

Q2 2021

# Seeking Higher Ground:

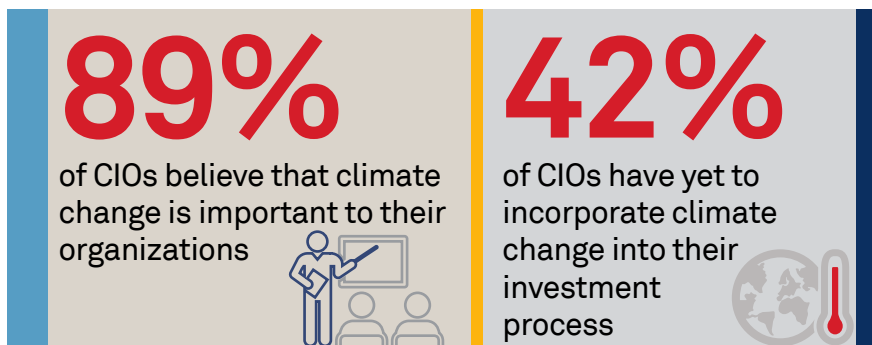
## Institutional Investors Respond to Climate Change



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## Executive Summary

Climate change is a slow-burning crisis that is transforming the investment landscape. Over half the 101 global institutional investors participating in a new joint PGIM-Greenwich Associates study say climate change is already affecting their portfolios by creating new risks and generating new opportunities. Of those investors who do incorporate climate change into their portfolios, 67% actively consider the investment risk from climate change in their portfolios, while almost as many (56%) consider investment opportunity.

Two distinct gaps emerged from the global survey of CIOs around their approaches to climate change. First, there was an “action gap.” That is, while global institutional investors overwhelmingly recognize climate change is critical, significantly fewer of them are taking action to address the climate crisis. Second, investors in different regions had starkly different views and tendencies, resulting in a “regional gap.”

## *The Action Gap*

Nearly 90% of institutional investors surveyed in Europe, North America and Asia-Pacific believe climate change is an important issue for their organization—and roughly 60% of them believe climate change has already begun to impact their portfolios. Nevertheless, despite wide recognition of the issue, there is an action gap, as significantly fewer have taken measures to address it. Globally, more than 40% of investors have yet to incorporate climate into their investment processes at all.

Significant data gaps may be one factor behind the action gap. Institutional investors who have not acted on climate change cite uncertainty regarding how to incorporate unreliable climate metrics and models into their portfolios.

## The Regional Gap

The study of institutional investors also identified a regional gap. Over 80% of European investors actively incorporate climate change into their investment processes—more than one and a half times the rate of their Asia-Pacific counterparts. Only a minority of North American study respondents go this far.

While there are multiple reasons why more European and Asia-Pacific investors are acting on climate change than their North American counterparts, three key themes emerged from investor studies: differences in regulation, funding status and prevailing views on fiduciary obligations.

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## METHODOLOGY

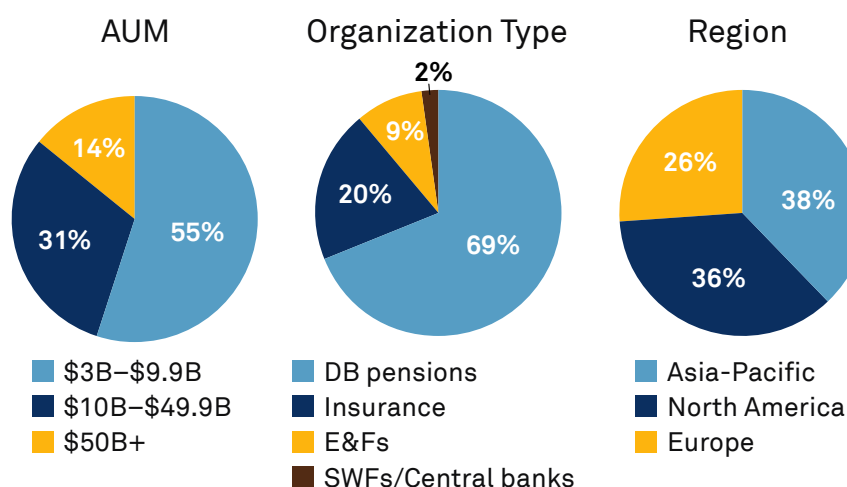
From April to August 2020, PGIM partnered with Greenwich Associates to conduct a study of institutional investors to understand the hidden risks associated with climate change, the emerging investment opportunities associated with a transition to a greener planet, as well as how CIOs incorporate climate into their data analytics and investment process (if at all). Greenwich Associates interviewed 101 institutional investors with greater than \$3 billion in assets across North America, Europe and Asia-Pacific.

