How to Build a Sustainability-Focused Equity Allocation

We believe it is possible to build an equity portfolio that meets high sustainability standards without materially changing its return profile.

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Historically, portfolio construction has centered around optimizing return relative to risk, but we increasingly see institutional investors also adding environmental and social impact goals to their portfolio's aims. For example, many institutional investors have committed to shift their portfolio's carbon emissions profile or direct capital toward solutions that address climate change. This focus on sustainability in addition to risk and return affects all asset classes and is particularly important to consider in equities because collecting the equity risk premium is the bedrock of most strategic asset allocations. **This raises the question: how can investors build an equity allocation that can achieve both return/risk *and* sustainability objectives?**

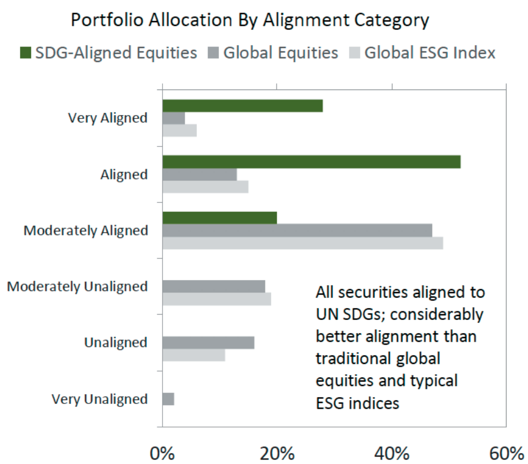
To answer this question, we have developed a process with the goal of building a diversified equity portfolio that meets high sustainability standards without materially changing its financial characteristics. Making the shift to incorporate sustainability into an equity portfolio requires applying the same rigor to issues of sustainability that we are accustomed to applying to risk and return. It also requires creating a new portfolio construction approach that not only balances return and risk but also adds in impact considerations as a new important dimension.

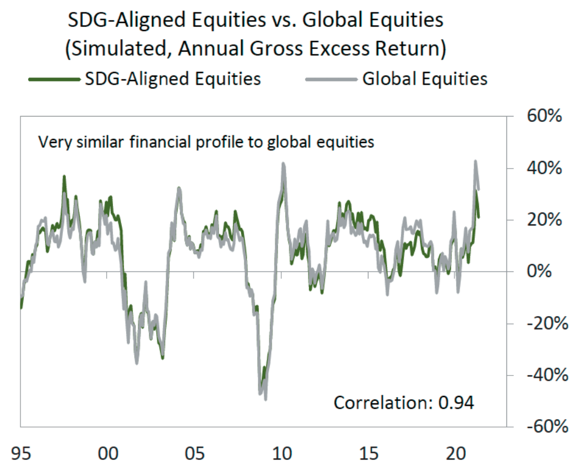
The charts below illustrate the outcome of our process: a globally diversified equity index—with comparable returns to a traditional global equity portfolio—that includes only companies aligned to the United Nations Sustainable Development Goals (UN SDGs).[1] In the remainder of this report, we describe how we built this allocation, breaking down the problem into two pieces:

1. **Selecting which companies are aligned with a sustainable future:** We have developed the capability to systematically assess the alignment of thousands of public market equities to the United Nations Sustainable Development Goals.

2. **Engineering the selected companies into a portfolio:** Once we have selected SDG-aligned equities, we leverage our portfolio construction capabilities to build up a diversified index by weighing each company's marginal diversification and sustainability characteristics.

[1] The equity portfolio referred to as SDG-Aligned Equities and described in this piece is shown for illustrative purposes only. Such portfolio is not a strategy or product that Bridgewater manages.





