	●	●
	2			●
	3			●
	4			●
	4			●
Assurant Inc	4	●	●	●
Astellas Pharma Inc	1	●	●	
Astral Ltd	3			●
AstraZeneca PLC	4			●
Asurion LLC	3		●	●
AT&T Inc	4		●	●
Atlantic Capital Bancshares Inc	2			●
Atrion Corp	2			●
Auction Technology Group PLC	4			●
Australia & New Zealand Banking Group Ltd	2	●		
AvalonBay Communities Inc	1		●	●
Avantium N.V.	1	●		
Avery Dennison Corp	4	●	●	●
Aviva PLC	4			●
Axis Capital Holdings Ltd	2			●
	4			●
AZZ Inc	4	●		●
Banco Santander Chile	3			●
Bangkok Bank PCL	1		●	
Bank Leumi Le-Israel BM	1	●	●	
Bank of America Corp	2	●	●	●
	4	●		●
Bank Rakyat Indonesia Persero Tbk PT	1		●	●
BankUnited Inc	1		●	●
Barclays PLC	1	●		
Barrick Gold Corp	4	●	●	●
Barry Callebaut AG	2	●	●	
	3			●
Bayer AG	1			●
Becton Dickinson and Co	3	●	●	●
Bharat Forge Ltd	2		●	
	3			●
BHP Group Ltd	2			●
	4			●
Bill.com Holdings Inc	4	●	●	●
Biogen Inc	3			●
Black Knight Inc	2			●
	4			●
Bluebird Bio Inc	2			●
	2			●
BNP Paribas SA	2			●
Boeing Co/The	2			●
boohoo Group PLC	1			●
	2		●	●
Booking Holdings Inc	4	●	●	●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Booz Allen Hamilton Holding Corp	2	●	●	
Boston Beer Co Inc/The	4	●	●	●
BP PLC	1	●		●
Braskem SA	3	●	●	●
Bridgepoint Group PLC	4			●
Brighthouse Financial Inc	4	●	●	●
Brink's Co/The	2			●
	2			●
	3		●	●
British American Tobacco PLC	2	●	●	
Britvic PLC	3	●	●	
	3			●
Brixmor Property Group Inc	4	●		●
Broadcom Inc	1	●	●	●
Brookfield Renewable Partners LP	3	●		
Budweiser Brewing Co APAC Ltd	2	●		
Bunge Ltd	1	●	●	●
Bunka Shutter Co Ltd	2			●
Burberry Group PLC	2			●
	3			●
Cadence Design Systems Inc	2			●
	4	●	●	●
Cairn Homes PLC	1			●
Camden Property Trust	3	●	●	
Capitec Bank Holdings Ltd	2			●
Cardinal Health Inc	1		●	●
	3		●	●
	4			●
CareDx Inc	2			●
Carnival Corp	4	●	●	●
Carrefour SA	1	●	●	
Casey's General Stores Inc	3	●	●	●
Casino Guichard Perrachon SA	1	●	●	
Caterpillar Inc	2			●
	4	●		●
Cboe Global Markets Inc	4			●
CCR SA	1	●	●	●
Cedar Realty Trust Inc	1		●	●
Centene Corp	2		●	●
	4	●	●	●
	4			●
CenterPoint Energy Inc	4	●		●
Ceridian HCM Holding Inc	3			●
Challenger Ltd	2	●	●	●
Chevron Corp	2			●
	4	●		●
China Mengniu Dairy Co Ltd	4	●	●	
China Resources Gas Group Ltd	1	●	●	●
Chipotle Mexican Grill Inc	2			●
	4	●	●	●
Chubb Ltd	2			●
	4	●	●	●
Churchill Downs Inc	2			●
Cia de Minas Buenaventura SAA	4	●	●	
Cie de Saint-Gobain	2	●	●	
Cie Financiere Richemont SA	1	●		●
Cigna Corp	4			●
Cinemark Holdings Inc	1		●	●
CIRCOR International Inc	4			●
Citizens Financial Group Inc	3			●
Clarivate PLC	1			●
Close Brothers Group PLC	2			●
	2			●
Coles Group Ltd	1	●	●	

