PGIM + REUTERS PLUS™

ESG

GREENWASHING

Navigating the tide of fact and fiction in sustainable investing

Fall 2022

For professional investors only.
All investments involve risk,
including possible loss of capital.

INTRODUCTION

58%

OF CEOs ADMIT THEIR COMPANIES ARE GUILTY OF GREENWASHING[1]

Source: Harris Poll for Google Cloud

Across much of the globe, temperatures have reached new highs in 2022.

With climate change set to make unbearable heatwaves more common, legislative climate action is gathering pace and there is a growing sense of urgency that “green investing” plays a vital role in the world’s vision to decarbonise. But is it able to live up to its hype? Or are we in danger of “fiddling” while the world burns?

While finance is rapidly becoming a force for decarbonization, the pressure on asset managers to invest in a way judged to be green is immense. With inconsistent definitions of what constitutes green and sustainable investing, however, the risks of misleading marketing and greenwashing are high. To avoid this, there’s a need for greater integrity as ESG continues to evolve. Investors need solutions they can trust.

WHAT IS GREENWASHING?

Just as whitewashing means using misleading information to gloss over bad behavior, so greenwashing is a play on the term. Companies are accused of greenwashing when they present their investment products or activities as more environmentally friendly or sustainable than they are. Yet with no clear definitions of what is ‘green’ or ‘sustainable,’ there is ample room for disagreement over what really is greenwashing. Consequently, while some greenwashing is marketing hype, on other occasions accusations of greenwashing can result from differing opinions about what it means to invest sustainably or how best to achieve sustainable outcomes.

1 Peters.A (2022) ‘68% of U.S. execs admit their companies are guilty of greenwashing’, *Fast Company blog*, 13 April. Available at: https://www.fastcompany.com/90740501/68-of-u-s-execs-admit-their-companies-are-guilty-of-greenwashing#:~:text=In%20a%20new%20survey%20of,that%20figure%20rose%20to%2068%25. (Accessed 2022).

CONFUSION AROUND THE MEANING OF ESG

10%

PERCENTAGE OF WORLDWIDE ASSETS IN ESG FUNDS GLOBALLY

Source: Refinitiv Lipper

As the world's financial firms embrace environmental, social and governance (ESG) investing, there's controversy that they're labelling their activities as green or sustainable solely to attract business. There's huge commercial pressure to do so, as interest in ESG funds is growing.

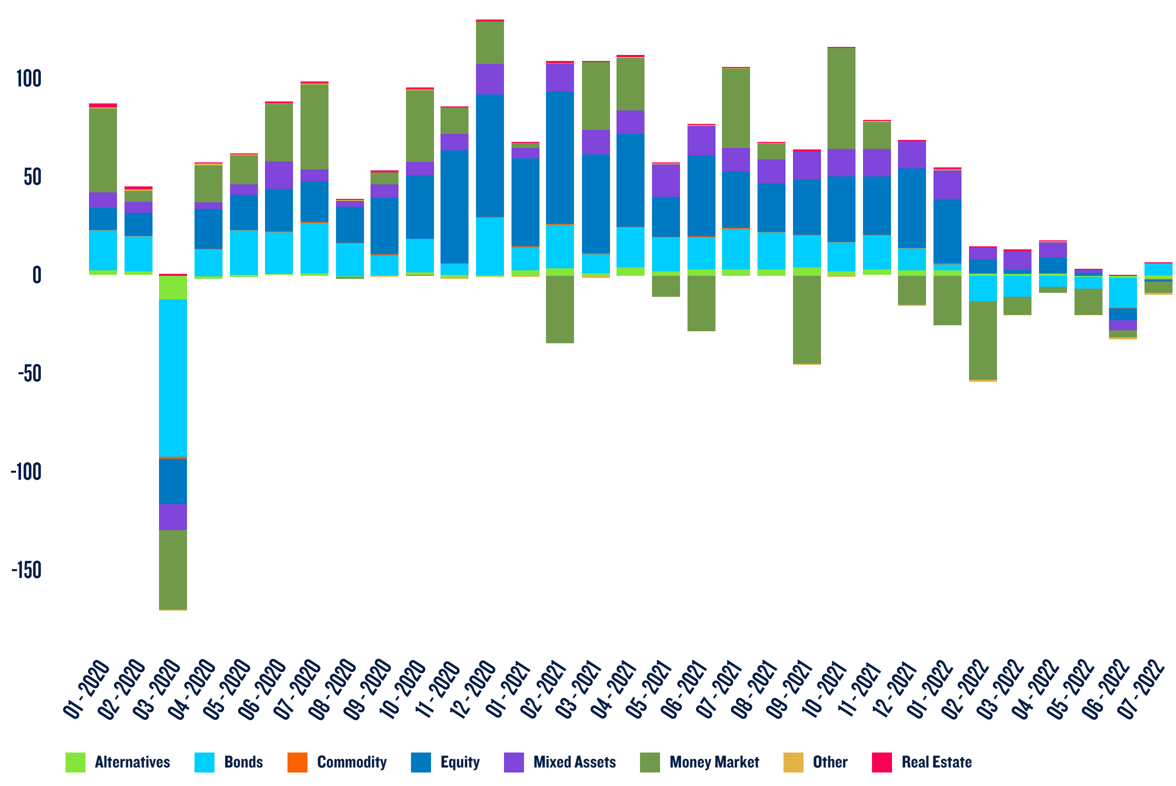
$8.8 TN

AMOUNT POURED INTO ESG FUNDS IN 2021/2022

Source: Refinitiv Lipper

Indeed, riding mainly on concerns about global warming, assets under management in responsible investment funds reached more than $8.8 trillion globally in 2021, according to Refinitiv Lipper. Since then, however, they have edged lower in 2022's harsh market environment, due mainly to falling asset prices but also some outflows. At the end of July 2022, assets under management stood at $7.03 trillion, down more than 20% on the year.

Global Estimated Net Flows ESG Funds - Asset Type



Source: Refinitive Lipper (as of July 2022)

Distinguishing Green Fact from Green Fiction

Yet the problem of greenwashing is partly the result of ambiguity and varying definitions. That's fertile ground for misunderstanding and, in some cases, even misrepresentation. It can be hard to distinguish between fact and fiction.