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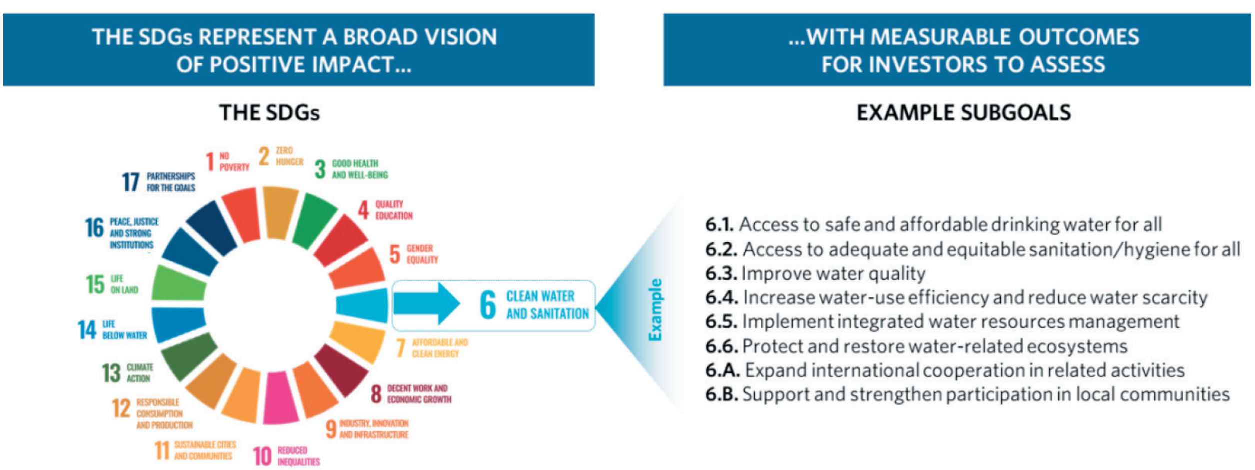
Selecting Which Companies Are Aligned with a Sustainable Future

The first step is choosing a sustainability or impact goal for your portfolio. Before investors can build a sustainable portfolio, they must decide what "sustainability" means to them. We use the United Nations Sustainable Development Goals, which are a broad global framework for social and environmental impact agreed to by most governments globally. The goals are expansive, ranging from ending poverty to providing affordable and clean energy, and we believe they address many investors' most important sustainability goals. For example, environmental sustainability and climate change affifire a top priority for many asset owners, and these play a large role in the SDGs (6 of the 17 goals address climate and the environment directly). The SDGs also contain around 200 specific and measurable indicators defined by the UN that help investors and researchers to assess real-world corporate activities.



[2] Returns through May 19, 2021 and are shown gross of fees. SDG-Aligned Equities is shown for illustrative purposes only and does not represent a strategy managed by Bridgewater. SDG-Aligned Equities is constructed using Bridgewater analysis, which selects equity securities that are aligned with the UN SDGs and then combines such equity securities into an index based on publicly available market data. The results do not represent actual results and actual results may significantly differ from the simulated returns being presented. Readers should consider the limitations inherent in simulated results. It is expected that the simulated performance will periodically change as a function of both refinements to our methodology and the underlying market data. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this report.

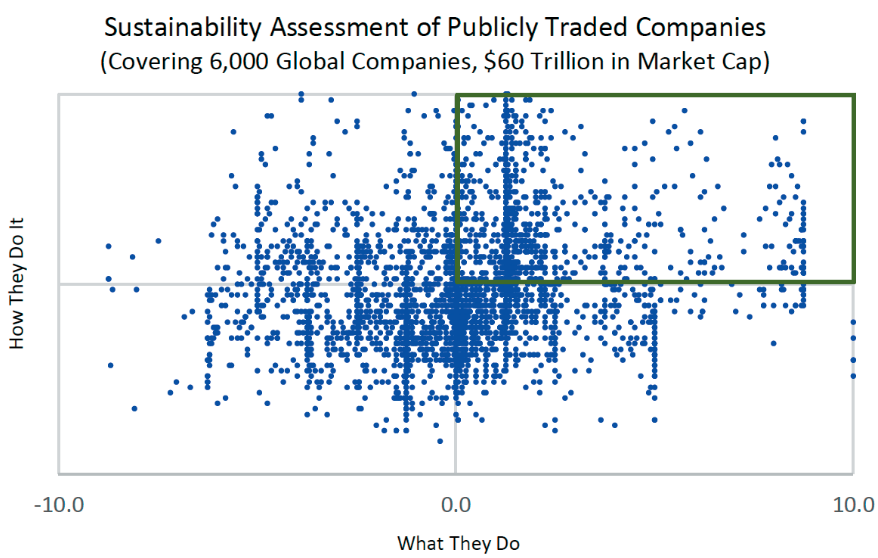
The next step is building a scalable process to assess public companies against that goal. After choosing a goal, we develop a perspective on what we aim to measure and why (what we call a "data concept")—rather than reacting to the mountain of messy data that is increasingly available to investors on ESG issues. Given that institutional investors tend to have exposure to hundreds if not thousands of public market equities, a systematic process to assess equities is required to make the process scalable. Of course, systemization also forces a rigor in thinking (because it can be evaluated) and provides the opportunity to build in diversification and triangulation across multiple perspectives.