## Introduction

Over the next decade, the consequences of a changing climate will present institutional investors with unprecedented climate-related risks, but also substantial new opportunities, as the world embarks on the path to a greener future.

In this report, we will examine how institutional investors in Europe, North America and the Asia-Pacific regions view the impact of climate change, and also analyze the steps these investors are taking within their organizations and portfolios in response to the climate crisis. This analysis is based primarily on the results of a proprietary global study of 101 institutional investors by Greenwich Associates in partnership with PGIM that concluded in the second half of 2020.

### Profile of Global CIO Study Participants



Note: Based on 101 respondents.

Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

# Mind the Gaps: Institutional Investors Take Varying Approaches to Climate Change

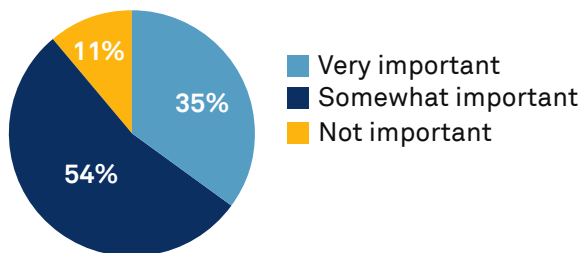
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## The Action Gap

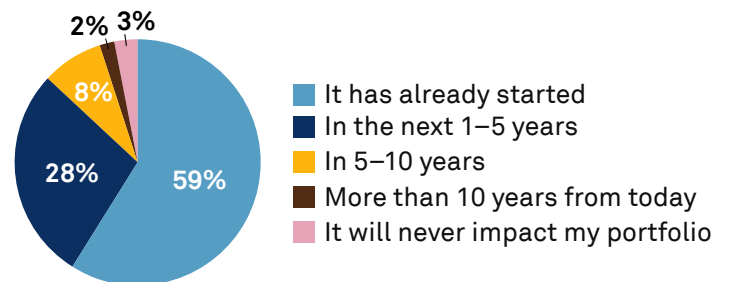
According to the study, nearly 90% of investors worldwide believe climate change is an important issue for their organization—and roughly 60% of the investors believe climate change has already begun to impact their portfolios.

## Vast Majority Recognize Climate Change is Important and is Already Impacting Portfolios

Importance of climate change to organizations<sup>1</sup>



Most investors say climate change is already impacting their portfolios<sup>2</sup>

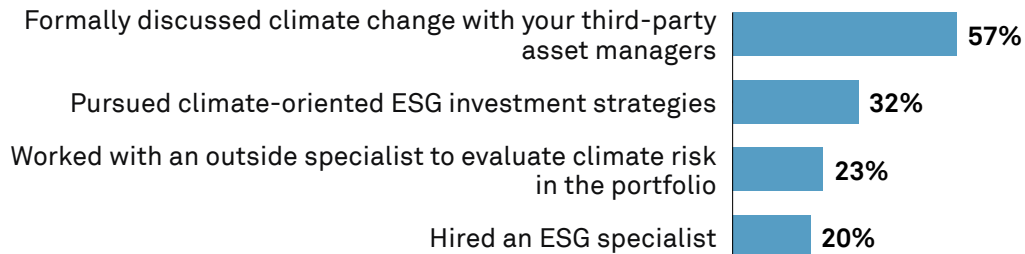


Note: <sup>1</sup>Based on 93 respondents. <sup>2</sup>Based on 101 respondents.  
Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

Yet, despite the wide recognition of the issue and its importance, far fewer have taken action in response. More than 40% of institutions in the study have yet to formally incorporate it into their investment processes (see graphic titled *European Respondents Most Likely to Incorporate Climate Change Into Their Investment Process* at the bottom of page 5).

Even the actions taken are quite tentative. Just over half have begun talking about climate change with third-party asset managers. Meanwhile, only about a third are pursuing climate-oriented ESG strategies, for example—and only 20% have brought an ESG specialist onto their staff.