At the heart of greenwashing concerns, there's confusion over what it means to be sustainable or green. For example, many investors think of sustainable, ESG, green and climate investing in terms of what their investments do for the environment and society. They think of investing in green assets such as wind farms, in climate solutions such as electric vehicles, and in companies with environmentally and socially friendly products and services such as plant-based proteins or life-saving treatments. However, many investment professionals think in terms of risks and opportunities. For example, they think of how resilient their investments are to a changing climate, how significant business opportunities arising from climate solutions may be, and how good companies are at managing product safety issues.

Fiduciary Duties and Greenwashing

There remain many debates in the world of ESG investing that have led to the current confusion. One is about fiduciary duties: Do investors have the legal right to allocate and steward capital to tackle societal challenges such as climate change? Financial return is the primary goal of most investors and where an environmental, social or governance risk poses a threat to financial return, many jurisdictions around the world not only allow but increasingly require investors to consider those ESG risks and act accordingly. Whether investors can legally pursue over-arching sustainability goals – such as those consistent with various international instruments such as the Paris Agreement and the UN Sustainable Development Goals – is still moot in many jurisdictions, but a cultural shift towards thinking about fiduciary duties in a broader systemic context is under way[2] and asset owners are becoming increasingly explicit that earning a financial return is not the only goal they have for their investments. For example, the Church Commissioners, which manages the Church of England's endowment, states that it has a duty alongside creating financial return to invest in a way that brings benefits to the wider world.[3]

"The important thing in ESG investing is that asset managers are clear with clients about what can and can't be done. All investment strategies make trade- offs and ESG strategies may trade off risk-adjusted returns against sustainability outcomes. It is vital – for clients as well as the wider industry – that everyone understands what these trade-offs may be and their possible costs so that clients are able to choose the right strategies to meet their expectations."

EUGENIA JACKSON
Global Head of ESG, PGIM

2 Freshfields Bruckhaus Deringer (2021) *A legal framework for impact.* Available at: https://www.unepfi.org/wordpress/wp-content/uploads/2021/07/A-Legal-Framework-for-Impact_Report.pdf (Accessed 2022).
3 Church Commissioners for England (2021) *For the common good: Stewardship at the Church Commissioners -Stewardship Report 2021.* Available at: https://www.churchofengland.org/sites/default/files/2022-06/The%20Church%20Commissioners%20for%20England%20Stewardship%20Report%202021.pdf (Accessed 2022).

The Double Materiality Concept

Increasingly, asset owners and asset managers are looking beyond the impacts of ESG risks on their portfolios to understand how companies impact the economic, social, and environmental systems around them – a concept known as double materiality. This may be with the goal of understanding the impact of systemic risks on a portfolio's financial performance or it may be to achieve a sustainability outcome such as improving access to clean water. This broader focus is driving an increasing demand for greater non-financial information and transparency and consistency of these disclosures is crucial if they are to be of any value to either financial or sustainability outcomes – and avoid the risk of greenwashing.

The How of Sustainability

The second major debate – one that is currently raging in Europe – is about the "how." This is at the heart of the greenwashing confusion. Sustainability "purists" on the one hand argue green means financing companies that provide credible climate solutions from wind farms to green hydrogen developments. For them, green means real-world impact now and nothing else will do. At the other end of the spectrum are the "pragmatists" or sustainability incrementalists.

2050

NET ZERO GOAL, PARIS AGREEMENT

Pragmatists accept that mothballing fossil-fuel energy systems and switching on renewables is not going to happen overnight. But as the world heats up they see the urgent need for an orderly and just energy transition.[4] How we facilitate that transition and who pays for it is the subject of much disagreement, and it is these questions that are driving the confusion over definitions. Pragmatists argue that allocating capital to purely green assets will not hasten an orderly or just transition to a decarbonized world. Others balk at the idea that natural gas or blue hydrogen can play a vital role in facilitating the transition to a low carbon future.

4 Mark Lynas et al 2021 Environ, (2021) *Greater than 99% consensus on human caused climate change in the peer-reviewed scientific literature.* Available at: https://iopscience.iop.org/article/10.1088/1748-9326/ac2966 (Accessed 2022).

The Broad ESG Investing Spectrum

While ESG investing has been vaunted as key to the world's decarbonization, it's not a clear or straightforward path. The reality is a broad spectrum of investors (from those seeking to mitigate ESG risks, to those with sophisticated approaches on ESG goals and preferences) are all seeking to navigate the best ways forward.

In this complex and rapidly evolving landscape, there is a need for asset managers to help clients select the right sustainable investments by promoting transparency (with regard to climate as well as wider sustainability disclosures), developing expertise, resources, tools, and organizational structures to support ESG strategies, building trust, and acting with integrity to protect clients from misleading marketing claims.

COMMITMENT VS ACTION

$130 TN

FINANCIAL ASSETS COMMITTED TO NET ZERO EMISSIONS BY 2050

Source: Glasgow Financial Alliance for Net Zero (GFANZ)

This eye-catching claim from the voluntary group Glasgow Financial Alliance for Net Zero (GFANZ) includes $57 trillion from asset managers. But what does this mean in reality?

Revealed at the 2021 United Nations Climate Change Conference in Glasgow, otherwise known as COP26, the pledge drew criticism for not immediately stopping financing of fossil fuel. While the International Energy Agency's (IEA) "Net Zero" scenario rules out any new fossil fuel projects, members of GFANZ warned that a complete moratorium could hasten a disorderly and unjust transition.

70%

FUNDS MARKETED AS ESG THAT FALL SHORT OF TARGETS

Source: Harvard Law School Forum on Corporate Governance

Thus, whilst GFANZ was lauded for its ambition, it has also been charged by some critics as being a commitment without any guarantees of action, amounting to little more than greenwashing and struggling to align their commitments with their fiduciary duties. For some, GFANZ is not ambitious enough. For others, it oversteps its bounds.[5]

A growing number of asset managers have set high-level ambitions with regard to decarbonization targets, but many have struggled to follow through on those pledges and some are considering whether they can legally [6] Others have chosen to take a more conservative path, developing methodologies and tools before making any public commitments.