In our analysis, companies are rated on two dimensions, capturing the two ways corporates can have impact:

1. **What They Do:** Companies impact the world through the goods and services they provide. We break down a company's revenues into its various goods and services and align each of them with achieving sustainability goals. Even a very high-level goal like "Reduced Inequalities" can be mapped to specific business goods and services that are aligned with that goal (e.g., expanding financial services provided to underserved and low-income communities).

2. **How They Do It:** In addition to their revenue lines, companies also impact the world through behavioral practices such as their environmental footprint and labor practices. Each of these can be mapped to relevant sustainability metrics (e.g., carbon emissions or child labor). The relevance of each of these elements depends on the nature of the business (e.g., carbon emissions are more significant to a manufacturer than to a services business), so we look at close to 100 measures of business practices but weigh the relevance of these issues for each company.

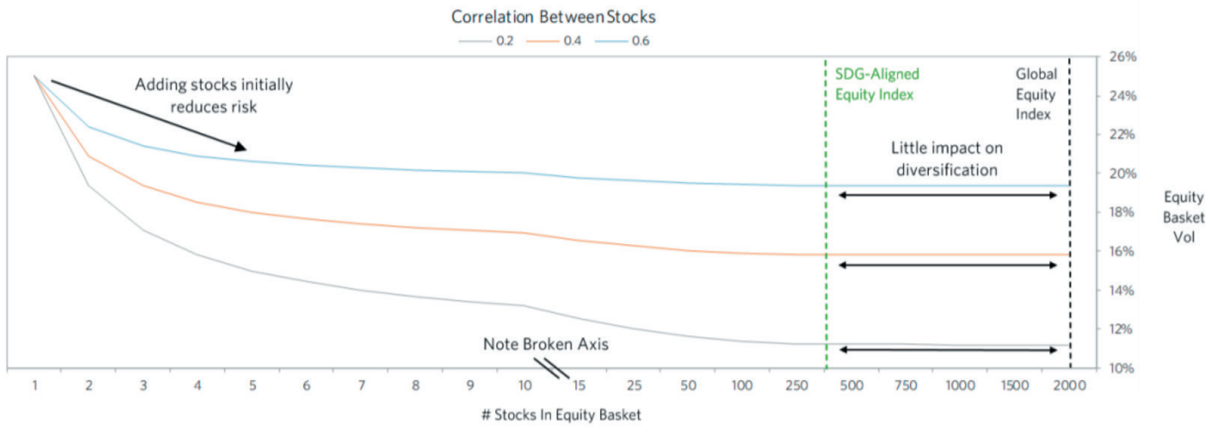
The chart below shows the outcome of that process. Utilizing our systematic approach, we analyzed over 6,000 of the largest publicly traded companies, covering over $60 trillion in available market cap. Our starting universe, illustratively highlighted in the top right box, consists only of those companies that meet our principles for sustainability in "what they do" and "how they do it."



