Annual ESG Report

2022

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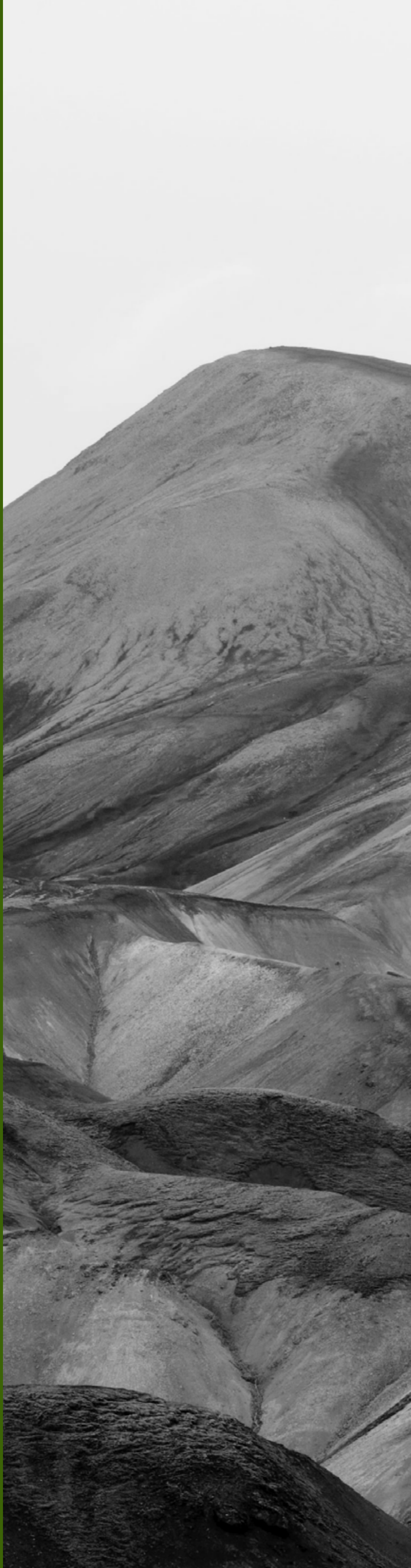


2022 in Hindsight

You had to have been living under a rock to not hear about ESG in 2022. It was a topic that drew equal interest and scrutiny and made for a seemingly endless stream of headlines in the financial media.

For AQR, we continued to be part of the discourse – contributing to research and sharing (some may say "arguing") our beliefs to help investors make more informed decisions. I started on that path fairly early in the year with a rebuttal to the concept that short selling isn't a carbon offset. In summary: of course short-selling isn't a literal carbon offset, while it doesn't magically remove CO_2 – neither does divestment! But it still does what it needs to do – raise the cost of capital to emitters, and in fact does so more than just divesting, and that should count.

After that, we furthered the conversation on carbon data, publishing research that argues that historical carbon data – long criticized for being "stale" and "not forward looking" – can actually provide insights into a portfolio's current and future climate exposure. That research informed my colleagues' paper "Supply Chain Climate Exposure" which found an innovative metric that could be used in the quest to manage climate change risks.

While I've always been proud of our ESG research (and I may be a little bit biased), it's nonetheless gratifying for our firm to be recognized for our work. "Supply Chain Climate Exposure" went on to be published in the Financial Analysts Journal and also shortlisted for "Research Innovation of the Year" in the 2022 PRI Awards, recognizing it as one of the most innovative and insightful pieces of new research on ESG integration.

Of course, more important than accolades and published articles is the impact of our ESG research efforts on our client offering. This year, we once again furthered numerous research projects on E, S, and G-themed alpha ideas, using ESG in risk models and designing new ESG-focused portfolio solutions.

Finally, research aside, we continued to dispel the belief that quant firms can't be responsible owners. Our team's stewardship efforts continue to evolve past what anyone thought would be possible from quant firms even a few years ago. Our focus continues to be on transparency and creating long-term value for our clients.

As we look ahead to the new year, we're going to keep going on these fronts – researching ESG issues, arguing for what we believe in, searching for new ESG alpha signals and setting the standard for quants as responsible asset owners.

It's core to who we are and important to the clients who entrust us with their investments.

Cliff Asness
Managing and Founding Principal

About AQR

AQR is a global investment management firm dedicated to delivering results for our clients. At the nexus of economics, behavioral finance, data and technology, AQR's evolution over two decades has been a continuous exploration of what drives markets and how it can be applied to client portfolios. Our culture of intellectual curiosity compels us to challenge the status quo, disrupt long-held beliefs and uncover new insights – we view the pursuit of truth and research excellence as our fundamental responsibility to ensure we remain at the forefront of systematic investing. AQR is committed to its fiduciary duty and to serving as a responsible investor. We offer diversified strategies across long-only and relaxed constraint equity, total and absolute return alternatives, and dedicated ESG solutions within each asset class.[3]

1998

AQR – Applied Quantitative Research – is founded

6

Consecutive years as one of Pensions & Investments' Best Places to Work

~65%

of our researchers hold advanced degrees and ~30 employees hold PhDs

~$100B[4]

in AUM and ~19% of firmwide AUM in dedicated ESG portfolios[5]

4

Consecutive years as a Best Place to Work for LGBTQ Equality with a perfect score in the Human Rights Campaign's Corporate Equality Index

[3] Source: AQR. Information as of December 31, 2022. Diversification does not eliminate the risk of experiencing investment losses.
[4] AUM data includes assets managed by AQR and advisory affiliates.
[5] As of 12/31/2022, AQR managed ~$17 billion in dedicated ESG solutions, designed in service of our clients' ESG-related objectives. These include ~$16 billion in carbon-aware portfolios (which actively manage carbon intensity and other metrics for significant carbon reductions in long-only accounts and zero carbon exposure where shorting is allowed) and ~$6 billion in our Sustainable strategies, two processes which may also be combined. The Sustainable process seeks to avoid companies with the largest ESG risk exposures by imposing static and dynamic exclusions, while targeting an improvement in portfolio ESG profile; in relaxed constraint and alternatives portfolios, we may actively short the worst ESG offenders.