Unsurprisingly, this confusion is reflected in the market. InfluenceMap, a London-based non-profit, found in 2021 that 55% of funds marketed as either low-carbon, fossil-fuel free or green energy exaggerated their environmental claims. The group also estimated that more than 70% of funds promising ESG goals fell short of their targets.[7]

Commitments vs Impact

These findings highlight that ESG commitments do not necessarily equal real-world impact. Likewise, a lack of public commitment should not be equated with having no interest in ESG.

As the ESG world becomes more contested and political, public commitments may not tell the whole story. Investors should look beyond the pledges and determine what asset managers are doing in practice – what strategies, resources, and organizational structures they have in place to allow their clients to approach ESG with integrity.

5 Gosling.T (2022) 'Trouble ahead for GFANZ', *Tom Gosling Blog*, 7 August. Available at: https://www.tom-gosling.com/blog/trouble-ahead-for-gfanz (Accessed 2022).
6 Financial Times (2022) 'US banks threaten to leave Mark Carney's green alliance over legal risks', *Financial Times,* 22 September. https://www.ft.com/content/0affebaa-c62a-49d1-9b44-b9d27f0b5600 (Accessed 2022).
7 Halper.J, Bussiere.S, Shriver.T, Cadwalader (2022) 'Asset Management Industry Confronts the Challenges Presented by Climate Change Transition', *Harvard Law School Forum on Corporate Governance,* 28 February 2022. Available at: https://corpgov.law.harvard.edu/2022/02/28/asset-management-industry-confronts-the-challenges-presented-by-climate-change-transition/ (Accessed 2022).

CONFUSION AROUND THE MEANING OF CLIMATE TRANSITION

Eliminating fossil fuels from portfolios does not necessarily create a fossil-fuel-free world. In fact, it may well delay and obfuscate its orderly transition. Being transparent and unambiguous about the objectives behind various green funds, investors can choose what strategies work for them.

The varying perspectives on what constitutes green investing has created an element of confusion for asset managers and asset owners alike. The strictest definition – one the "purists" of the ESG world would apply – might call on funds to prohibit any investments in fossil fuels and finance only alternative energy projects such as wind and solar farms, which is narrower than the GFANZ pledge. But there is a growing acceptance of a more pragmatic approach to decarbonization which supports a pathway to transition. ESG funds and tools have been built around this view, which include brown assets on a credible pathway or assets that facilitate a just transition to decarbonization. These investments might include cleaner fossil fuels such as natural gas, and mining that has ties to the battery supply chain.

Minimizing carbon emissions allows for funds to manage risk, while benefits to the environment are created over time as the years-long transition to alternative energy moves forward.

This approach also acknowledges the reality of today's energy markets, with the majority of the world's consumption dependent on oil, natural gas, and coal. Dropping fossil fuel investments may encourage the privatization of energy assets, rather than a transition to green energy. And it does little to influence the world's largest suppliers of oil: state-run energy giants. Even if the supply of fossil fuels is curtailed, prices would likely rise in the face of global energy demand.

CAPITAL FLOWING TO ESG ASSETS

Propelled by new regulatory schemes in Europe, capital is flooding into ESG funds, putting intense commercial pressure on asset managers to build their sustainable investing teams, launch new ESG funds and re-label existing funds.

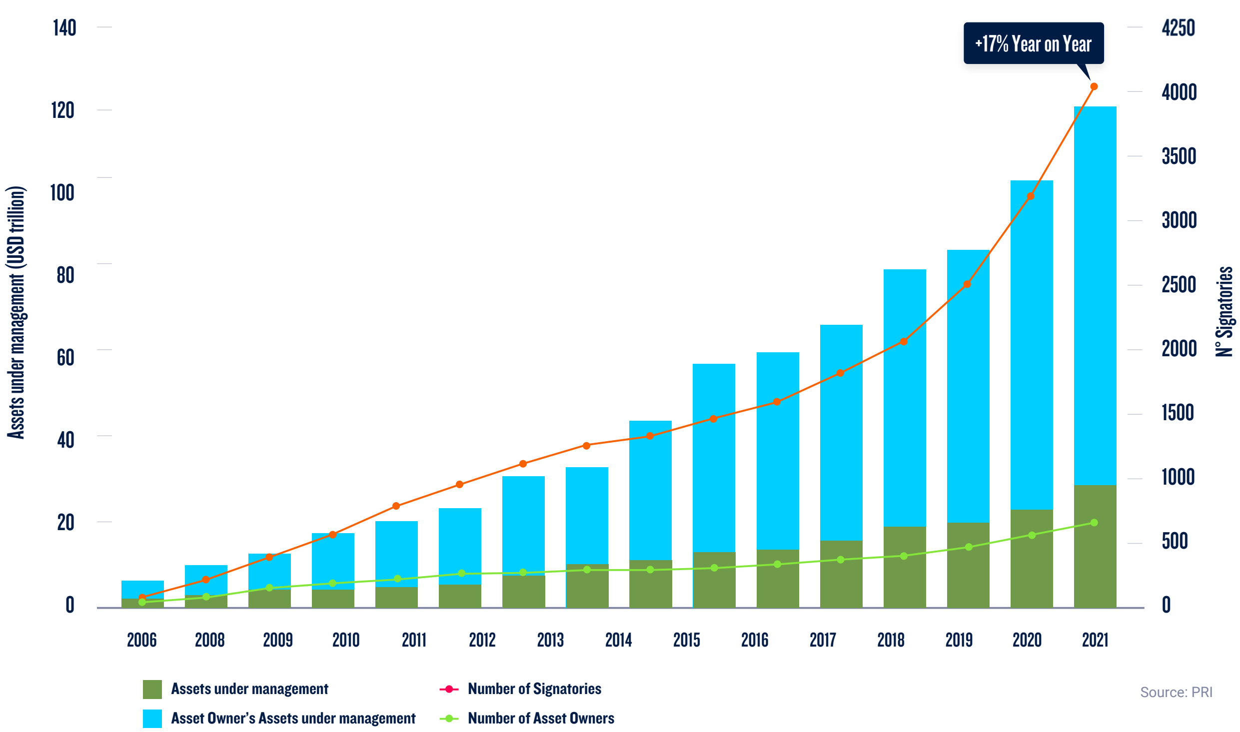
Some 4,000 asset managers and owners, representing more than $120 trillion, have now signed up to the UN's Principles for Responsible Investment (PRI) - 17% growth over the 12 months to 31 March 2021. That commits them to six principles intended to integrate ESG issues into investment decisions, where consistent with their fiduciary duties. Notably, though, these commitments are not always followed by action, as the PRI put 185 of its signatories on notice in 2018 for failing to take their commitment seriously enough.