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Colfax Corp	2			●
Colgate-Palmolive Co	3			●
Colgate-Palmolive India Ltd	4			●
Compass Group PLC	3			●
Conagra Brands Inc	1	●	●	
ConocoPhillips	2			●
	4	●	●	●
Constellium SE	1			●
	2			●
Corning Inc	4	●	●	●
Costco Wholesale Corp	1	●	●	
Country Garden Holdings Co Ltd	3	●	●	●
Coupa Software Inc	1	●	●	●
	4		●	●
Coupang Inc	2		●	
	2		●	●
Covestro AG	4			●
Credicorp Ltd	2		●	●
CreditAccess Grameen Ltd	3			●
CRISPR Therapeutics AG	2			●
CrossFirst Bankshares Inc	2			●
Crown Castle International Corp	4	●	●	●
CSL Ltd	3			●
CSX Corp	4	●		●
Cummins Inc	2			●
CVS Health Corp	2			●
	4		●	●
Daiichi Sankyo Co Ltd	1		●	
Danaher Corp	1	●	●	●
Danone SA	1	●		
Dar Al Arkan Real Estate Development Co	1	●	●	●
Darling Ingredients Inc	4	●	●	●
Dassault Aviation SA	2			●
DBS Group Holdings Ltd	3	●	●	
DCC PLC	3	●		●
Deere & Co	2	●	●	
Deliveroo PLC	2		●	●
	2		●	●
Delivery Hero SE	2			●
	3		●	●
Delta Air Lines Inc	2			●
	4	●	●	●
DENTSPLY SIRONA Inc	2	●	●	●
Derwent London PLC	2			●
Devon Energy Corp	4	●	●	●
Diageo PLC	2	●	●	
Dlocal Ltd/Uruguay	3		●	●
DocuSign Inc	1		●	●
Dollar General Corp	2	●	●	
	4	●	●	●
Dollar Tree Inc	1	●		●
Dominion Energy Inc	2			●
	4	●	●	
Domino’s Pizza Inc	1			●
Downer EDI Ltd	4		●	●
Dr. Martens Plc	3			●
DraftKings Inc	1	●	●	●
DTE Energy Co	2			●
East African Breweries Ltd	2	●	●	
Ecopetrol SA	3	●		
Ecovyst Inc	3	●	●	●
Edenred	1			●
Elanco Animal Health Inc	4	●	●	●
Element Solutions Inc	1	●	●	●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Enanta Pharmaceuticals Inc	1			●
Energy Transfer Operating LP	2	●		
Entergy Corp	1	●	●	●
	4	●	●	●
Equifax Inc	4	●	●	
Equitable Holdings Inc	4			●
Equity Residential	4	●	●	●
Essent Group Ltd	4			●
EssilorLuxottica SA	4		●	
Estee Lauder Cos Inc/The	2	●	●	
Etsy Inc	1	●	●	●
Eurofins Scientific SE	2			●
Evotec SE	2			●
Evraz PLC	3	●		
Exact Sciences Corp	2			●
Exelixis Inc	4		●	●
Exelon Corp	4	●	●	●
Exxon Mobil Corp	1	●		●
	2	●		●
Fidelity National Information Services Inc	3	●	●	●
Fifth Third Bancorp	3		●	●
First Abu Dhabi Bank PJSC	1	●		
FirstEnergy Corp	1	●	●	●
FirstRand Ltd	2			●
	2			●
	3	●		
	4			●
Five Below Inc	2			●
	4	●	●	●
FleetCor Technologies Inc	1		●	●
Fortinet Inc	2			●
	4	●	●	●
Fortive Corp	4	●	●	●
Freeport-McMoRan Inc	4	●	●	●
Fresenius SE & Co KGaA	4			●
Freshpet Inc	3			●
Frontier Developments PLC	1			●
	1		●	●
Funding Circle Holdings PLC	1			●
	1			●
Galapagos NV	2			●
Galaxy Entertainment Group Ltd	2	●	●	●
Galp Energia SGPS SA	1	●		●
Gazprom PJSC	3	●		
GEA Group AG	1		●	●
General Electric Co	2			●
	4	●		●
General Motors Co	2			●
Genuit Group PLC	1			●
GlaxoSmithKline PLC	1			●
	4			●
	4		●	●
Glencore PLC	2	●	●	●
Global Blood Therapeutics Inc	1		●	●
	2			●
	4		●	●
Globo Comunicacao e Participacoes SA	3	●	●	●
GLP Pte Ltd	2	●	●	●
Godrej Consumer Products Ltd	3			●
Goldman Sachs Group Inc/The	2			●
Goodman Group	4			●
Great Portland Estates PLC	1	●		
Groupe Bruxelles Lambert SA	2			●