## Investors Have Taken Different Approaches to Climate Change



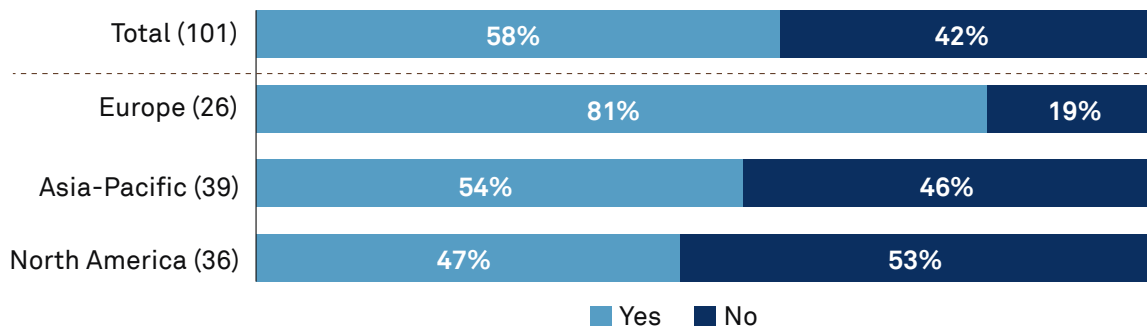
Note: Based on 101 respondents.

Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

## The Regional Gap

There are clear regional distinctions when it comes to investors acting on climate change, with Europe leading the way. Over 80% of European investors actively incorporate climate change into their investment processes, as do more than half of their Asia-Pacific counterparts. However, only a minority of North American investors go this far.

## European Respondents Most Likely to Incorporate Climate Change Into Their Investment Process



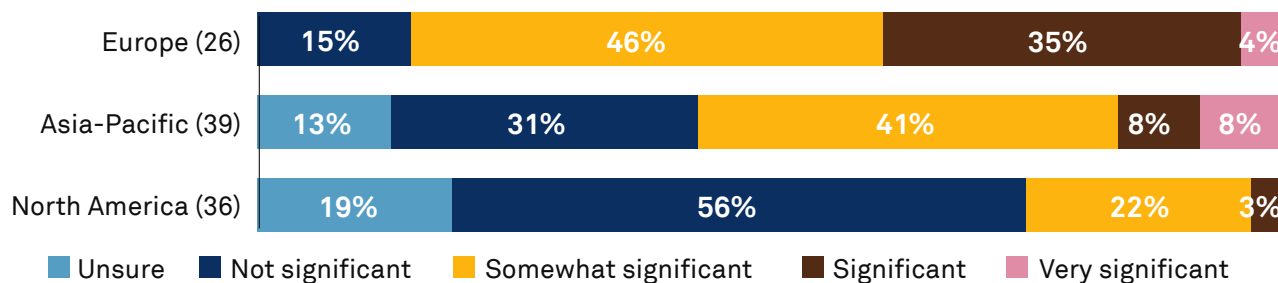
Note: Numbers in parentheses represent number of respondents.

Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

Another aspect of the regional gap is around whether climate change is relevant to asset allocation decisions. A solid majority of North American investors found climate change was not relevant to these investment decisions. Less than a third of Asia-Pacific investors and only 15% of their European peers agreed.

## Most North American Respondents Do Not Consider Climate Change in Asset Allocation Decisions

Is the impact of climate change meaningful relative to other factors that you model in driving asset allocation decisions?



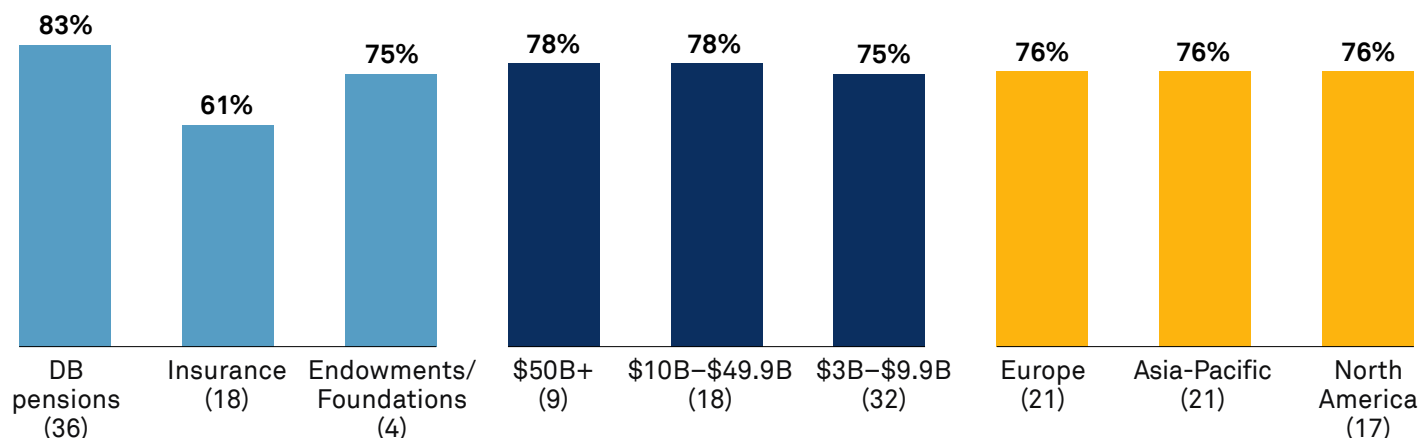
Note: Numbers in parentheses represent number of respondents. May not total 100% due to rounding.  
Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