Engineering the Selected Companies into a Portfolio

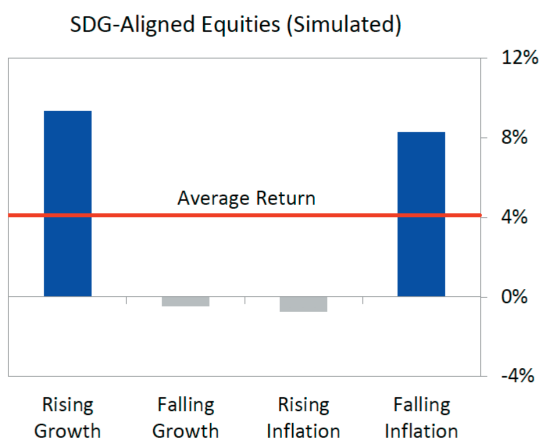
Because there are so many stocks to choose from in the world with similar fundamental exposures to macroeconomic conditions, **we believe that what is lost by reducing the universe of stocks held in terms of the marginal benefit of diversification is relatively modest**. The chart below shows this from a theoretical perspective. The initial gains from diversification—moving from 1 to 50 securities—are substantial, while the later gains—moving from 50 securities to 500 securities—are very small. As an illustration, when we engineered a portfolio using the goals and selection process described above, we selected about 300 companies constituting about $13 trillion of market cap to build a diversified allocation.

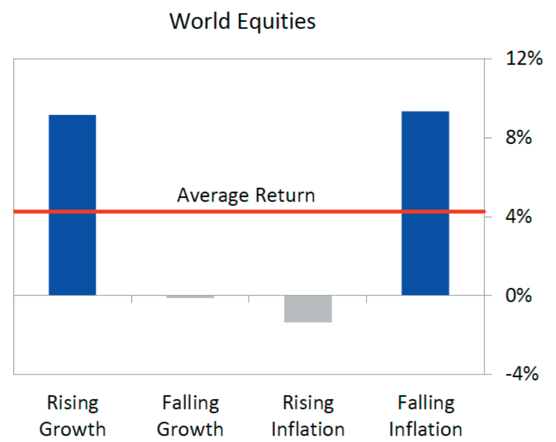
Number of Stocks in Equity Basket vs Equity Basket Volatility



Building a well-diversified portfolio out of the selected companies requires expanding traditional portfolio construction capabilities, which carefully examine how to achieve optimal diversification from any set of assets, to add in a third dimension that also considers sustainability characteristics in that process. From a risk-reducing diversification perspective, the goal is to avoid a range of biases such as sectoral concentration (e.g., healthcare), geographical concentration (e.g., Europe), company concentration, and factor concentration (e.g., valuation). From a sustainability perspective, the most-aligned companies should have more weight than those with less alignment to social and environmental goals. Going through this process, we believe it is possible to engineer a portfolio of equities with substantially similar financial characteristics as a global equity index—comprised only of companies that were selected to meet high sustainability standards.

Stock returns are driven by corporate cash flows and how those cash flows are discounted; growth and inflation are the dominant drivers of corporate cash flows, and risk premiums and discount rates determine how these cash flows are discounted to today. These exposures are widely shared across stocks. A diversified mix of sustainable equities shares the same overall macro exposures as a typical global index, and the returns of a portfolio of sustainable equities can, in large part, be explained by shifts in these macro factors.





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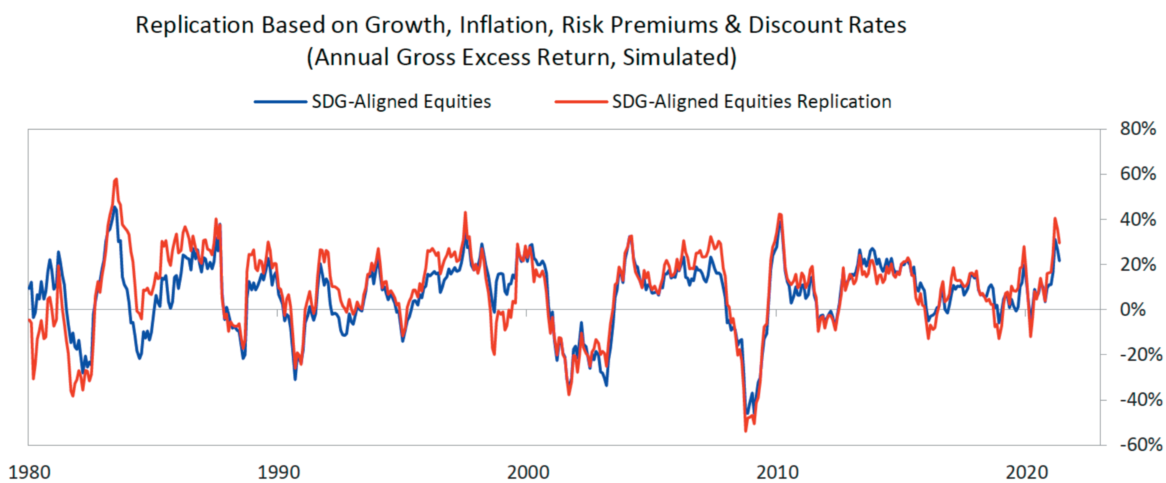