	4			●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Gruenenthal Pharma GmbH & Co KG	3		●	●
Grupo SBF SA	4	●	●	
Guangzhou R&F Properties Co Ltd	4	●	●	
Guardant Health Inc	1			●
	2			●
	4			●
Haier Smart Home Co Ltd	1		●	
Halliburton Co	2			●
	4	●	●	●
Halma PLC	3			●
Hamamatsu Photonics KK	4			●
Hanger Inc	4	●	●	●
Hannon Armstrong Sustainable Infrastructure Capital Inc	4	●	●	●
Hartford Financial Services Group Inc/The	4	●	●	●
HCA Healthcare Inc	1		●	●
HDFC Bank Ltd	3		●	
HeidelbergCement AG	2	●		
Helios Towers PLC	1			●
Heritage Financial Corp/WA	4	●	●	●
Hess Corp	4	●	●	●
Hillenbrand Inc	1	●		●
Hilton Worldwide Holdings Inc	2			●
	4	●	●	●
Hitachi Ltd	1		●	
Hologic Inc	4		●	●
Home BancShares Inc/AR	2			●
HomeServe PLC	2			●
Hon Hai Precision Industry Co Ltd	4	●	●	●
Honeywell International Inc	3	●	●	
Hoshino Resorts REIT Inc	3	●	●	
Hoshizaki Corp	4	●	●	●
Host Hotels & Resorts Inc	4	●	●	●
Howmet Aerospace Inc	2			●
	4	●	●	●
HSBC Holdings PLC	1	●		●
Huazhu Group Ltd	4	●		
Hubbell Inc	4	●	●	●
HubSpot Inc	4		●	●
Humana Inc	3	●	●	●
Huntington Bancshares Inc/OH	4	●	●	●
Hyundai Motor Co	1	●	●	●
IAC/InterActiveCorp	1	●	●	
	2			●
Iberdrola SA	2	●		●
	3		●	●
ICICI Bank Ltd	3	●	●	●
	3	●	●	●
IDP Education Ltd	1			●
Illinois Tool Works Inc	1	●	●	●
Imperial Brands PLC	1			●
	2			●
Incyte Corp	2			●
	4	●	●	●
Indorama Ventures PCL	1	●		●
Informa PLC	1			●
	2			●
	4			●
Infosys Ltd	3	●	●	
ING Groep NV	4	●	●	
Integrated Diagnostics Holdings PLC	2			●
Intelbras SA Industria de Telecomunicacao Eletronica Brasileira	2		●	
Interchile SA	4	●	●	●
Intercontinental Exchange Inc	4			●
International Container Terminal Services Inc	4	●	●	●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Investec Ltd	3	●		●
Investec PLC	1			●
	3	●		●
IRSA Propiedades Comerciales SA	2	●	●	
J Sainsbury PLC	1	●	●	
Japan Tobacco Inc	4		●	●
Jardine Matheson Holdings Ltd	1	●	●	●
JBG SMITH Properties	2			●
JBS SA	1	●		
JD Sports Fashion PLC	1	●	●	
	1			●
	1			●
JFE Holdings Inc	1	●	●	●
Jiangsu Hengrui Medicine Co Ltd	2	●	●	●
Johnson & Johnson	2			●
	4			●
Johnson Matthey PLC	2			●
JPMorgan Chase & Co	2			●
	2	●		
	4	●		●
Julius Baer Group Ltd	4			●
Kerry Group PLC	1	●	●	
Keysight Technologies Inc	3	●	●	●
Keywords Studios PLC	1			●
Kilroy Realty Corp	1	●		●
Kimco Realty Corp	4	●		●
Kingfisher PLC	2			●
	4			●
Kodiak Sciences Inc	4			●
Kohl's Corp	1			●
	4		●	●
Koninklijke Ahold Delhaize NV	1	●	●	
Koninklijke Philips NV	2			●
Korn Ferry	3			●
	4	●	●	●
Kosmos Energy Ltd	2	●		
	4	●		
Kraft Foods Group Inc	1	●	●	
Kraft Heinz Co/The	1		●	●
	4	●	●	●
Kerry Group PLC	1	●	●	
Land & Houses PCL	4		●	●
Larsen & Toubro Ltd	3			●
	3	●	●	
Lazard Ltd	2			●
LCI Industries	2			●
Legacy LifePoint Health LLC	3	●	●	●
LG Household & Health Care Ltd	1			●
Linde PLC	3			●
	3	●		●
	4	●		●
Live Oak Bancshares Inc	2			●
LL Flooring Holdings Inc	3	●	●	●
Lloyds Banking Group PLC	1			●
	4		●	●
Loews Corp	4		●	●
Lonza Group AG	4	●	●	●
Macquarie Group Ltd	3			●
	3	●		
Marel HF	1	●	●	●
Marfrig Global Foods SA	1	●		