ESG Philosophy

AQR is committed to helping our clients achieve their ESG goals. We seek to integrate ESG in both our asset selection and our ownership practices.

AQR will:

Embrace research and education on ESG criteria in pursuit of continuous improvement of our understanding of the risk and opportunities facing our clients, our investment strategies, and our business.

Incorporate ESG investment ideas **on an equal footing** with other investment ideas. In all mandates, ESG investment ideas will be implemented to the extent they improve portfolio risk or return characteristics.

Be a responsible steward of our clients' investments, striving to create long-term value for our clients without compromising on our core values (our stewardship policy documents are publicly available on AQR.com/ESG).

Ensure we have the **resources** available to adhere to these guiding principles and to aid clients in their understanding of ESG-based investing.

Our ESG Journey

1998
- AQR launches, already employing "G"-related signals

2009
- Whitepaper on considering ESG in portfolio design*

2013
- Formation of ESG Working Group

2014
- Formalized ESG philosophy
- Articulated initial research agenda for ESG in equities
- Signed UN PRI

2015
- First "E"-related signal
- Separate account clients offered ESG proxy voting option

2016
- Launch of AQR Sustainable offering
- Began pooled engagement through ISS
- AQR colleagues join first of numerous UN PRI groups
- Published on relationship between ESG and risk**
- Began research on low-carbon portfolios

Legend:
- Strategy
- Stewardship
- Thought Leadership

* "A Framework for ESG Consideration in Portfolio Design" – Jul. 2009
** "Assessing Risk through Environmental, Social and Governance Exposures" – Dec. 2016 (Journal of Investment Management: Vol. 16, No. 1, 2018)
*** "Hit 'Em Where It Hurts: ESG Investing 2.0" published in IPE – Oct. 2018
**** "Clearing the Air: Responsible Investment" – May 2019, also published in The Journal of Portfolio Management Ethical Investing 2020
***** Responsible Investing: The ESG-Efficient Frontier – Oct. 2019
Source: AQR, UN PRI.

2017

- Launched "ESG in the Office" initiative
- First live low-carbon portfolio

2018

- Published on ESG-related shorting and sustainable relaxed constraint***

2019

- With UN PRI, created Responsible Investment framework****
- Published on relationship between ESG and returns*****
- New internal ESG governance structure
- AQR carbon-neutral globally, incl. travel

2020

- Launch of direct proactive engagement
- Sustainable policy made default for proxy voting in AQR-sponsored funds
- Became CDP signatory
- Launched first net zero reported emissions portfolio

2021

- Transitioned first Risk Parity portfolio to ESG implementation
- Launched portfolio seeking net zero reported emissions in mutual fund format

2022

- Published novel research on measurement of supply chain climate exposure
- Published research on using historical carbon data to glean current portfolio insights
- Doubled engagement with CDP from roughly 100 engagements in 2021 to over 200

ESG Governance Structure and Resources

Executive Committee

Management and oversight of AQR's ESG agenda ultimately rests with the firm's Executive Committee. The Executive Committee serves as the firm's key governance function across business areas and is led by AQR's founders and principals from multiple business areas. Four ESG Committees are responsible for executing AQR's ESG agenda: ESG Research, ESG Stewardship, ESG Reporting and Communication, and ESG in the Office.

ESG Committees

ESG Research

Responsible for setting direction of ESG research agenda and collaborating on projects across research teams.

ESG Stewardship

Responsible for overall approach toward engagement with portfolio companies, the broader investment community, and regulators as well as oversight of proxy voting.

ESG Reporting and Communication

Responsible for ESG-related content shared internally and externally, including marketing collateral and reporting.

ESG in the Office

Lead internally-focused ESG initiatives including recycling, energy reduction, offsetting, and firmwide carbon neutrality and coordinate with Human Resources on broad corporate social responsibility efforts.

Source: AQR.

Our ESG Program

2022 at a Glance

~80%[6]

of AUM Integrating ESG-Related Alpha Signals

~$1 billion

of AUM Launched, Converted or Enhanced with Dedicated ESG Implementations

230

Direct Engagements Conducted with Portfolio Companies

6+

Years Managing Dedicated ESG Assets

5

New Portfolios Targeting Reduction in Carbon Intensity

Added New E Signal to Stock Selection Models

“Supply Chain Climate Exposure” shortlisted for UN PRI’s “Innovation in ESG Research” Award

Source: AQR, Natural Capital Partners. AUM is approximate as of 12/31/2022, includes assets managed by AQR and its advisory affiliates

[6] ~80% of AQR’s assets under management integrated ESG-related alpha or risk signals. We include ESG-related signals in our multi-factor security selection models as standard, and have since AQR’s inception; in all portfolios, we will incorporate ESG to the extent that we believe it improves the risk/return profile, consistent with our research on the ESG-efficient frontier.

[7] CarbonNeutral® certification is issued by Natural Capital Partners and is based on a protocol updated annually to reflect developments in climate science, international policy, standards and business practice. View the latest protocol here.

Supply Chain Climate Exposure: A Fuller Picture

Investors are increasingly vocal about measuring and managing climate risk in their investments. This is a daunting prospect, and the available data is noisy at best. This is particularly acute for measuring climate exposure in the supply chain, which we, and many others, believe is crucial for a holistic assessment of a given position.

In a new research paper, we proposed a simple and intuitive metric that we believe captures supply chain climate exposure. We provided empirical evidence to this point, documenting for example that our measure has intuitive sectoral and country patterns and helps explain stock price reactions to climate-related news. Importantly, the measure requires data that is arguably of high quality and can be easily computed by investors and companies alike. Below is a short summary.

Improving our understanding of climate exposure

Investors using traditional climate exposure metrics face an unpleasant tradeoff. What they can easily measure may well be relevant but likely tells only a partial story. For example, a company may seem green on a standalone basis when we look at its own emissions or fossil fuel holdings data. At the same time, this seemingly green company may have important customers, or suppliers, whose activities could be impaired by transition or physical climate risks. At the extreme, even a green company might lose a major customer who goes bankrupt because of exposure to climate change.