$120 TN

THE VALUE OF ASSETS NOW MANAGED BY ASSET MANAGERS AND OWNERS COMMITTED TO RUNNING THEM ALONG SUSTAINABLE LINES.

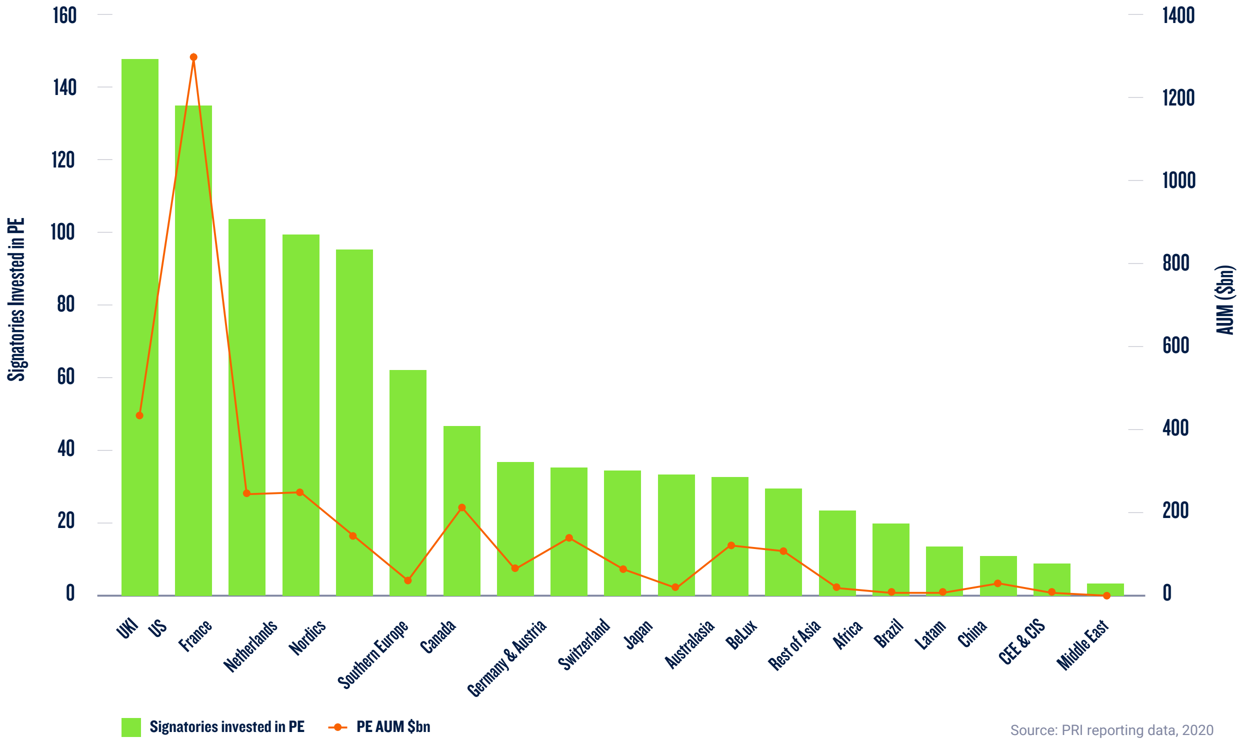
Source: UN's Principles for Responsible Investment (PRI) (as of 2021 latest figures available).

PRI Signatory Growth in 2006-2021[8]



8 Financial Times (2018) 'UN responsible investing body threatens to kick out laggards', *Financial Times,* 28 May. https://www.ft.com/content/794219c0-6002-11e8-ad91-e01af256df68 (Accessed 2022).

Signatories Invested in Private Equity



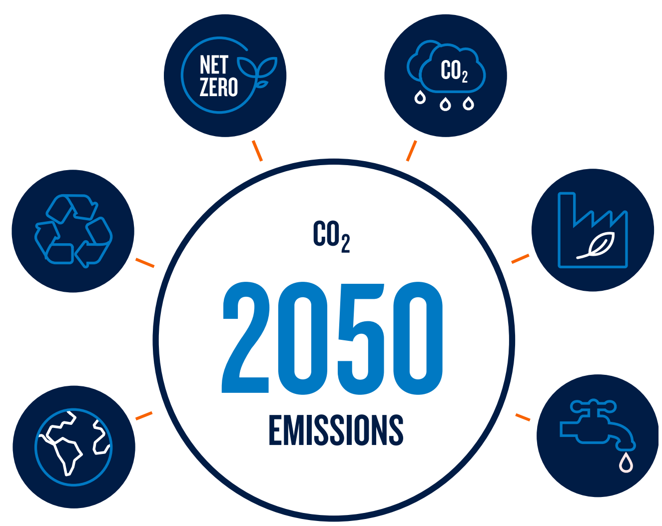
Source: PRI reporting data, 2020

UKI: United Kingdom and Ireland
CEE: Central and Eastern European Countries
(Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, Latvia and Lithuania)
CIS: Commonwealth of Independent States (Armenia, Azerbaijan, Belarus, the Kyrgyz Republic, Kazakhstan, Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan)

Even out of the public eye, in private markets, ESG assets and PRI signatories are growing.

This growth has come despite a lack of data in some corners of the ESG universe, particularly for private and fixed-income assets. In a survey by the CFA Institute, 71% of industry roundtable participants said alternative data "have the potential to improve the robustness of sustainability analysis."[9]

Another challenge is a gap in regulatory standards, which have primarily focused on sustainability issues for listed equities. Asset-class-specific frameworks are likely needed to bring ESG risk and impact analysis to non-equity investments.