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[3] Rising/Falling Growth/Inflation refer to perspectives from Bridgewater's analysis called the "AW Lens," which is an analytical approach to assess the behavior of the major drivers of asset performance and their impact on markets during any given period based on Bridgewater's understanding of global financial markets. Returns through May 19, 2021 and are shown gross of fees. SDG-Aligned Equities is shown for illustrative purposes only and does not represent a strategy managed by Bridgewater. SDG-Aligned Equities is constructed using Bridgewater analysis, which selects equity securities that are aligned with the UN SDGs and then combines such equity securities into an index based on publicly available market data. The results do not represent actual results and actual results may significantly differ from the simulated returns being presented. Readers should consider the limitations inherent in simulated results, including limitations and assumptions with SDG construction process. It is expected that the simulated performance will periodically change as a function of both refinements to our methodology and the underlying market data. Past performance is not indicative of future results. Please review the "Important Disclosures and Other Information" located at the end of this report.

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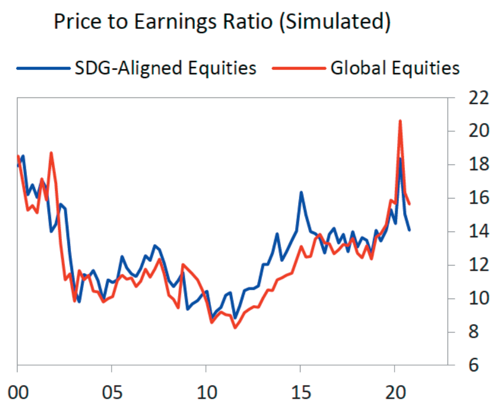
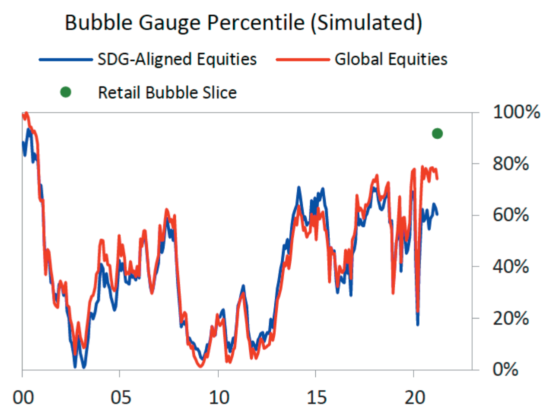
And a diversified mix of sustainable equities also looks quite like market indices in terms of its valuation characteristics. Sustainable equities have a slightly lower P/E ratio in aggregate; our bubble gauge, which provides our perspective on stock market valuations, shows the sustainable mix as modestly overvalued, while valuations in the market overall are a bit more stretched (and there are some of the concentrated pockets of froth with much higher valuations).