We developed a framework that allows us to capture such risks. Simply and intuitively, this metric is created by computing a revenue-weighted average of customers' (or suppliers') climate exposures. For example, the measure will be higher for those companies that do more business with carbon-intense firms, or those companies that whose business partners are more exposed to climate-type risks. We believe that this approach may help investors identify not only companies with potentially higher risk exposures, but also companies that may be offshoring emissions to their supply chain partners.

Validating the measure with data

The measure we propose is based on a straightforward yet innovative economic insight. But, to justify using any measure in investment practice, we want to back it up with empirical evidence as well. This is of course a challenge for climate risks, which are difficult to detect and may only truly arise in the long term. We hope that our approach, documented in detail in our paper, serves as a blueprint for investors assessing other climate data.

For example, we show that our measure helps explain market reactions around climate news. This is important: to the extent we believe the market cares about climate risks, we should expect to see that in the prices of stocks we identify as relatively green (or brown) when new climate-related information is released. On a similar note, we show that historical performance associated with our measure is consistent with the market pricing in such risks, suggesting that the broader investor community may be paying more attention to these exposures and incorporating them into prices.

Increasing clarity for investors and companies alike

While we believe we have an advantage in processing the climate data, our approach to supply chain exposure is in principle accessible to many other investors. In fact, we believe that the raw climate data an investor would need is of higher quality than some commercially available solutions attempting to capture similar exposures, for example scope 3 emissions.

This advantage is of even more importance to the portfolio companies themselves. They are increasingly pressured by investors to produce climate metrics, but they find it difficult to produce reliable numbers for measures such as scope 3 emissions. In contrast, our measure is not only straightforward for a portfolio company to compute, but it may actually be a more meaningful capture of the company's exposure to economic risks. As such, our metric's intuitive definition and transparency may be appealing for both investor and corporate decision makers.

[8] Source: AQR. There can be no assurance that an investment strategy will be successful.

Our ESG Approach

The many motives for responsible investing and the increasingly vast landscape of ESG-focused products often lead to confusion around the meaning and implementation of ESG. We believe clearly defining responsible investment is a necessary first step to having a clear discussion and policy on responsible investing.

We collaborated with UN PRI to develop a responsible investing framework, which is graphically summarized below. While our ESG approach also includes corporate social responsibility, we characterize responsible investment as requiring both responsible asset selection and responsible ownership.

Responsible asset selection is the consideration of ESG issues that may affect the long-term pricing of an asset as well as the long-term sustainability of the issuer's business model. Responsible ownership is a thoughtful awareness of the avenues to interact with companies to influence their business, beyond the simple decision of whether to invest.

The following discussion of our ESG program aligns with this clear distinction and details our progress on both halves.

Responsible Asset Selection

Screening

Norms-Based (Static)
- Examples: Coal, Tobacco

ESG (Dynamic)
- Environmental, Social, Governance

Thematic
- Examples: Green, Impact

ESG Integration

Valuation
- Environmental, Social, Governance

Risk
- Environmental, Social, Governance

+

Responsible Ownership

Voting
- Examples: ESG-Focused, ESG-Aware

Engagement
- Examples: Campaign, Disclosure

Activist
- Examples: Board Seat, Acquire Shares

Direct Management
- Examples: Private Equity, Other Illiquids

Responsible Asset Selection

As in prior years, our 2022 ESG research effort included multiple projects on E, S, and G-themed alpha ideas, using ESG in risk models, and designing new ESG-focused portfolio solutions. In keeping with our research culture, we often release specific pieces of our research as publicly accessible whitepapers such as the above-discussed "Supply Chain Climate Exposure."

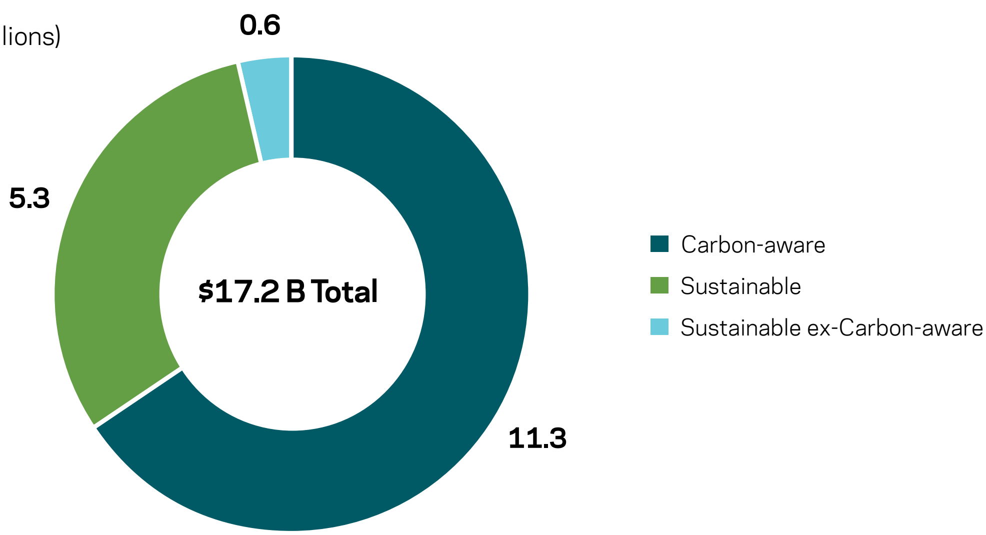
As of the end of 2022, AQR managed approximately $100 billion, ~80% of which includes ESG-related investment signals, consistent with our research on the importance of ESG information for assessing company fundamentals. AQR begins 2023 managing ~$17 billion in dedicated ESG strategies, which employ sustainable themes that may reduce risk or achieve a specific ESG objective.