## What Is Driving the Action Gap?

Two compelling themes emerge to explain the action gap that has been revealed in the study: 1) differing societal views on the appropriate role of investors in combatting climate change, and 2) unreliable climate analytics and models.

Institutional investors are primarily spurred to act on climate change because it improves risk-adjusted returns and also because it is the right thing to do. Approximately three-quarters of those who are mobilizing on climate change say the main reason for incorporating climate change into investment portfolios is the potential positive impact on risk-adjusted returns. This motivation is fairly consistent across organization type, institution size (as measured by AUM) and region.

## Share of Institutional Investors Integrating Climate Change into Their Portfolio Because it Will Impact Risk-Adjusted Performance

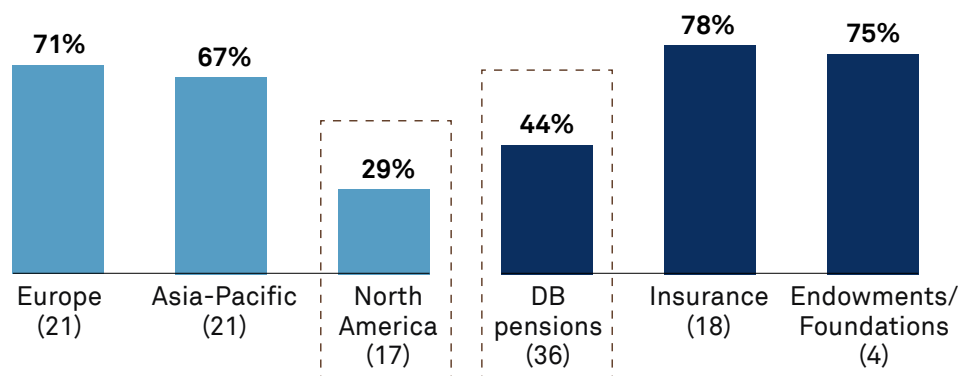


Note: Numbers in parentheses represent number of respondents.  
Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

## The Broader Societal Role of Investors

When it comes to the purpose-driven imperative of acting on climate change, there is a high degree of variation across regions. While over two-thirds of European and Asia-Pacific investors state they have integrated climate change into their investment process because it is the right thing to do, in North America, fewer than 1 in 3 investors share this view. This variation is also apparent across investor types, with defined benefit plans significantly lagging insurance firms and endowments/foundations.