MarketAxess Holdings Inc	3	●	●	●
Marsh & McLennan Cos Inc	4	●	●	●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Mastercard Inc	1	●	●	●
	3			●
Matador Resources Co	4	●		●
Match Group Inc	1	●	●	
Matson Inc	4	●		●
Mattel Inc	4			●
McDonald's Corp	2			●
	4	●	●	●
McKesson Corp	3	●	●	●
Medley Inc	3	●	●	●
Melrose Industries PLC	4	●		●
Merck & Co Inc	2			●
	4	●	●	●
Metalloinvest Finance DAC	3	●		
MGM Resorts International	2			●
	4		●	●
Microsoft Corp	4			●
Minerva SA/Brazil	1	●		
Mirati Therapeutics Inc	4	●	●	●
Mitsubishi Corp	1	●		●
Mitsubishi Electric Corp	4		●	
Mitsubishi UFJ Financial Group Inc	2	●		●
	4	●		●
Mitsui Fudosan Co Ltd	4	●		●
	4			●
MKS Instruments Inc	1		●	●
Moderna Inc	1	●	●	●
Molten Ventures PLC	1	●	●	
	3			●
Mondelez International Inc	4	●	●	●
Moncler SpA	2			●
MongoDB Inc	1			●
	2			●
	4		●	
Monro Inc	4			●
Morgan Stanley	3	●	●	●
MorphoSys AG	1			●
	4			●
Moscow Exchange MICEX-RTS PJSC	1		●	●
Motorola Solutions Inc	4		●	
Mowi ASA	2	●	●	
MSCI Inc	4	●	●	●
	4	●		
Mueller Water Products Inc	4	●	●	●
Munich RE	4			●
Myers Industries Inc	1	●	●	●
NARI Technology Co Ltd	2	●	●	
Nasdaq Inc	1		●	●
	1	●	●	
Naspers Ltd	1			●
	3			●
National Australia Bank Ltd	2		●	●
National CineMedia Inc	2			●
National Express Group PLC	3			●
National Fuel Gas Co	4	●		●
National Grid PLC	2			●
National Instruments Corp	4			●
NAVER Corp	4	●	●	
Nestle SA	1	●	●	
Netflix Inc	4	●	●	●
Network International Holdings PLC	2			●
	4	●	●	●
Neurocrine Biosciences Inc	2			●
New World Development Co Ltd	1	●	●	●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Nextdoor.com Inc	4			●
NextEra Energy Inc	2	●		●
	4		●	●
NexTier Oilfield Solutions Inc	2			●
Nielsen Holdings PLC	1		●	●
NIKE Inc	1			●
	3		●	●
Ninety One PLC	1			●
	3	●		●
Nippon Paint Holdings Co Ltd	4	●	●	●
Nippon Telegraph & Telephone Corp	1	●	●	●
NiSource Inc	3	●	●	●
NN Group NV	1	●	●	
Nordstrom Inc	1	●	●	●
Norfolk Southern Corp	2			●
	4	●	●	●
Northern Star Resources Ltd	3			●
Northrop Grumman Corp	4	●	●	●
Novartis AG	2			●
Novocure Ltd	4		●	●
Novolipetsk Steel PJSC	3	●		
NVIDIA Corp	4	●	●	
NVR Inc	3	●	●	
NXP Semiconductors NV	1		●	●
	1	●		●
	4	●	●	●
Oak Street Health Inc	2			●
Ocado Group PLC	2			●
	3	●	●	
	4			●
Okta Inc	4	●	●	●
Ontex Group NV	1			●
	1			●
Oportun Financial Corp	1		●	
O'Reilly Automotive Inc	1	●	●	●
Ortho Clinical Diagnostics Holdings PLC	4	●	●	●
Otsuka Holdings Co Ltd	1		●	
Oxford Nanopore Technologies PLC	4	●	●	●
PACCAR Inc	2			●
Pacific Premier Bancorp Inc	4		●	●
Park Hotels & Resorts Inc	2			●
Paycom Software Inc	2			●
	4	●	●	●
PayPal Holdings Inc	4	●	●	●
Pennant Group Inc/The	2			●
PepsiCo Inc	2			●
PerkinElmer Inc	4	●		●
Persol Holdings Co Ltd	2			●
Petco Health & Wellness Co Inc	4	●		●
Petroleo Brasileiro SA	3	●	●	
Petroleos Mexicanos	4	●		
Pfizer Inc	2			●
	4		●	●
Playtech Plc	3			●
PNM Resources Inc	2			●
Polycab India Ltd	3			●
Portland General Electric Co	4	●		●
POSCO	1			●
PPG Industries Inc	2			●
	3	●	●	●
Prologis Inc	1			●
	1	●	●	●
	2			●
	4	●		

