



T. ROWE PRICE

INVESTMENT POLICY ON CLIMATE CHANGE

UPDATED AS OF FEBRUARY 2022

BACKGROUND

For the world to have a chance of at least minimizing the impact of climate change, it is necessary to keep global temperatures to within +1.5°C from preindustrial levels. To experience less severe impacts from climate change, global temperatures need to stay within +2.0°C. The United Nations' Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate Change found that keeping the global temperature rise to 1.5°C would require a 45% reduction in net emissions by 2030 and net zero emissions by 2050. Keeping to +2.0°C would require a 25% reduction in emissions by 2030 and net zero emissions by 2070.

The generally accepted estimate is that human activities created 1,900 GtCO2 of cumulative greenhouse gas (GHG) emissions since the preindustrial period and caused a +1.0°C rise in global temperature as of 2017. Given that GHGs absorb heat and release it gradually over time (like bricks in a fireplace after the fire goes out), we know that past emissions have yet to be fully reflected in global temperatures. The IPCC estimates that past emissions will likely result in a less than +0.5°C increase in global mean standard temperature (GMST) over the next 20 to 30 years (i.e., if all GHG emissions had stopped in 2018, we would likely experience less than +1.5°C from preindustrial levels). Of course, the world did not stop emitting GHGs in 2018, and it is not reasonable to expect net zero carbon emissions in the short term, so the science indicates that keeping the GMST rise to less than +1.5°C will be extremely challenging, if not impossible.

The probability that our investments will need to be capable of adapting to either a $\pm 1.5^{\circ}$ C or $\pm 2.0^{\circ}$ C scenario is high. Even keeping global warming within these parameters means there will be climate change impacts that will affect the investment landscape, such as rising sea levels, increased storm frequency, hotter and more frequent heat waves, and shifts in growing seasons. Potentially even more material to many investment cases is how the regulatory landscape would evolve to meet a $\pm 1.5^{\circ}$ C or $\pm 2.0^{\circ}$ C scenario. In its 2019 Global Warming of 1.5° C report, the IPCC aggregates the various scientific climate models that keep global warming within a $\pm 1.5^{\circ}$ C pathway. Taking the midpoint of these models implies a massive reengineering of the world's energy infrastructure, including significant energy efficiency gains as well as transitioning away from fossil fuels and into renewables between now and 2050. In a 1.5° C pathway, some fossil fuels can remain so long as they can be absorbed by forests, other vegetation, and soils or through man-made carbon capture, but the amount of primary energy generated from fossil fuels is greatly reduced.

How our investments are positioned to navigate climate change is a key concern for our analysts and portfolio managers. We believe it is part of our fiduciary duty to understand how our investee companies are assessing their exposure to climate change and are building environmental sustainability into their long-term strategic planning. Similarly, we seek to understand the impact climate change will have on sovereign and other issuers. We believe that almost the entire investment universe will feel some impacts of climate change—through revenues, sourcing, or their cost structure—and those that can create economic value with a low or zero carbon footprint will be better positioned than their peers in a world of rising environmental regulation.

INTEGRATION OF CLIMATE RISK ASSESSMENT INTO INVESTMENT PROCESS

Our practice at T. Rowe Price has been to embed environmental, social, and governance (ESG) factors which are inclusive of climate-related risks and opportunities, throughout our investment research platform. When it comes to evaluating climate change risk/opportunities into our investment theses, we rely on a combination of fundamental analysis (by analysts and portfolio managers), thematic research (by the Responsible Investing team), and our proprietary Responsible Investing Indicator Model (RIIM) analysis.

RIIM analysis provides two key benefits for our analysts and portfolio managers. First, RIIM proactively searches for environmental indicators and controversies on companies and sovereign issuers—this is an important feature as environmental data are not required disclosure nor are they standardized like financial data. Second, RIIM provides a framework for evaluating environmental factors—in essence, it creates a common language for our analysts and portfolio managers to discuss how an investment is performing on environmental factors as well as compare securities within the investment universe. Our evaluation of climate change factors focuses on energy transition and physical risk, but we also believe that an issuer's environmental footprint and track record are important indicators of how they may perform in a tightening regulatory environment.