Our dedicated ESG solutions encompass customized implementations designed in service of clients' specific ESG objectives, such as a custom dynamic screen or a tilt to manage reputational risk. Portfolios managed according to our standard ESG process target significant carbon reductions in long-only and relaxed constraint accounts and net zero carbon exposure in long-short portfolios, avoid companies with the largest ESG risk exposures by imposing static and dynamic exclusions, and target an improvement in portfolio ESG profile. In relaxed constraint and alternatives portfolios, we may actively short the worst ESG offenders. We currently offer this process in standalone long-only, total return and absolute return equity portfolios, as well as in the equity sleeves of multi-strategy total return and absolute return portfolios.

Dedicated ESG Assets

Year-end 2022

AUM ($ billions)



[9] Source: AQR. Approximate as of 12/31/2022, includes assets managed by AQR and its advisory affiliates.
[10] ~80% of AQR's assets under management integrated ESG-related alpha or risk signals. We include ESG-related signals in our multi-factor security selection models as standard, and have since AQR's inception; in all portfolios, we will incorporate ESG to the extent that we believe it improves the risk/return profile, consistent with our research on the ESG-efficient frontier.
[11] As of 12/31/2022, AQR managed ~$17 billion in dedicated ESG solutions, designed in service of our clients' ESG-related objectives. These include ~$16 billion in carbon-aware portfolios (which actively manage carbon intensity and other metrics for significant carbon reductions in long-only accounts and zero carbon exposure where shorting is allowed) and ~$6 billion in our Sustainable strategies, two processes which may also be combined. The Sustainable process seeks to avoid companies with the largest ESG risk exposures by imposing static and dynamic exclusions, while targeting an improvement in portfolio ESG profile; in relaxed constraint and alternatives portfolios, we may actively short the worst ESG offenders.

In 2022, we continued to expand our range of dedicated ESG strategies through launching new portfolios with such implementations and enhancing existing portfolios. For example, we added a net zero reported carbon emissions objective to two of our commingled funds (one is a Sustainable Style Premia All Country Equity portfolio and the other is a Style Premia portfolio). Our carbon-aware portfolio range now includes five portfolios that use shorting to achieve this objective. Additionally, we added a climate objective to a Sustainable Global Style Premia Long-Only Equity commingled fund, which now targets a 25% reduction in carbon intensity versus the MSCI World.

We have worked on a rich ESG research agenda this year, too. The projects range from evaluating new ESG data from third-party providers, to assessing different forms of aggregation of data from multiple providers, to designing novel ESG investment strategies that meet our clients' evolving needs. We also continued engaging with data providers on improving the quality and the informativeness of their data. There are two broad areas of research that deserve a longer note: climate investing and ESG solutions in the macro space.

Regarding climate investing, we continued developing AQR's "house solution" for climate, featuring a combination of third-party and internal data, for example the supply chain climate metric mentioned above and potentially also a newer NLP-based climate measure that we are currently investigating. We also meaningfully pushed forward industry conversations on carbon data, and to this end, we published "Looking Forward with Historical Carbon Data" which argues that historical carbon data, often criticized for being "stale" and "not forward looking," can still be very informative about corporate emissions in the near future.

[12] Source: AQR. There can be no assurance that an investment strategy will be successful.

We have undertaken several research projects in the macro space in response to growing interest from our clients. For example, we conducted due diligence on sovereign-level ESG data, where a number of new providers offer datasets that may be an interesting complement to a macro investor's toolbox.

Another project that we focused on in 2022 involved assessing the suitability of relatively novel instruments in the macro space that may have a role in an ESG-focused portfolio beyond alpha generation. We have been trading EU emissions trading scheme futures in certain portfolios for approximately five years, and as of 2022, all standalone trend portfolios feature EU carbon allowance futures as one of their traded assets. Moreover, we are working to add other (non-EU) carbon allowances into our strategies. These types of research projects not only address the questions we hear from clients but may also inform our work on designing macro-oriented ESG solutions.

Responsible Ownership

In keeping with the requirement that responsible investors pursue responsible ownership, we continued to enhance our approach to stewardship in 2022.

AQR's stewardship approach is grounded in transparency, as well as a desire to create positive long-term value for our clients. Our efforts cover a range of activities, including:

- Voting our proxies in an ESG-aware manner
- Engaging directly with management of companies where AQR may have a potential impact
- Collaborating with asset owners and other investors on specific issues to hold management accountable for misuse of their positions or other issues that are inconsistent with our ESG core values
- Participating in industry groups or bodies that advocate for specific changes or for greater disclosure on specific issues inconsistent with our ESG core values

AQR's Engagement Policy and Proxy Voting Policy are publicly available on AQR.com/ESG.

Engagements

It is our fervent belief that greater transparency is positive for all market participants, hopefully leading to better alignment between companies and their investor base, as well as more accurate pricing of ESG risks and opportunities. Therefore, the guiding principle in all of our engagement activities is transparency in ESG disclosures. Consistent with AQR's investment process, our engagement program is conducted at the firm level, rather than tailored to individual portfolios.

Our approach to engagement involves both proactive and reactive efforts. As a quantitative manager, we utilize ESG data as well as recommendations from our proxy voting service providers to identify potential opportunities for engagement with companies. For example, in case of disagreement between the recommendations of our proxy voting advisors on a specific resolution, our stewardship team takes a closer look at the issue at hand, possibly proactively engages with the portfolio company, and makes an informed decision on how to cast our votes. Similarly, the stewardship team engages with our portfolio companies where the topic is deemed sufficiently material for our clients.