### Share of Institutional Investors Integrating Climate Change into Their Portfolio Because it is the Right Thing to Do



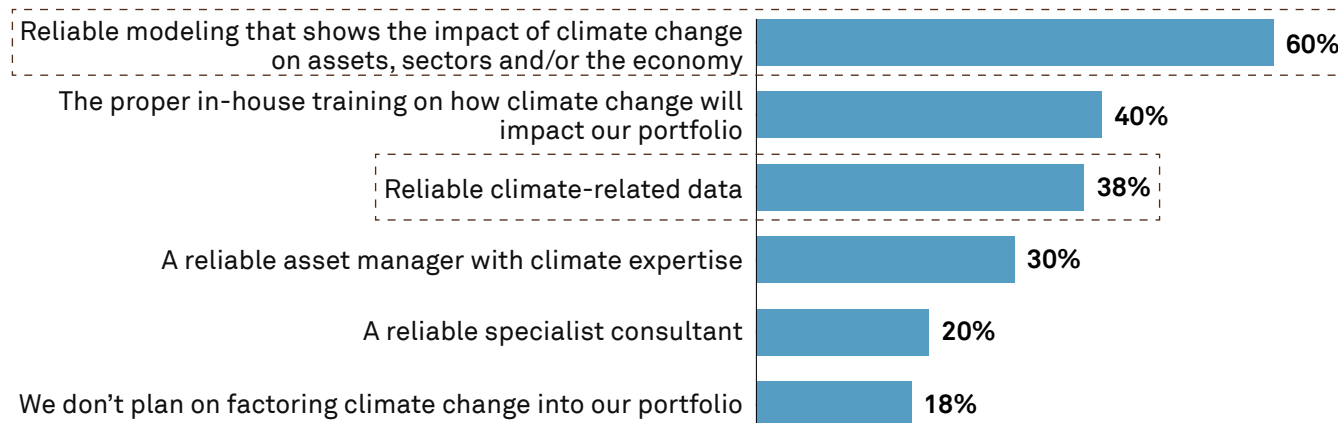
Note: Numbers in parentheses represent number of respondents.  
Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

## Unreliable Climate Analytics

Significant data gaps appear to be another factor behind the action gap. In particular, institutional investors lack confidence in the models available to assess the impact of climate change on their portfolios.

### Many Institutional Investors Lack Confidence in Climate Models

What would it take for your organization to start factoring climate change into your portfolio?



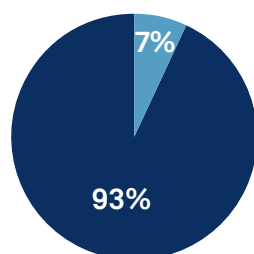
Note: Based on 40 respondents.  
Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study



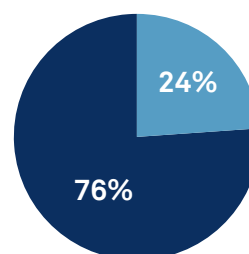
Even respondents who think climate change is a real and relevant problem for their organizations say a lack of reliable data and analytic models makes it difficult to evaluate the impact on their portfolios. Less than a quarter of the institutions in the study think existing climate change models are reliable, and fewer than 10% are currently utilizing these tools in their decision-making processes. This may be an area where better understanding and deployment of existing data and analytics could encourage more investors to incorporate climate change into their portfolios.

## Few Institutional Investors Use and Trust Predictive Climate Modeling

Do you use predictive climate modeling for screening your portfolio or weighting asset allocations?



Do you believe that predictive models on climate are sufficiently reliable when determining if climate change will have any meaningful impact on your investments over your typical investment horizon?



■ Yes  
■ No

Note: Based on 58 respondents.

Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

## What Is Driving the Regional Gap?

While there is a range of reasons why European and Asia-Pacific investors are taking more action on climate change than their North American counterparts, three key themes have emerged from investor studies: 1) different regulatory regimes, 2) funding status, and 3) prevailing views on fiduciary obligations.

### *Different Regulatory Regimes*

As with many such initiatives, the tone for adopting climate change into portfolios has been set by regulators. Among European and Asia-Pacific investors, regulators were cited as major influences on ESG investing in a 2019 study on ESG (see graphic that follows). This continues to be the case today. For example, earlier this year, the U.K. government announced that pension schemes with more than £5 billion in assets will soon be legally required to report on the financial risks of climate change within their portfolios.

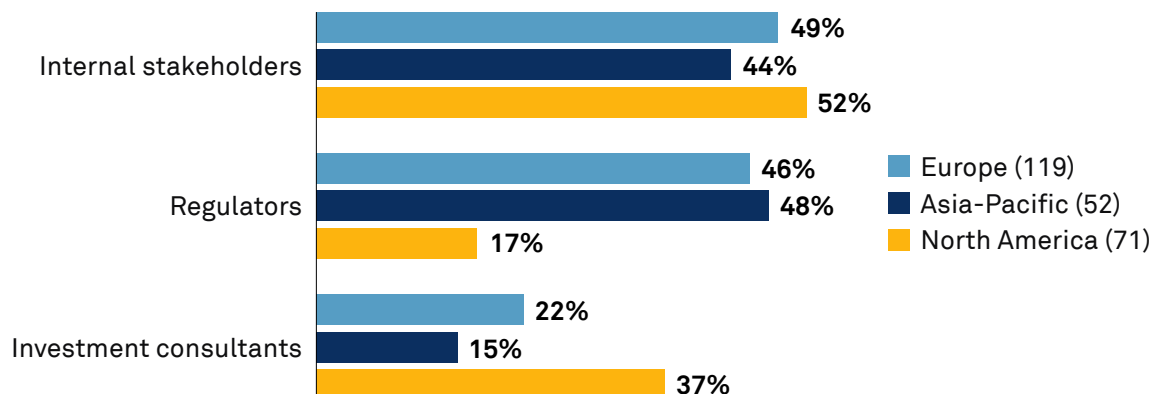
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**We are looking at the regulation and incorporation of the ESG criteria and that is taking quite a bit of attention. So far we have had wide-ranging discussions with the trustees about ESG and how to meet the requirements from the pensions regulator.**