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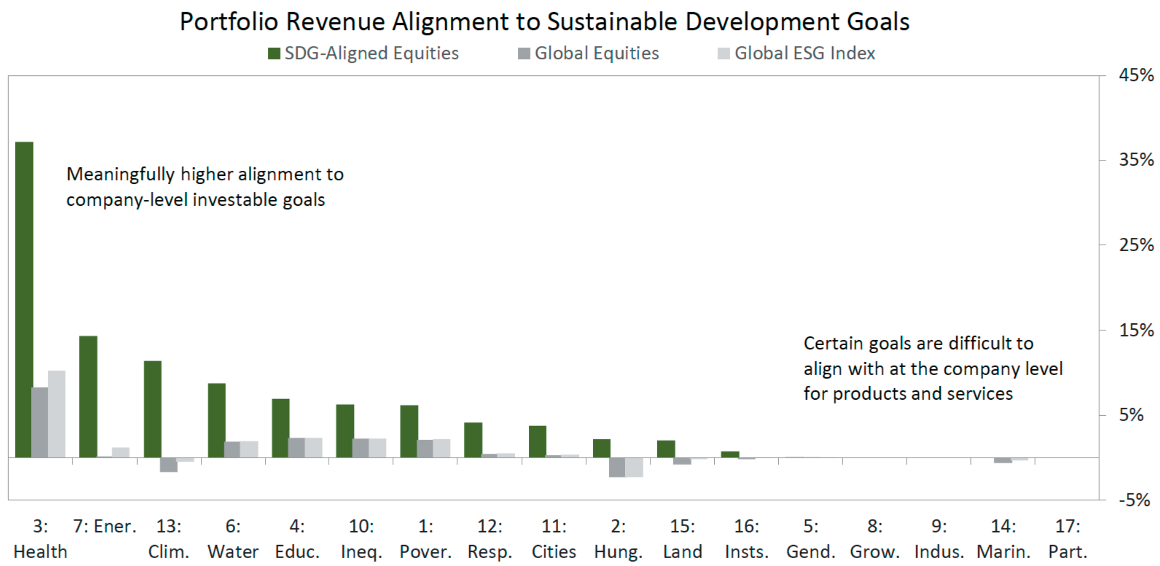
[5] The retail bubble slice refers to a slice of equities where BW analysis indicates that valuations are most stretched due to retail activity. SDG-Aligned Equities represents an illustrative view of equity allocations that uses SDG ratings to select SDG-aligned assets. This index is constructed based on Bridgewater analysis and does not represent returns of any actual Bridgewater strategy.

Tracking and Measuring a Portfolio Against Social and Environmental Sustainability Goals

Investors are accustomed to tracking, measuring, and reporting on the financial characteristics of their portfolio. A portfolio with added sustainability goals should also have a process of tracking, measuring, and reporting on these goals as well. Below, we give a few quick illustrations of how investors can do this.

First, investors can examine how different companies' goods and services contribute to individual Sustainable Development Goals through their offerings of goods and services. A typical equity allocation ends up with a modest allocation to companies aligned to most Sustainable Development Goals; in the case of climate, for example, it is a net negative when you add up companies that detract from the goal of decarbonizing the economy. The picture is quite similar for most held global ESG indices; in part, this is because many large indices prioritize minimizing tracking error to the benchmark, so they focus on "trimming the tail" by removing only a few companies with the worst business practices. In contrast, we start by establishing a very high sustainability bar (standards for alignment on both products and services, and business behavior) and then overlay our portfolio construction expertise, a process we call "3D Portfolio Construction." This results in a portfolio with meaningfully higher alignment to many SDGs (including SDG 3, which is focused on healthcare, and SDGs 7 and 13, which are focused on climate). It is also worth noting that several of the SDGs (e.g., SDG 16: Peace, Justice, and Strong Institutions) are less directly relevant to company products and services.



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The SDGs are: 1. No Poverty; 2. Zero Hunger; 3. Good Health and Well-Being; 4. Quality Education; 5. Gender Equality; 6. Clean Water and Sanitation; 7. Affordable and Clean Energy; 8. Decent Work and Economic Growth; 9. Industry, Innovation, and Infrastructure; 10. Reduced Inequalities; 11. Sustainable Cities and Communities; 12. Responsible Consumption and Production; 13. Climate Action; 14. Life below Water; 15. Life on Land; 16. Peace, Justice, and Strong Institutions;
17. Partnership for the Goals.