Within our RIIM assessment, we consider our investments' environmental characteristics holistically-key areas of focus include:

- Energy transition
- Physical risk
- Biodiversity impact
- Circular economy contribution
- Land useWater use
- Track record on environment
- Accountability and transparency for ESG (including climate change)

EQUITIES/CORPORATES

We believe that RIIM is particularly useful as it proactively and systematically identifies climate change considerations beyond greenhouse gas emissions. While carbon is the focus of public debate and data are widely available, we believe limiting analysis to this factor is short-sighted. Many other climate change factors—such as water availability, local pollution, and waste management—are more likely to be catalysts for regulatory change. The graphic below shows a non-exhaustive list of data points that can serve as climate change indicators and how they are embedded within the model.

ENVIRONMENT	OPERATIONS	Supply chain (environment)		Scope and quality of supply chain management
		Raw materials		
		Energy and emissions		Raw material procurement standards and statistics
		Land use		Scope and quality of energy management systems
		Water use		Carbon intensity and trend
		Waste		
		General operations	$\langle \langle \rangle \rangle$	Biodiversity programs
	END PRODUCT	Product sustainability		History of land use incidents
		Products and services environmental incidents	$\langle / / / \rangle$	Water intensity and trend
SOCIAL	HUMAN	Supply chain (social)	$ \setminus \setminus \setminus $	
	CAPITAL	Employee safety and treatment		Hazardous waste management
		Evidence of meritocracy		General environmental management standards
	SOCIETY	Society and community relations		History of environmental incidents
	END PRODUCT	Product sustainability		
		Product impact on human health and society		Environmental sustainability of end product
		Product quality and customer incidents	$\langle \rangle \langle \rangle$	Environmental incidents associated with end product
GOVERNANCE		Business ethics		
		Bribery and corruption		Environmental impact on local communities
		Lobbying and public policy	\searrow	Contribution to local pollution
		Accounting and taxation		
		Board and management conduct		ESG reporting and accountability
		Remuneration		
		ESG accountability		
DATA INCIDENTS		Data privacy incidents		

The table below outlines some examples of climate change issues our investment professionals consider across various sectors.

SECTOR	EXAMPLES OF CLIMATE CHANGE FACTORS		
Consumer Discretionary	Electric vehicles, eco-design consumer products, apparel and footwear supply chain impact		
Consumer Staples	Responsible palm oil sourcing, HCFCs ¹ phaseout, organic products		
Energy	Long-term oil and gas demand, fugitive methane emissions, gas flaring, risk of stranded assets, refinery and chemical plant emissions		
Financials	Sustainable financing, environmental-related insurance products (e.g., drought protection)		
Health Care	Water usage, waste disposal		
Industrials	Energy efficiency products, intermodal transportation shifts		
Information Technology	logy "Smart" appliances and infrastructure, software applications leveraging consumer demand patterns		
Materials	Emissions, efficient building products, agribusinesses, impact of fertilizers/pesticides, genetically modified organism		
Real Estate	Eco-friendly buildings, "new cities" infrastructure		
Telecommunications	Intelligent and efficient network infrastructure		
Utilities	ties Shift from centralized to distributed power networks, grid stability, renewables growth within electricity mix, risk of stranc assets, electricity storage, energy efficiency		

SOVEREIGNS

Climate change is a complex issue to address from an investment perspective. In some cases, its impact will be revealed through a gradual shift that may play out over many decades. In others, it will be a binary event. We believe this global challenge will touch the entire sovereign bond universe, and we believe the impact on financial markets is still only in its very early stages. When considering the impact of climate change on sovereign bonds, we see two key areas of focus:

- 1. How the country will be impacted by climate change itself (e.g., temperature fluctuation, sea level rise, higher storm risk) and
- 2. How the country's economic forecasts will be impacted by regulation intended to mitigate climate change.

Most countries will feel varying pressures from climate change, and each country will have differing levels of ability to tackle the impact of climate change (both in terms of economic resources and political will).