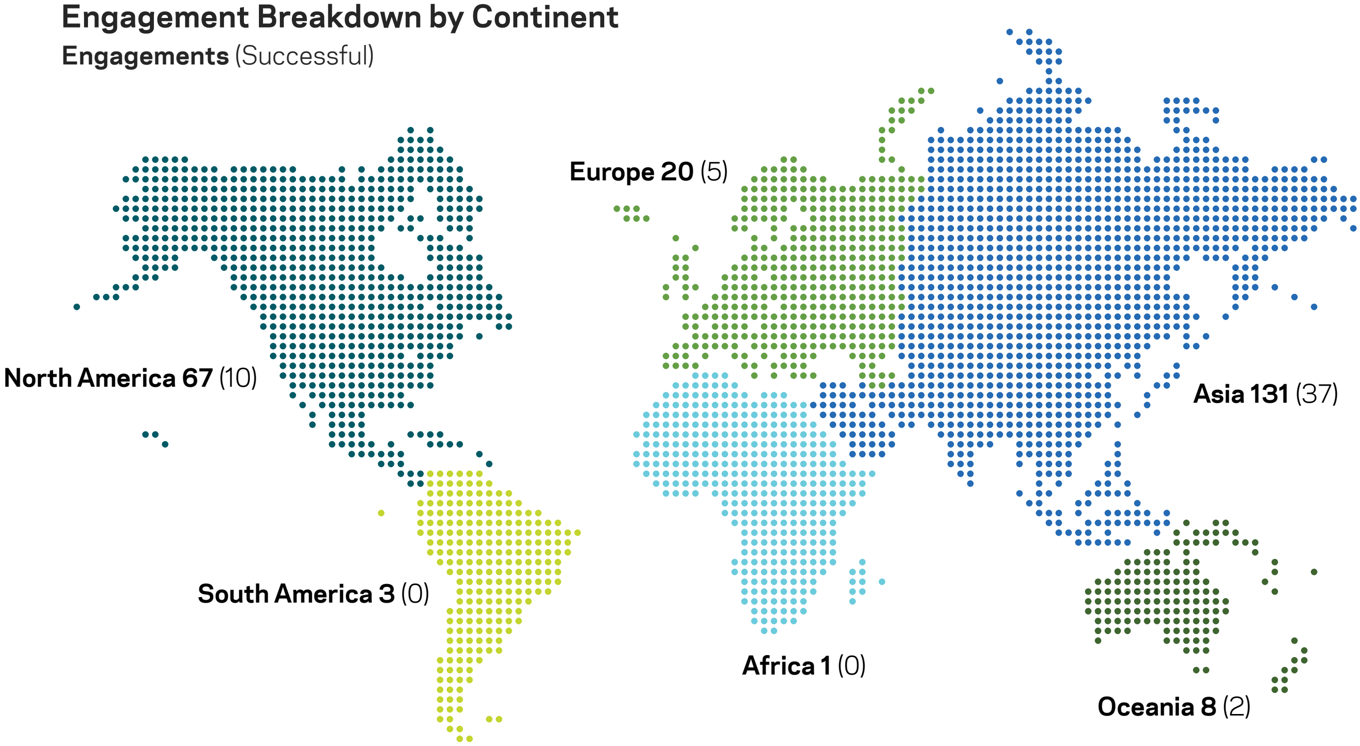
As we describe further below, we also identify engagement targets and help to advance the collective ESG effort through active participation in systematic investor-led initiatives, such as the CDP Non-Disclosure Campaign. AQR's Stewardship Committee oversees the engagement process, and any recommendations made to companies are done in a manner that is consistent with our desire to see ESG risks properly managed, and issues resolved in a fully transparent manner.

2022 was the third year that AQR conducted direct engagements with company management of our portfolio holdings. Overall, we conducted 230 direct engagements with portfolio companies, and our focus remains on transparency. Our specific goals are typically for companies to publish more data and/or reports publicly so investors can review and track how companies are responding to ESG-related issues – particularly in areas where the company may have a risk exposure, as we explain below in the context of environmental data. This signals to the investment community how seriously companies are responding to such risks, if they are making any changes to processes, what goals they are setting for themselves, and how they are tracking progress towards those goals. We believe this increased transparency should reduce future ESG risks at the company level. Beyond proactive direct engagement, we also engage directly on a reactive basis, for example on upcoming proxy issues where underlying firms seek out AQR to present issues which may be material for the vote.

2022 Engagements

Engagement Breakdown by Continent

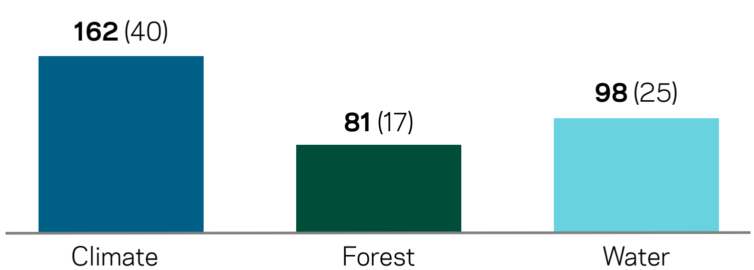
Engagements (Successful)



Engagement Breakdown by Developed vs. Emerging

Engagement Breakdown by Topic*

Engagements (Successful)



*111 Engagements that were on more than one topic are included in multiple categories

Source: AQR. AQR's engagements from January 1, 2022 to December 31, 2022

2022 Engagement Focus: Environment

As noted previously, the vast majority of AQR's dedicated ESG AUM integrates environmental objectives. Accordingly, we organized the topics of our engagements with portfolio companies to encourage disclosure on carbon emissions, water security, and deforestation.

AQR became a signatory to the CDP (formerly Carbon Disclosure Project) in 2020. Each year, the CDP surveys thousands of companies, cities, states, and regions to measure and manage their risks and opportunities on various environmental issues. Since 2020, AQR has actively targeted companies that are not meeting CDP's carbon data disclosure requirements along the lines recommended by TCFD, joining in a collective engagement with other CDP signatories to petition for increased disclosure from firms.

Following AQR's success in CDP's 2021 Non-Disclosure Campaign, in 2022, we led engagements with 210 companies on behalf of a broader investor signatory group, targeting portfolio companies which did not meet disclosure requirements. This represents twice the number of companies we engaged as part of CDP's 2021 campaign, making AQR the largest supporter of this campaign from the investment community. We sent letters to some of our largest firmwide holdings requesting public disclosure of some combination of their climate, water, and forest data. Approximately 25% of the companies we engaged successfully disclosed their environment-related data to CDP. Notably, AQR engaged with companies totaling ~4% of the MSCI Emerging Index weight, and successfully encouraged ~1% of the Index to complete reporting. We believe that this result is particularly meaningful given the historical poor disclosure of companies in emerging economies.