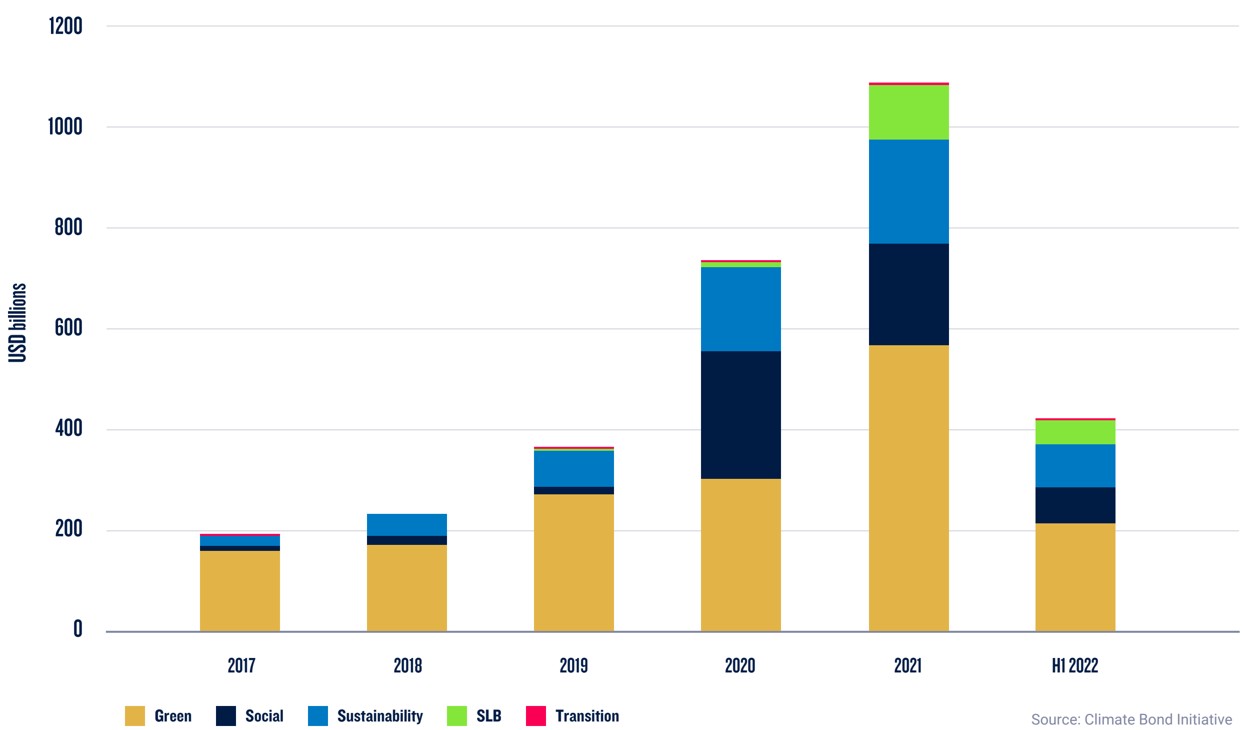
9 CFA Institute (2020) *Future of Sustainability in Investment Management: From Ideas to Reality.* Available at: https://www.cfainstitute.org/-/media/documents/survey/future-of-sustainability.ashx (Accessed 2022).

Green Bonds

The flow into ESG funds has been feeding through to underlying equity and fixed income markets. In fixed income, for instance, the green bond market hit a high of $509 billion in issuance in 2021, more than one-and-a-half times the $294 billion in 2020. However, market volatility caused by inflation concerns and the conflict in Ukraine and Russia have tempered growth in 2022.

This green investment boom has increased the capital available for scaling up decarbonization technologies and led, in some cases, to somewhat lower financing costs for businesses considered green and bond issues earmarked for green purposes. For instance, the UK's first green gilt – raising £10 billion for green projects in September 2021 – broke green premium (or 'greenium') records for cutting the cost of capital. Trading at 7.5 basis points (bps) over the June 2032 gilt, it was judged to have reduced the cost of finance by 2.5 bps, or 0.025% (based on an interpolation of where the UK's on-the-run 2031 and 2035 gilts were trading).[10]

Cumulative GSS+ volumes reached $417.8 bn in H1 2022



Source: Climate Bond Initiative

GSS+ : Green, social, sustainability, sustainability-linked, and transition labelled debt.

10 Durand.H, Lewis.J (2021) 'UK debut breaks greenium records', *International Financing Review blog,* 24 September. Available at: https://www.ifre.com/story/3063081/uk-debut-breaks-greenium-records-7w9dks20df (Accessed 2022).

ACTIVE ANALYSIS VS. PASSIVE INDICES

The lack of meaningful data remains a fundamental challenge for ESG investors. The UN's PRI group noted in a July 2021 report that "issuers do not always disclose sufficient data or do not do so effectively, posing measurement challenges."[11]

The data gap within some ESG asset classes highlights the benefits of active management, which can fill that void by leveraging in-house research capabilities. ESG ratings alone have their limitations. They use varying methodologies, and often they do not disclose them. Research by MIT's Sloan School of Management found the correlation among six ratings agencies was 0.61 on average, compared with 0.99 for mainstream credit ratings from Moody's and Standard & Poor's. Active analysis of issuers can reveal new or different risks and opportunities than those provided by ESG ratings, arming investors with a broader scope of information. Active managers can also cater to clients' individual investment goals, whether through fundamental ESG analysis or quantitative techniques.

For passive investors, it is crucial to ensure that an index's methodology aligns with their sustainability outcomes. Take, for instance, Tesla losing its place in the S&P 500 ESG index. This took many ESG investors by surprise, given the electric car maker's role in the EV transition. Yet the company's overall ESG score suffered as a result of other metrics. Being a "climate solution" was not the whole picture for this index.

Turning to private markets, there has been a huge increase in issuance of sustainability-linked loans (SLLs) used to finance specific green projects. In the first half of 2021, SLLs amounted to $350 billion, compared with $197 billion in 2020.[12]

Even here, though, there are dangers of greenwashing. Typically, SLLs reward improvements in metrics measuring greenhouse gas emissions with reductions on a loan's interest margin. Often, however, the improvements needed are soft and the rewards are small. There may also be a lack of transparency around targets for improvement and how they will be validated. Active management can offer a deeper assessment of how "green" some bonds and SLLs are in reality.