The graphic below shows a non-exhaustive list of data points that can serve as climate change indicators and how they are embedded within our RIIM framework:

ENVIRONMENT	Climate pressures		Population density
	Biodiversity		Level of water stress
	· · · · · · · · · · · · · · · · · · ·		Exposure to temperature change
	Carbon		
	Land		Forest degradation
	Freshwater		Renewable freshwater per capita
	Oceans		Depletion on water resources
SOCIAL	Population		
	Health	1	Ocean Health Index (OHI) score
	Safety		
	Education and employment		
	Infrastructure		
	Gender equality		
GOVERNANCE	Voice and accountability		
	Political stability		
	Government effectiveness		
	Regulator quality		
	Rule of law		
	Control of corruption		

¹ Hydrochlorofluorocarbons

ENGAGEMENT ON CLIMATE CHANGE

We believe that speaking with company managements and other stakeholders about climate change is a good way to gather valuable investment insights as to the management's process for assessing long-term risks and helps reinforce the notion that climate-related risk assessment should remain a priority. We believe companies that engage in long-term strategic planning, including in-depth analysis of ESG factors such as climate change, benefit from that experience. Looking inward to assess their own mission and purpose, to think about how the competitive landscape is evolving over long periods of time, and to consider how changes in the broader community might affect the company are all processes that improve the alignment of the company's direction with the interests of long-term shareholders. Furthermore, when a company's radar is tuned into long-term climate shifts, it may be better positioned to create new opportunities.

Engagement with management teams or Board members on climate change is usually conducted as part of a multifaceted discussion on many investment considerations for that particular company but occasionally could focus only on climate change implications. Given that T. Rowe Price has predominantly actively managed portfolios, we have the option not to invest in a company with onerous climate change risk. As a result, our engagements on specific ESG issues like climate change tend to be in-depth discussions, where we believe our engagement can be effective.

One of the more difficult aspects of evaluating climate change risks and opportunities in corporate securities is the lack of disclosure on key environmental metrics, strategy, and accountability. At T. Rowe Price, we guide and encourage companies toward industry best practice disclosure standards. To this end, we advocate for disclosures aligned to the Sustainability Accounting Standards Board (SASB) and the Task Force on Climate-Related Financial Disclosures (TCFD)—both globally recognized frameworks that emphasize financial materiality. We also emphasize the importance of reporting greenhouse gas emissions and encourage our investee companies to report their scope 1–3 emissions.²

POLICY ON CLIMATE-RELATED LOBBYING

Issuers should be aware of the potential for conflict between their stated positions on climate risk and their lobbying activities, such as those conducted via trade associations. While organizations may join trade groups for a variety of valid business reasons, and they may not align with every position the association takes, the Board of Directors should be actively engaged on any areas where the company's core values conflict with its direct or indirect lobbying activities. In addition to engaged board oversight, from our perspective the best practices to employ for mitigation of such conflicts are public transparency of lobbying, political spending and trade association memberships; strong communication within organizations to align their Sustainability and Public Affairs practices; and advocacy within the trade association when a gap exists between the company's values and the organization's. In particular, when a company identifies climate change as a significant risk to its business but also chooses to remain a member of a trade association known to be resisting legislative solutions to the problem, the company has a duty to explain how it prioritizes these competing objectives and how it will escalate and resolve the conflict within the trade organization.

T. Rowe Price utilizes this best-practice framework and our research findings on climate-related lobbying to inform our proxy voting decisions and engagement priorities.

REPORTING ON CARBON FOOTPRINT

We assess and report on the carbon footprint of our equity and credit funds (for portfolios where we have more than 75% data coverage) on a quarterly basis to our clients. The report includes data on total emissions and weighted average carbon intensity.

COLLABORATIONS ON CLIMATE CHANGE

We participate in collaborative industry initiatives on a selective and strategic basis. These initiatives support our core engagement program. We seek to understand where collaboration can provide the most viable and impactful supplement to our powerful internal capabilities. The following are the organizations/principles related to climate change that T. Rowe Price is a member of.

ORGANIZATION	STATUS	JOINED
Investment Association Climate Change Working Group	Member	2020
Institutional Investors Group on Climate Change (IIGCC)	Member	2020
Task Force on Climate-Related Financial Disclosures (TCFD)	Supporter	2020
FAIRR	Member	2020

OVERSIGHT AND ACCOUNTABILITY FOR CLIMATE CHANGE

The Nominating and Corporate Governance Committee of the Board of Directors of T. Rowe Price has responsibility and oversight of climate change. T. Rowe Price's leadership is aware of the risks and opportunities climate change may pose to its business and through our Corporate ESG and Responsible Investing teams, which are responsible for developing and managing the firm's sustainability initiatives in their respective areas of focus, ensures that the agreed-upon risk measures are implemented. Day-to-day tasks involve the identification, assessment, tracking, and mitigation of climate risks and opportunities.

² 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).

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Important Information

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