We are pleased to share that CDP has recognized AQR as their biggest supporter in terms of quantity of companies engaged via the Non-Disclosure Campaign, and have again featured AQR's efforts and broader program in their recently published 2022 Non-Disclosure Campaign Results Report:

From the 2022 CDP Non-Disclosure Campaign Results Report

Over the course of 2022, AQR led engagements with more than twice the number of companies not meeting disclosure requirements as in 2021, and we are proud to add this achievement to our history of collaboration with CDP. We believe that these transparency-focused engagement efforts benefit the broader investment community and serve AQR's clients by enhancing both the breadth and quality of data we use in our sustainable, climate-aware portfolios, ultimately improving risk-adjusted returns. This provides evidence for our belief in the complementary nature of responsible ownership and ESG integration into investment decisions – a view that underpins the framework for responsible investment that AQR co-created with UN PRI in 2019. Engaging through CDP helps amplify this impact.

AQR Capital Management

Source: AQR, CDP.

We believe that this effort not only helps the broader investment community, but also benefits our clients by strengthening the feedback loop between our engagement program and our investment selection process. By successfully encouraging companies to disclose their carbon-related and environmental data, we are not only improving the transparency they provide, but also enhancing both the breadth and the quality of data inputs we use in our own sustainable, climate-aware portfolios, which represent ~$17 billion in assets under management. On page 17 we included breakdowns of the success rates of our engagement by topic and geography.

AQR has been undertaking proactive direct engagement, grounded in a desire for improved transparency, since 2019. Beyond our work on behalf of the CDP signatory base, in 2022 we additionally undertook 20 engagements with companies to request more robust disclosure and reporting.

In 2023, we plan to expand these efforts to include more companies and additional ESG-related topics. This will entail using our investment signals (for example, the supply chain carbon emissions signal discussed earlier) to identify companies for engagement and track their progress.

Collaborative Engagement and Industry Initiatives

We work within the industry to advance the collective ESG effort and continuously look for opportunities to collaboratively engage with peers. AQR is an active participant in industry discussions across the spectrum of ESG-related issues.

As an overview of our efforts in this area during 2022, AQR served on IIGCC Hedge Funds and Derivatives Working Group, TISA Responsible Investment Committee, MFA ESG Working Group, UN PRI Hedge Fund Advisory Committee, and the Investment Association Climate Change Working Group. We also engaged in regulatory consultations across the US, UK, and EU through our participation in these bodies.

We continued our efforts as part of the MIT Aggregate Confusion Project, an initiative we co-founded in 2021 that aims to improve ESG measurement. Notably, the MIT Aggregate Confusion Project won the Partnerships category of the 2022's Allocators' Choice Awards. This award, which was announced in September, is the result of a vote by asset owners and recognizes the project's work over the past year towards reducing the level of noise in ESG measurement by improving data available to managers and allocators.

Finally, AQR is a regular participant in Fintech Innovation Lab, an annual program run by the Partnership Fund for New York City and Accenture that helps early- to growth-stage companies who are redefining the fintech industry grow their business with support from the world's top financial service firms. One of the companies we advised in 2022 was Mark Labs, a mission-driven software company focused on shareholder engagement analytics and management. Our interactions included idea-sharing on how to evolve their software to maximize impact through engagement with our portfolio companies and effective oversight of the engagement process across AQR (portfolio management, compliance, etc.).

Proxy Voting

Our stewardship program covers both engagement and proxy voting. Since 2003, AQR has been using Institutional Governance Services (ISS), an independent third-party advisor, for a variety of proxy voting services.

Our portfolios tend to be highly diversified, often entailing many small positions across a wide range of companies and industries. We vote using recommendations from ISS and incorporating internal proprietary research to make informed decisions on individual votes.

Below is a summary of AQR's proxy voting program in 2022:

7,325 Meetings Voted

74,249 Ballots Voted

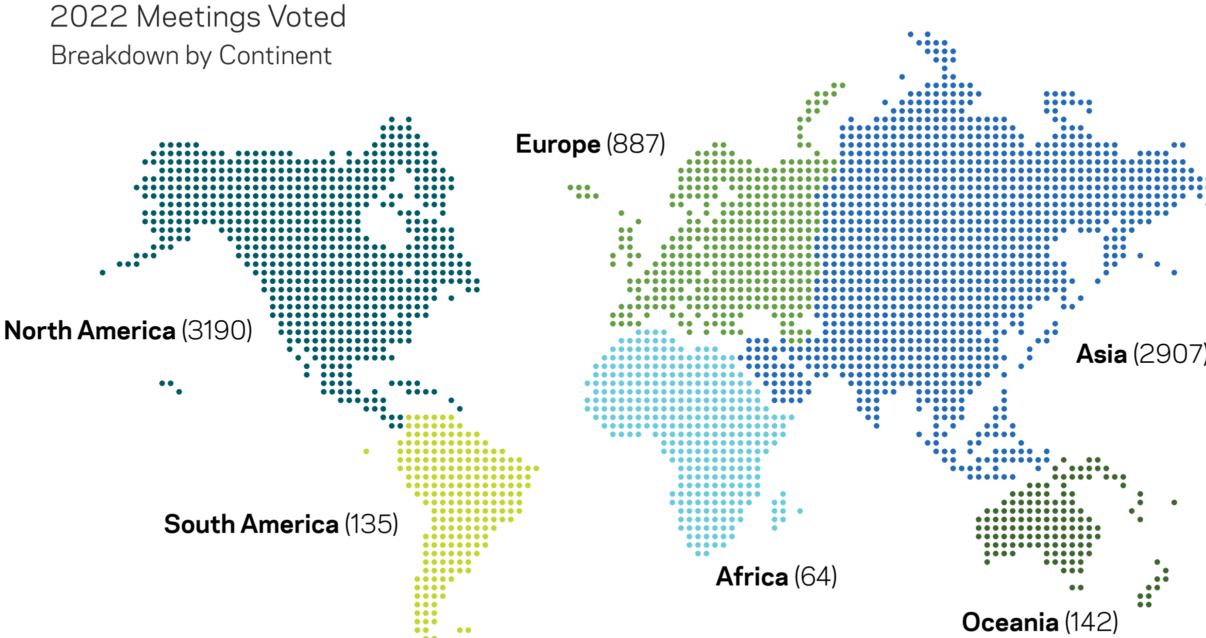
89% of Total Votes With Company Management

11% of Total Votes Against Company Management

We seek to align our voting with long-term shareholder value creation, including on ESG issues. The voting patterns above reflect our belief that, as a starting point, company leadership should be given leeway to determine what is in their companies' and shareholders' best interests.