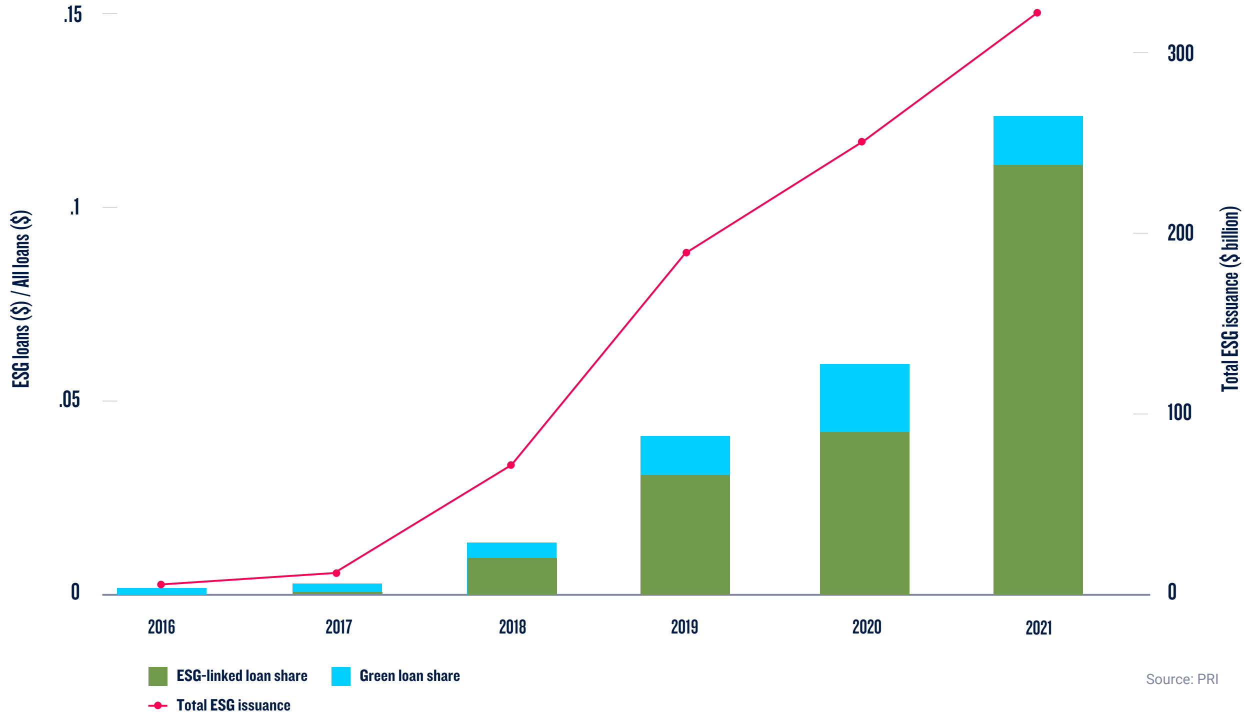
"The significant growth in the Green Bond market underscores the importance of scrutinising individual issues and credits," according to PGIM Global Head of ESG Eugenia Jackson. "As we await improved standards to enhance issuers' accountability on their Green Bond pledges, PGIM Fixed Income's Green Bond impact assessment provides a framework for evaluating the credibility and additionality of their securities."[13]

"By employing data screening, scalability, and a discerning approach to stock classification not bound by strict definitions, quants establish a holistic approach to analyzing companies' management and operations, their interaction with stakeholders, and their exposure to risk. This can uncover value in the ESG space while navigating a potential bubble in ESG investing."

GEORGE PATTERSON
Chief Investment Officer, PGIM Quantitative Solutions

11 Principles for Responsible Investment (2021) 'Do ESG information providers meet the needs of fixed income investors?', *Principles for Responsible Investment blog*, 23 July. Available at: https://www.unpri.org/credit-risk-and-ratings/do-esg-information-providers-meet-the-needs-of-fixed-income-investors/8067.article (Accessed 2022).
12 Wass.S (2021) 'Sustainability-linked loan supply outpaces green bonds and loans amid US surge', *S&P Global Market Intelligence blog,* 27 July. Available at: https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/sustainability-linked-loan-supply-outpaces-green-bonds-and-loans-amid-us-surge-65569374 (Accessed 2022).
13 Jackson, E. PGIM Fixed Income (2021) *Filtering Shades of Green Through Our Green Bond Framework.* Available at: https://www.pgim.com/fixed-income/white-paper/filtering-shades-green-through-our-green-bond-framework (Accessed 2022).

ESG-linked and green loan issuance



Source: PRI

This figure illustrates the annual issuance of ESG-linked and green loans during the sample period from 2016 to September 2021. The sample consists of 1,127 ESG-linked and 1,228 green loan facilities from Refinitiv DealScan (DealScan, hereafter). In each bar, the dark and light areas indicate ESG-linked and green loan issuance amounts as a fraction of all loans, respectively (left y-axis). The dashed line indicates the total issuance amount of ESG-linked and green loans combined (right y-axis).

"Clients will have many different approaches to ESG. Some may pursue ESG strategies to enhance long-term returns, others - a public pension fund perhaps - may forgo a small amount of financial return in exchange for reduced carbon emissions on the understanding that its beneficiaries want to have a sustainable world to retire into as well as a pension pot. People may disagree with or learn from each other's approaches to ESG - but the most important element to ESG is that asset managers understand their client's expectations and objectives and are clear about trade-offs and, vitally, that they do what they say they will do."