*~U.K. institutional investor*



## Largest Influences for ESG Investing



Note: Numbers in parentheses represent number of respondents.  
Source: Greenwich Associates 2019 Global ESG Research Study

Countries in the Asia-Pacific region have also pushed forward on climate change legislation. One recent example comes from Singapore. In December 2020, the Monetary Authority of Singapore released its Guidelines on Environmental Risk Management for asset managers, banks and insurance companies. These outline how financial institutions will need to develop environmental risk management frameworks and incorporate environmental risk considerations into finance and investment decisions. Indeed, over 40% of the investors in the Greenwich Associates 2019 Global ESG Research Study in the Asia-Pacific region were utilizing ESG considerations in their manager hiring decisions.

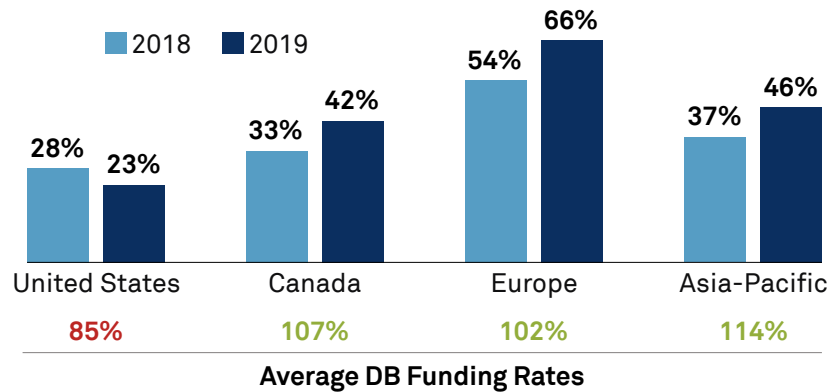
In stark contrast, regulators and policymakers in the U.S. have done much less to press investor focus on climate change. As a result, only 17% of North American investors cited regulators as a key driver of pursuing an ESG path. The administration of U.S. President Joseph Biden has already taken some steps to narrow the policy gap with regional peers. However, while climate is a stated top priority for the Biden administration, it remains to be seen what measures and legislative changes may be put in place to prompt more companies to take tangible action and institutional investors to respond.

## Funding Status

The underfunded status of defined benefit plans in the U.S. may also help explain why some institutional investors might view action on climate change as a luxury they cannot afford. Defined benefit plans in the U.S. trail investors in the rest of the world based on the average funding rates of the plans (see graphic that follows). The perception of performance trade-offs associated with ESG investments presents a real conundrum for CIOs looking to close those funding gaps.

## Is ESG Investing a Luxury?

ESG Utilization



Note: Based on 242 respondents in 2019.

Source: Greenwich Associates 2019 Global ESG Research Study, Greenwich Associates 2019 Global Institutional Investors Study and OECD (2020), Pension Markets in Focus 2020, <http://www.oecd.org/finance/pensionmarketsinfocus.htm>