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
ProSight Global Inc	1			●
Prosus NV	3			●
Prothena Corp PLC	4	●	●	●
Prysmian SpA	1			●
PTC Inc	1			●
PTT Exploration & Production PCL	2	●	●	●
PTT Global Chemical PCL	4	●	●	
Public Service Enterprise Group Inc	1	●	●	●
QUALCOMM Inc	3			●
Ralph Lauren Corp	4	●	●	●
RBC Bearings Inc	3			●
RealReal Inc/The	1	●	●	●
Reata Pharmaceuticals Inc	2			●
Recruit Holdings Co Ltd	1		●	
	4		●	●
Red Robin Gourmet Burgers Inc	4	●	●	●
Regeneron Pharmaceuticals Inc	2			●
	4		●	●
Rentokil Initial PLC	1			●
	2			●
	4			●
Repsol SA	4	●		
REX American Resources Corp	2			●
RH	3			●
Rio Tinto Ltd	1	●	●	●
	1	●	●	●
Rivian Automotive Inc	2	●	●	
RLX Technology Inc	1		●	●
Rockwell Automation Inc	4	●	●	
ROCKWOOL International A/S	1	●		●
	1	●	●	●
	4	●	●	●
Ronshine China Holdings Ltd	4	●	●	●
Roper Technologies Inc	3	●	●	
Rosneft Oil Co PJSC	4	●		
Rotork PLC	2			●
RWS Holdings PLC	1			●
	4		●	●
Sage Therapeutics Inc	1			●
Samsung Electronics Co Ltd	1		●	●
Sanofi	2			●
	4			●
Sarepta Therapeutics Inc	1			●
Sasol Ltd	1	●	●	●
Saudi Arabian Oil Co	2	●	●	
Saudi National Bank/The	4	●	●	●
SBA Communications Corp	4	●	●	
Sberbank of Russia PJSC	3	●	●	
Scentre Group	1			●
Schneider Electric SE	2	●	●	
Seagen Inc	4			●
SEB SA	1			●
	3			●
Select Medical Holdings Corp	2			●
Sempra Energy	2			●
Semtech Corp	4	●	●	●
Sensirion Holding AG	2			●
ServiceNow Inc	3			●
	4	●	●	●
Seven & i Holdings Co Ltd	1	●	●	●
Severstal PAO	3	●		
Shimadzu Corp	4	●	●	●
Shinhan Financial Group Co Ltd	3	●	●	●
Shockwave Medical Inc	2			●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Shop Apotheke Europe NV	4	●	●	●
Shopify Inc	4	●		●
Shoprite Holdings Ltd	4			●
Siemens AG	4		●	●
Siemens Healthineers AG	1			●
Signature Bank/New York NY	4	●	●	●
SITC International Holdings Co Ltd	1			●
SiteOne Landscape Supply Inc	4	●	●	●
Skyworks Solutions Inc	2			●
	4	●	●	●
SL Green Realty Corp	1		●	●
	4			●
Smith & Nephew PLC	1			●
Smiths Group PLC	3			●
Snap Inc	1	●	●	
South32 Ltd	2	●		
	3	●		●
Southern Co/The	2	●		
	4	●		●
Splunk Inc	1		●	●
	2			●
Sprouts Farmers Market Inc	1	●	●	●
SPX Corp	1	●	●	●
SS&C Technologies Holdings Inc	1			●
SSP Group Plc	4			●
Starbucks Corp	1			●
	3			●
	4		●	●
State Bank of India	1	●		
State Street Corp	4	●	●	●
Steadfast Group Ltd	4			●
Steel Dynamics Inc	4	●	●	
Stericycle Inc	4	●	●	●
StoneCo Ltd	3		●	
Stora Enso Oyj	3	●		
Strategic Education Inc	2			●
	2			●
Sumitomo Corp	2	●		●
Summit Materials Inc	2			●
	4	●	●	●
Swedbank AB	2	●	●	●
Swire Properties Ltd	2	●	●	●
Sysco Corp	3	●	●	●
Taiheiyo Cement Corp	3	●		●
Taiwan Semiconductor Manufacturing Co Ltd	4	●		