2022 Meetings Voted

Breakdown by Continent



Source: AQR, ISS. AQR seeks to cast votes for all of its portfolio companies, with the exception of those that are domiciled in markets where there are beneficial ownership disclosure and/or Power of Attorney requirements. Diversification does not eliminate the risk of experiencing investment losses.

Applied Research and Conferences

AQR frequently participates in academic and practitioner dialogue regarding ESG. We seek to understand the broader implications and challenges stemming from ESG issues to help our clients navigate them too, and we feel our thought leadership distinguishes us in the space. Many colleagues publish ESG-related papers that can be found at AQR.com/ESG.

In 2022, AQR employees authored or co-authored several notable publications that contribute to the academic and industry literature on ESG, with a particular focus on climate:

Supply Chain Climate Exposure

AQR White Paper

This paper was shortlisted for Research Innovation Award category in the PRI Awards 2022. The shortlist was selected by an independent judging panel and recognizes recent innovative research from PRI signatories that offers new and meaningful insights into an issue related to the integration of ESG into investment decisions. It has also been accepted for publication in the Financial Analyst Journal. We extensively detail this paper and its contributions previously in this report.

ESG Ratings: A Compass without Direction

Working Paper

ESG ratings firms provide information to investors, analysts, and corporate managers about the relation between corporations and non-investor stakeholders interests. Recently, ESG ratings providers have come under scrutiny over concerns of the reliability of their assessments. In this Closer Look, we examine these concerns. We review the demand for ESG information, the stated objectives of ESG ratings providers, how ratings are determined, the evidence of what they achieve, and structural aspects of the industry that potentially influence ratings. Our purpose is to help companies, investors, and regulators better understand the use of ESG ratings and to highlight areas where they can improve. We find that while ESG ratings providers may convey important insights into the nonfinancial impact of companies, significant shortcomings exist in their objectives, methodologies, and incentives which detract from the informativeness of their assessments.

The paper has been published in Stanford University's Closer Look series.

Looking Forward with Historical Carbon Data

AQR White Paper

Increasingly many allocators are interested in computing their portfolio's carbon footprint. The usual way to do so relies on data on historical greenhouse gas emissions, which are typically 1-2 years lagged relative to when investment portfolios are built. We show that historical emissions data are useful despite this substantial lag. First, we use point-in-time data to show that the relative greenness of portfolio companies is very stable over time: Not surprisingly perhaps, companies that were historically green (or brown) remain green (or brown) today and for a number of years into the future, overall and compared to same-sector peers. Second, and more surprisingly, we show that portfolio carbon footprint measured using historical data is remarkably informative about the current portfolio carbon footprint (using current, or same-fiscal-year emissions that the portfolio finances). We believe this observation should give allocators comfort that historical carbon data still provides important insights about their portfolio's current, or even future, climate exposure.

This paper will be published as a chapter in a forthcoming book, "Climate Investing: New Strategies and Implementation Challenges," published by Wiley and ISTE.

Shorting Counts

Cliff's Perspective

In this piece, Cliff explains why, in calculating a portfolio's ESG score, it is critical that shorts are properly accounted for so that investors can use shorting to reduce carbon exposure, to get to net zero, or to mitigate risk otherwise in an ESG portfolio.

Pushing Past the Boundaries of ESG Investing: AQR Capital Management

Harvard Business School Case Study

Harvard Business School wrote a case study on how AQR decided to launch a long-short vehicle integrating ESG. The case highlights that while shorting was virtually unused in the ESG space, we determined it could be a powerful tool to strongly incorporate ESG views into a portfolio.

Additionally, in 2022, AQR colleagues presented at over 20 ESG-related industry engagements and conferences. A few highlights include:

- UN PRI Academic Week and UN PRI Digital Conference
- Cliff Asness discussed ESG with Institutional Investor Editor-in-Chief Michael Corcoran; they covered effective company engagement, addressing climate change through investments, using shorting as an effective ESG tool, and more. We've released a series of short videos from their discussion, which are available here.

AQR was also an active participant in the media conversation around ESG topics in 2022:

- 40 articles mentioning our ESG thought leadership or products
- Ten interviews and written responses in relation to media on ESG-focused topics
- Regular communication with reporters on our ESG views and research

Corporate Sustainability Initiatives

AQR promotes sustainability and social responsibility within our offices and our communities through a number of channels.

ESG in the Office

Our ESG in the Office Committee spearheads numerous initiatives to create a more sustainable workplace. This committee began as an employee-originated initiative in 2017, bringing together colleagues from across the firm to enhance the management of ESG in our own business practices. The group has implemented several notable projects, including recycling educational programs for employees and initiatives to reduce the consumption of single-use non-recyclable material throughout our offices.

AQR has chosen to offset its emissions since 2019, and we are a CarbonNeutral® certified company since 2021. Our assessment underpinning carbon neutrality spans all offices globally and includes emissions related to business travel and homeworker emissions. In 2022, AQR's offset calculations were externally reviewed for the first time. Independent third-party RSK verified AQR's greenhouse gas assessment calculations.

Additionally, the firm has initiated a large-scale transition of our physical data centers to the cloud, which is estimated to be 3.6x more energy efficient than on premise data centers. Looking forward, we continue to explore how day-to-day operations in our office locations can become more sustainable.