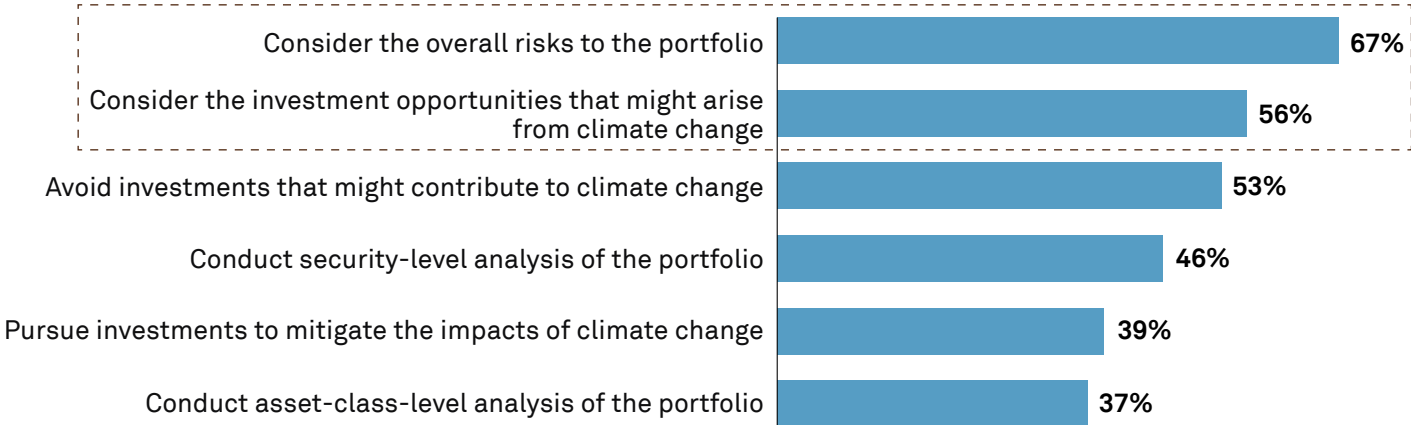
## Perceptions of Fiduciary Duty

Furthermore, current U.S. pension policy makes it somewhat unclear whether CIOs can legally make ESG allocations at all. In fact, current U.S. fiduciary standards are interpreted as actively discouraging consideration of any non-pecuniary factors. Over 75% of North American institutional investors who responded to the Greenwich Associates 2019 Global ESG Research Study felt some level of concern that investing in ESG may conflict with their fiduciary duty. Looking ahead, a big push to incorporate climate change among U.S. investors will come when investment consultants, pension oversight boards and others advising institutional CIOs come to the consensus that not accounting for climate and other ESG factors is actually a breach of their fiduciary duty.

## Engaged Investors See Climate Change as a Source of Both Risk and Opportunity

While the risks around climate change are most apparent, many investors do not view it solely through a risk management lens. Of those investors who do incorporate climate change into their portfolios, many see investment risk as well as investment opportunities in supporting the transition to a greener planet. Sixty-seven percent actively consider the investment risk from climate change in their portfolios, while almost as many (56%) consider investment opportunity.

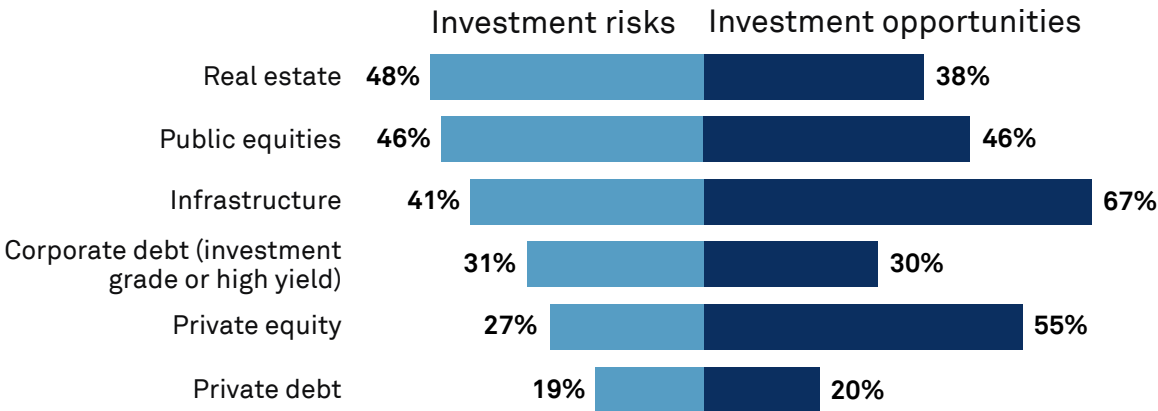
# Building Climate Change into Portfolios



Note: Based on 58 respondents.  
Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

The physical climate risks to real assets are obvious and dominate investment risk perspectives. Infrastructure and real estate, which stand to bear the brunt of extreme storms and rising sea levels, were among the asset classes with the highest perceptions of risk. Public equities were most frequently cited by European investors as an area of risk. Perhaps this is due to the sizable weighting of heavy carbon-emitting sectors like oil and gas, air travel and auto manufacturers in broad equity indices.