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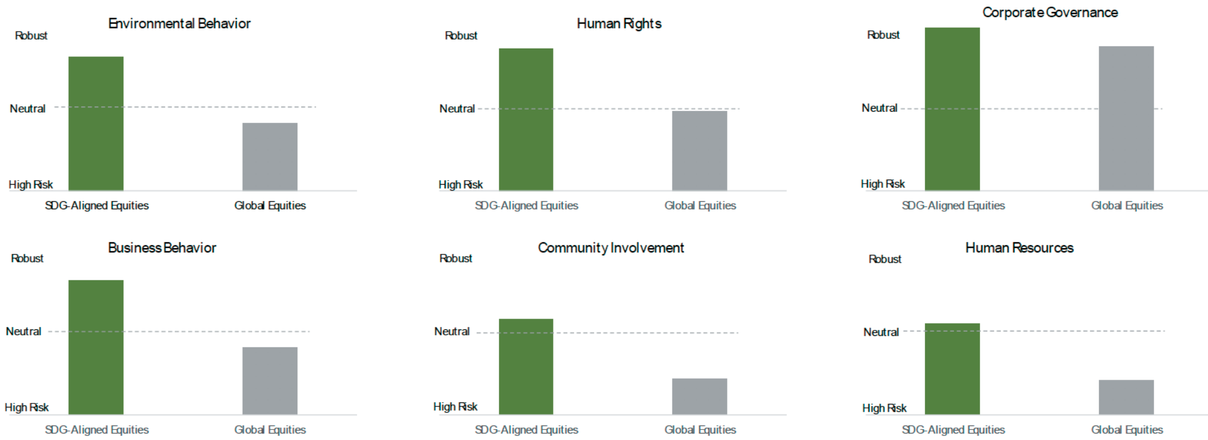
Additionally, investors can measure and track how their portfolio is performing in terms of business behaviors. As shown below, an equity index assessed through our process has better aggregate business behavior than global equities on relevant topics such as environmental activity (e.g., pollution and waste), social and labor considerations (e.g., supply chain quality and non-discrimination of labor), and corporate governance.



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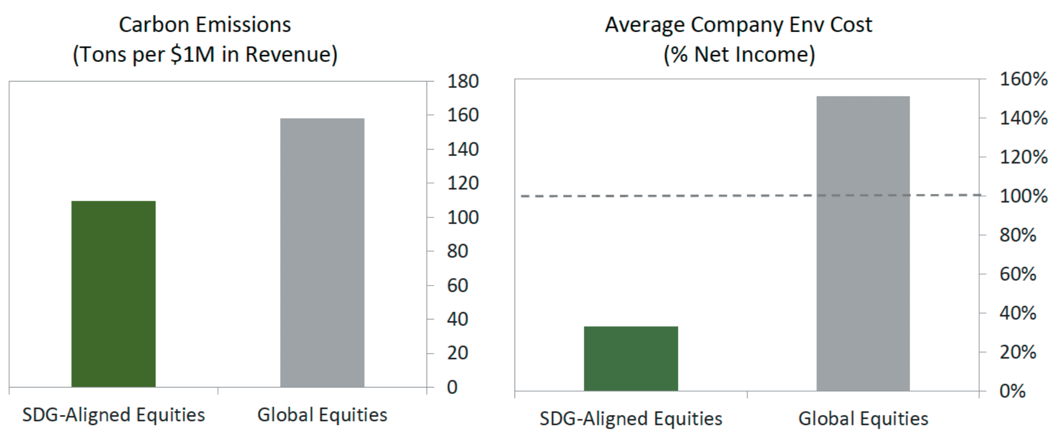
Increasingly, investors are also able to measure impact directly, for example by accounting for companies' environmental damage. Below, in partnership with the Harvard Business School Impact-Weighted Accounts Initiative, we assign a dollar value to the environmental impact that companies have as a by-product of their business (e.g., for every unit of greenhouse gas emissions and waste generated, a dollar cost is assigned). Comparing this to the revenues that the company has allows us to answer the question, "How profitable would a company actually be if we accounted for the environmental impact of the business?" A sustainable equity mix reflects a much lower environmental footprint for corporate activities.



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[8] Please see previous footnote.