Diversity & Inclusion

Recognizing that our people are our most valuable asset. AQR has a long-standing commitment to fostering an inclusive and supportive workplace. AQR's Diversity & Inclusion Committee is comprised of senior members of AQR and serves as a central point of governance and support for diversity and inclusion initiatives throughout the firm. Employee-led networks — including our LGBTQ+ and allies' network AQR Pride, the AQR Women's Initiative Network, AQR Black Employee Network and the Hispanic & Latinx Employee Network — welcome, engage and support members of our AQR community and help to advance recruiting and retention.

Our diversity initiatives include partnerships with organizations where our employees can dedicate their time volunteering. Examples of our volunteer programs include the Ali Forney Center, which helps homeless LGBTQ+ youth in New York City; Open Doors, a resource for housing stability in Norwalk, Connecticut; and Bundles of Joy, which provides essentials to new parents and babies in need in Westchester, New York.

[13] CarbonNeutral® certification is issued by Climate Impact Partners and is based on a protocol updated annually to reflect developments in climate science, international policy, standards and business practice. View the latest protocol here.

Educational Programs

AQR's commitment to ESG thought leadership, innovation and education is reflected in our employee educational programs. This year, we welcomed Armond Cohen, co-founder and Executive Director of the Clean Air Task Force, to host a fireside chat with our employees to discuss a pragmatic, science-based approached to advancing climate action. We also hosted a three-part training series on responsible asset selection, responsible ownership, and ESG in the Office for our client-facing teams, and for colleagues in research, we frequently host seminars where ESG research is presented, discussed and evolved.

ESG in our Communities

As part of our philanthropic program, AQR supports organizations that provide exposure to the financial services industry, access to role models, and educational initiatives to help expand the pipeline of underrepresented talent

We have identified local community partners in North America, Europe, and Asia who are creative and innovative in their approaches and where our engagement can aid their efforts. In 2022, we continued our partnership with BLK Capital Management, a 100% black owned and student run non-profit, and with Norwalk Grassroots Tennis and Education to promote academic and athletic opportunities. In Europe, we partnered with Into University, which supports young people from disadvantaged backgrounds to attend university or another chosen aspiration, and in India, we partnered with the Agaram Foundation to support students first generation college students.

Additionally, our philanthropic partners include organizations focused on environmental causes, such as the Billion Oyster Project, a nonprofit focused on restoring oyster reefs to New York Harbor to help filter water, and SoundWaters Coastal Cleanup, where employees collected and removed debris from a local Connecticut coastline. In London, we partnered with The Conservation Volunteers to organize an employee volunteer event to improve food-growing space and make other enhancements at a woodland estate.

Finally, in response to the crisis in the Ukraine, employees donated to the International Rescue Committee, the total of which was matched by both AQR and by Cliff Asness.

Awards and Recognition

For six consecutive years, AQR has been named a Pensions & Investments' "Best Place to Work" in Money Management, a recognition based on an employee survey, firm benefits and culture. And, for four years in a row, AQR received a 100% in the Human Rights Campaign's Corporate Equality Index (CEI), making our firm one of the "Best Places to Work for LGBTQ Equality."

[14] For five years in a row, AQR was named one of Pensions and Investments' Best Places to Work in Money Management in 2017, 2018, 2019, 2020, 2021 and 2022

[15] The Human Rights Campaign named AQR a 2019, 2020, 2021, and 2022 Best Place to Work for LGBTQ Equality

Looking Ahead

2023 Priorities

In 2023, we will continue to develop the engagement programs that moved meaningfully forward in 2022. This will include continued participation in systematic investor-led industry initiatives (e.g., CDP) that advance the collective ESG effort. We are also exploring enhancements to our engagement program, such as linking our dialogues with portfolio companies to the ESG-related signals we use to rank companies in our stock selection models. Our team will also continue to explore additional avenues of and areas for engagement. If you are an investor that would like to partner on a specific corporate engagement, or a specific engagement area or issue, please reach out to us at ESGengagement@aqr.com.

Moreover, we plan to strengthen our commitment to corporate social responsibility. For example, we will continue to organize volunteering events to increase ESG engagement in the community and promote ESG education internally through a variety of mediums, including a speaker series. We will also continue to promote the use of greener modes of transport by our employees and engage with our buildings' owners to make operations less environmentally intensive.

We expect 2023 to be similarly active on the ESG research front, too. This past year, we continued to expand and refine our responsible investing solutions, translating an active internal research agenda into enhancements to our ESG signals, risk models, and portfolio solutions. We anticipate further expanding these research efforts in multi-asset and macro portfolios and further considering how to best incorporate United Nations Sustainable Development Goals and markers of transition like Science-Based Targets into the portfolios we manage. We are also working on a number of new sustainability-related whitepapers to further advance the industry dialogue, which we look forward to sharing on our ESG webpage.

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Sustainable investing is qualitative and subjective by nature, and there is no guarantee that the environmental, social and governance ("ESG") criteria utilized, judgment exercised, or techniques employed, by AQR will be successful, or that they will reflect the beliefs or values of any one particular investor. Certain information used to evaluate ESG factors or a company's commitment to, or implementation of, responsible practices is obtained through voluntary or third-party reporting, which may not be accurate or complete. ESG investing can limit the investment opportunities available to a portfolio, such as the exclusion of certain securities or issuers for nonfinancial reasons and, therefore, the portfolio may perform differently than or underperform other similar portfolios that do not apply ESG factors.

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Human Rights Campaign Corparate Equality Index and Best Place to Work for LGBTQ Equality
Measuring LGBTQ+ workplace equality, the Corporate Equality Index is a national benchmarking survey administered by the Human Rights Campaign, the largest national LGBTQ+ civil rights organization. A score of 100 on the survey requires comprehensive benefits, policies, training, education, community involvement and senior sponsorship.

Pensions & Investments' Best Places to Work
Pensions & Investments Best Places to Work is based on a questionnaire about the firm's policies, practices, benefits and demographics, as well as an engagement and satisfaction survey of employees. AQR was recognized for the priority it places on the well-being of employees, its efforts to foster connectivity with colleagues even while working remotely, its plans to adopt a hybrid work model and the effort made to support employees' work-life balance.

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