EUGENIA JACKSON
Global Head of ESG, PGIM

REGULATION AND STANDARDS

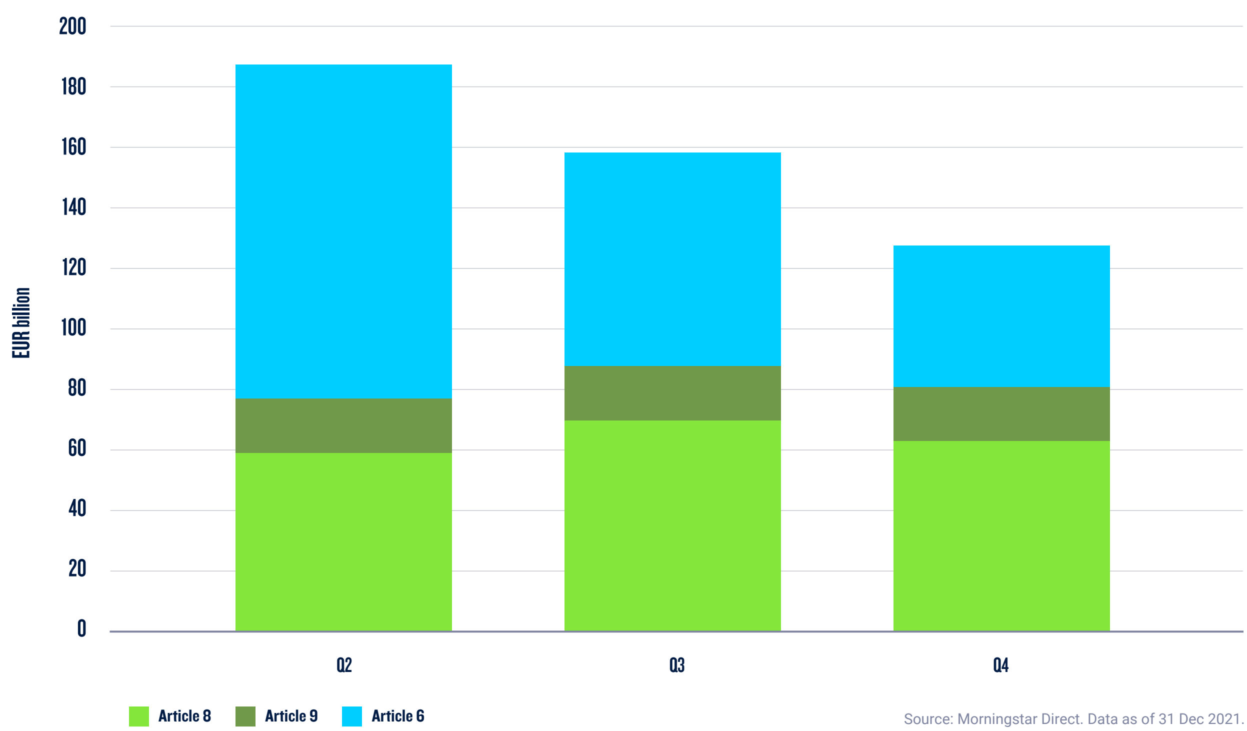
As new regulations and standards emerge, a lack of clarity has led to greenwashing concerns. However progress towards a global baseline of sustainability disclosures is now underway and in time, definitions should become clearer and mandatory standards become effective.

Regulations and standards are setting out to eliminate greenwashing, yet they can unintentionally become primarily product labelling schemes that are useful for marketing. On 10 March 2021, the European Union's Sustainable Finance Disclosure Regulation came into effect. Aiming to discourage greenwashing and encourage responsible and sustainable investment, it was heralded as leading the way globally. The regulation required asset managers to classify their funds into three categories, depending on their investment objectives. Article 6 covered all managed funds that consider sustainability risks in the investment process, Article 8 funds promote environmental or social characteristics, and Article 9 funds have a sustainable investment objective.

An unexpectedly high number and broad range of funds were labelled as Article 8 (light green) and Article 9 (dark green). In fact, 6,862 funds were classified as Article 8 by the end of the first quarter of 2022 and 898 as Article 9, according to Morningstar. As money flooded in, by March 2022, assets in the two categories of funds reached EUR 4.2 trillion, representing nearly half of all funds sold in the EU.

Despite the introduction of a regulatory framework, uncertainty around greenwashing lingers. In a report published in September, the Netherlands Authority for the Financial Markets (AFM) said there were "still uncertainties with regard to the correct interpretation of some requirements," noting that some of the funds it reviewed lacked detailed descriptions of their sustainability objectives. Regulators have some work to do before labels for ESG funds become reliable.

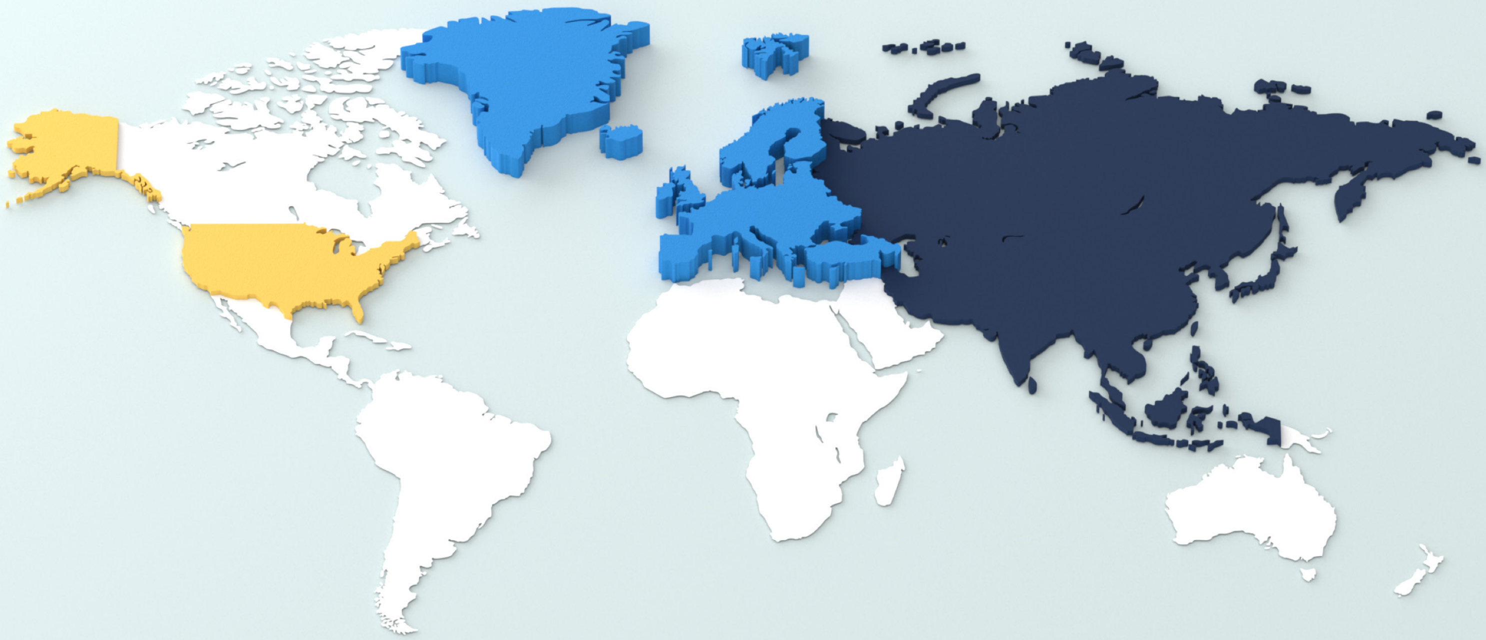
Inflows rise in Article 8 and Article 9 funds, falling in Article 6



Source: Morningstar Direct. Data as of 31 Dec 2021.