## Investment Risks and Opportunities Around Climate Change



Note: Based on 101 respondents.  
Source: PGIM-Greenwich Associates 2020 Megatrends Climate Change Study

Regarding investment opportunities, infrastructure, private and public equities were the asset classes most frequently cited. This may reflect the potential winners in the inevitable global transition to a lower-carbon economy—renewable energy generation and other supporting systems like smart grids and transmission networks, for example—that can be found in these asset classes.

## Conclusion

As climate change becomes more apparent and climate analytics and data improve, asset prices will reflect climate change more completely and consistently. These changes will impact investors in multiple ways:

### *The Action and Regional Gaps Will Narrow*

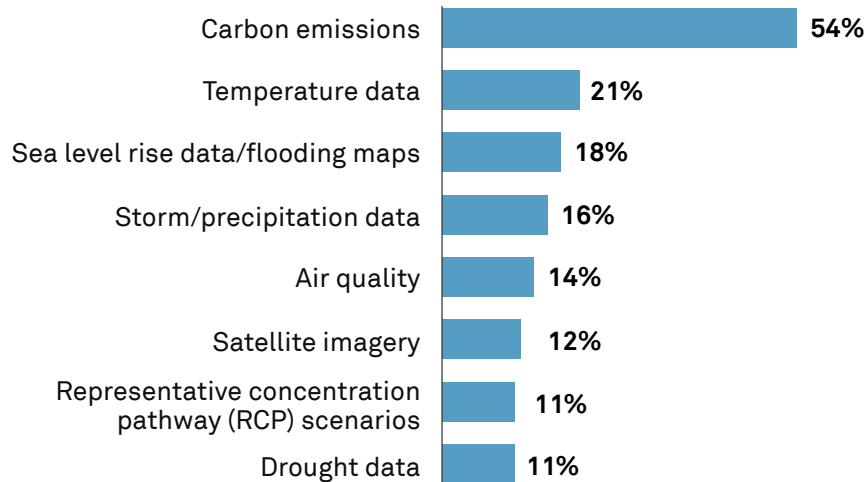
There are several compelling factors to support a narrowing of both the action gap and the regional gap. First, extreme climate events—major typhoons and hurricanes, droughts, extreme heat, and cold spells—are becoming more frequent and increasingly disrupting economic activity and supply chains. This is rippling through financial markets. Climate's impact on asset prices and investor portfolios is already apparent and will be even more difficult to disregard going forward. In short, climate change is emerging as a material factor for all investors and will increasingly be treated as any other factor that impacts investment performance.

Second, while policymakers and regulators in the U.S. are lagging their counterparts in other regions, U.S. companies have been very much involved in carbon neutral pledges and emissions disclosures. Clearly, these companies are motivated by other forces besides government mandates. They are increasingly responding to the persistent and public pressure from vital external stakeholders—namely, consumers and investors. These collective nudges from investor movements and consumer groups have provided a compelling force for change where regulatory actions have been lagging.

### *A Data Revolution is Underway in Climate Analytics*

While investors not actively incorporating climate change into their investment process cited unreliable climate models and data as a reason behind their lack of action, many investors are, in fact, leveraging new climate data and analytics available right now (see graphic that follows). Indeed, there has been a data revolution in accessibility, quality and granularity of climate data over the last five years. While there is much room for improvement—significant data gaps exist in private markets and corporate carbon emissions data lack uniformity or clear standards, for example—the trend toward improved and more relevant analytics for investors is very clear.

## Climate Data Used in Internal Analysis



Note: Based on 58 respondents.

Source: PGIM–Greenwich Associates 2020 Megatrends Climate Change Study

This data revolution in climate analytics enables investors to differentiate risk at a much more granular level than broad markets. Data-savvy investors can better assess and manage climate risks and even find opportunity where the broader market sees little value. Going forward, data-driven investors will be better able to navigate the hidden risks and emerging opportunities around climate change.

For deeper insight into how climate change is altering the investment landscape, please refer to [Weathering Climate Change](#)<sup>1</sup> by PGIM.

<sup>1</sup> <https://www.pgim.com/megatrends/climate-change>

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