Takeda Pharmaceutical Co Ltd	1			●
	2			●
Telefonaktiebolaget LM Ericsson	2	●	●	
Telefonica Deutschland Holding AG	3	●	●	
Teleperformance	1		●	●
	2		●	●
	3		●	
Tencent Holdings Ltd	4		●	
Tesco PLC	1	●	●	
Tetra Tech Inc	4	●	●	●
Texas Capital Bancshares Inc	4		●	●
Texas Instruments Inc	3	●	●	●
Texas Roadhouse Inc	2			●
Textron Inc	2			●
	2			●
	4	●	●	●
Thai Oil PCL	4	●		
Thales SA	1			●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
THG PLC	1	●		●
	4			●
Times China Holdings Ltd	4	●	●	●
TJX Cos Inc/The	3	●	●	●
TMK PJSC	3	●		
TMX Group Ltd	3	●		
Torrent Pharmaceuticals Ltd	1	●	●	●
	3			●
TotalEnergies SE	2			●
Toyota Motor Corp	3			●
Tractor Supply Co	4	●	●	●
Trainline PLC	1			●
	1			●
Transaction Capital Ltd	1			●
	2		●	●
TransUnion	4		●	●
Transurban Group	4			●
Treasury Wine Estates Ltd	2			●
TreeHouse Foods Inc	1		●	●
Trex Co Inc	4	●		
TRG Pakistan	4		●	
Trimble Inc	4	●		
Truist Financial Corp	1		●	●
Turkiye Sise ve Cam Fabrikalari AS	1	●	●	●
Turning Point Therapeutics Inc	4			●
Twilio Inc	2			●
Tyman PLC	1			●
UBS AG	4	●		●
UBS Group AG	1		●	●
Ukrainian Railway	3			●
	4	●	●	
Ultragenyx Pharmaceutical Inc	1	●	●	●
Unilever PLC	1	●	●	
	2	●		
	4			●
United Parcel Service Inc	1		●	●
United Rentals Inc	4	●	●	●
United Therapeutics Corp	3			●
Upwork Inc	1		●	●
	3	●	●	●
Van Lanschot Kempen NV	1			●
Verisk Analytics Inc	4	●		●
Vertex Pharmaceuticals Inc	2			●
Victorian Plumbing Group PLC	4			●
Virtus Investment Partners Inc	1	●	●	●
Visa Inc	3		●	●
Vnet Group Inc	4	●	●	
Vodafone Group PLC	1	●		●
Volcan Cia Minera SAA	1	●	●	●
Volkswagen AG	2	●	●	●
Vonovia SE	1	●	●	
VPG NV	1	●		●
Vulcan Materials Co	1	●	●	●
Wal-Mart de Mexico SAB de CV	1	●	●	●
Walmart Inc	1	●	●	●
Walt Disney Co/The	1		●	●
	4	●	●	●
Warby Parker Inc	2			●
Waste Connections Inc	2	●		
Weir Group PLC/The	1			●
	4			●
Wells Fargo & Co	1	●	●	●
	2			●
	4	●	●	●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Company Name	Quarter	Environmental	Social	Governance
Wesfarmers Ltd	4		●	
West China Cement Ltd	4	●	●	●
Westlake Corp	4	●	●	●
Westpac Banking Corp	4			●
WEX Inc	2			●
Weyerhaeuser Co	4	●		
Whitbread PLC	2			●
	4			●
Williams Cos Inc/The	1	●	●	●
Wilmar International Ltd	3	●	●	
Winmark Corp	2	●	●	
Wizz Air Holdings Plc	3			●
Woolworths Group Ltd	1	●	●	
	2	●	●	
Worley Ltd	4			●
WPP PLC	2			●
Wynn Resorts Ltd	2			●
X5 Retail Group NV	2			●
Xero Ltd	3			●
Xylem Inc/NY	1		●	●
Yoma Strategic Holdings Ltd	1		●	
Yum China Holdings Inc	1		●	●
	4	●	●	●
Yum! Brands Inc	3			●
Zalando SE	1			●
	1	●		
Zebra Technologies Corp	3		●	●
Zomato Ltd	3			●
Zurich Insurance Group AG	1	●		
	4	●	●	
	4	●		●
Zynga Inc	2			●