The New Greenwashing Regulations and Standards World

Globally, though, standards are steadily being introduced that will help to narrow the scope for greenwashing. Notably, the International Sustainability Standards Board is introducing new ground rules for companies reporting on sustainability, which should further improve disclosures on environmental and other sustainability issues.



USA

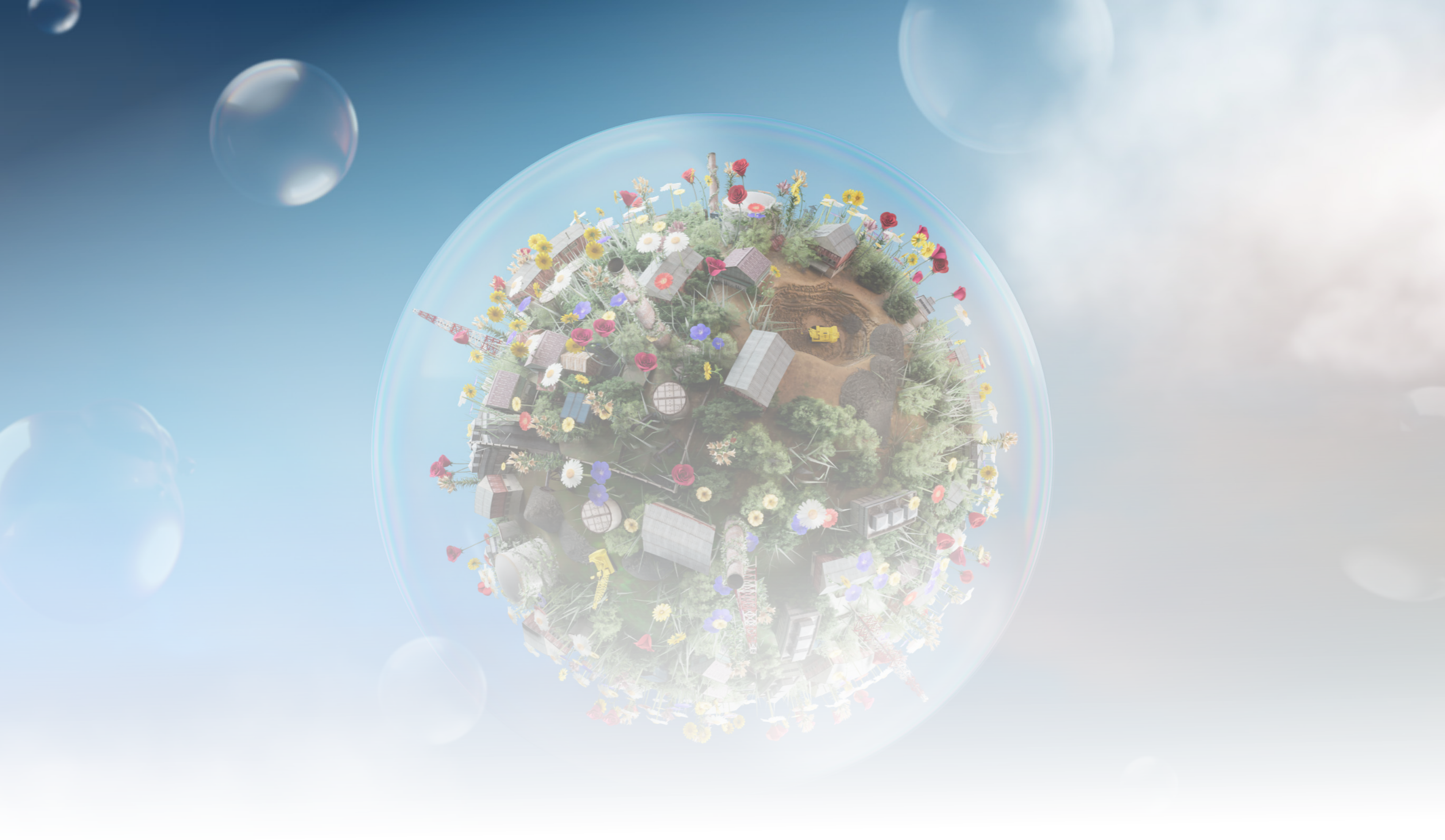
In the US, the Securities and Exchange Commission in May 2022 proposed two new rules for ESG funds and advisers, potentially creating new disclosure requirements for these funds and expanding on SEC rules around fund names.

EUROPE

EU Sustainable Finance Disclosure Regulation implemented in March 2021, defining to what extent funds can describe themselves as green. The EU's new taxonomy regulation seeks to provide clarification on which economic activities are sustainable. Its inclusion of natural gas and nuclear power has not been without controversy.

ASIA

Turning to Asia, new climate disclosure rules are being introduced in China and Singapore, which will also aid investment decisions and narrow the scope for corporate greenwashing.



CONCLUSION

There is no doubt that climate change is now having profound implications on how long-term investors build their portfolios. Yet ESG investing is rightly under intense scrutiny as commercial pressure and ambiguous definitions risk leading to greenwashing.

The debate about what it means to be green is deeply complex – but that's ok. As Kermit the Frog from The Muppets said, it's not easy being green. However, it is important for asset managers to act with integrity by promoting transparency, building expertise, and establishing trust.

For asset owners, it can be difficult to decipher fact from fiction. There are many different definitions of sustainable investing, but above all, asset owners must be clear about what their sustainable investing objectives are. Then they can scrutinize their asset managers, who need to be honest about their constraints and limitations as much as their ambitions. They need to act with integrity and engage with a "show us" approach to allow asset owners to select suitable investment products, ensuring that marketing pledges are consistent with how portfolios are invested. When both asset managers and owners have clear goals in mind, clients can look beyond disagreements over what it means to be "green" and choose investments based on their own priorities across the environmental, social, and governance categories.

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