The specific securities identified and described are for informational purposes only and do not represent securities purchased, sold or recommended by T. Rowe Price. No assumption should be made that the securities identified were or will be profitable.

Risks

International investments can be riskier due to the adverse effects of currency exchange rates, differences in market structure and liquidity, as well as specific country, regional, and economic developments. The risks of international investing are heightened for investments in emerging market and frontier market countries. Emerging and frontier market countries tend to have economic structures that are less diverse and mature, and political systems that are less stable, than those of developed market countries.

The value approach to investing carries the risk that the market will not recognize a security's intrinsic value for a long time or that a stock judged to be undervalued may actually be appropriately priced.

Fixed income securities are subject to credit risk, liquidity risk, call risk, and interest rate risk.

As interest rates rise, bond prices generally fall. Investments in high yield bonds involve greater risk of price volatility, illiquidity, and default than higher-rated debt securities.

Impact investing strategies may not succeed in generating a positive environmental and/or social impact. The incorporation of environmental and/or social impact criteria into an investment process may cause a strategy to perform differently from a strategy that uses a different methodology to identify and/or incorporate environmental and/or social impact criteria or relies solely or primarily on financial metrics.

There is no assurance that an investment objective will be achieved.

Index data is for illustrative purposes only and is not indicative of any specific investment. Investors cannot invest directly in an index.

Additional Disclosures

MSCI and its affiliates and third party sources and providers (collectively, "MSCI") makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI. Historical MSCI data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. None of the MSCI data is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.

Important Information

This material is being furnished for general informational and/or marketing purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, nor is it intended to serve as the primary basis for an investment decision. Prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services.. **Past performance is not a reliable indicator of future performance.** The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request.

It is not intended for distribution to retail investors in any jurisdiction.

Australia—Issued in Australia by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia.

Canada—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

EEA—Unless indicated otherwise this material is issued and approved by T. Rowe Price (Luxembourg) Management S.à r.l. 35 Boulevard du Prince Henri L-1724 Luxembourg which is authorised and regulated by the Luxembourg Commission de Surveillance du Secteur Financier.

Hong Kong—Issued by T. Rowe Price Hong Kong Limited, 6/F, Chater House, 8 Connaught Road Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission.

Japan—Issued in Japan by T. Rowe Price Japan, Inc. (KLFB Registration No. 3043 (Financial Instruments Service Provider), Members of JIAA and JITA), located at GranTokyo South Tower 10F, 9-2, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-6610. This material may not be disseminated without the prior approval of T. Rowe Price Japan, Inc..

New Zealand—Issued in New Zealand by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Singapore—Issued in Singapore by T. Rowe Price Singapore Private Ltd. (UEN: 201021137E), No. 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore.

Switzerland—Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland.

UK—This material is issued and approved by T. Rowe Price International Ltd, 60 Queen Victoria Street, London, EC4N 4TZ which is authorised and regulated by the UK Financial Conduct Authority.

USA—Issued in the USA by T. Rowe Price Associates, Inc., 100 East Pratt Street, Baltimore, MD, 21202, which is regulated by the U.S. Securities and Exchange Commission.

© 2022 T. Rowe Price. All Rights Reserved. T. ROWE PRICE, INVEST WITH CONFIDENCE, and the Bighorn Sheep design are, collectively and/or apart, trademarks of T. Rowe Price Group, Inc. SUSTAINABILITY WITH SUBSTANCE is a trademark of T. Rowe Price Group, Inc.

INVEST WITH CONFIDENCE®

T. Rowe Price focuses on delivering investment management excellence that investors can rely on—now and over the long term.

CCON0105197
202205-2162137