



A New Way of Seeing Value



Introducing Engine No. 1's Total Value Framework

Engine No. 1's Total Value Framework is a data-driven approach to investing that puts a tangible value on a company's environmental, social and governance impacts and ties those impacts to long-term value creation.

Interest in environmental, social and governance (ESG) has never been greater, and yet, ESG ratings systems conflict with one another and remain uncorrelated from financial returns. The inability to tie data to actual outcomes has supported shareholders divesting rather than holding a company and engaging when a problem arises.

For the first time, the Total Value Framework measures, in dollars and cents, the material negative and positive impacts a company has and demonstrates how a company's performance and value can be enhanced by the investments it makes in its employees, customers, communities, and the environment.

At Engine No. 1, we believe there is no tradeoff between impact and returns. The Total Value Framework is an important step forward for CEOs, board members, and investors to include impact analysis in long-term decision making to drive better economic results.

Flaws in the data

The financial world has been flooded with new ESG-related data in recent years: nine out of ten companies in the S&P 500 now issue sustainability reports¹; Bloomberg terminals provide access to 140 million ESG data points; and dozens of providers offer investors their own ESG data, ratings, and scores. A recent GSIA report suggests that the managers of \$35 trillion in assets are grappling to integrate this data into their investing.² In our view, three principal challenges undermine ESG data:

1 Metrics are unstandardized: There are more than 230 distinct initiatives to bring standards to corporate sustainability reporting.³ Researchers have found that, even for the relatively narrow topic of employee health and safety, twenty different reporting metrics were recently used among fifty large companies.⁴ Companies and investors often end up relying on simplified ratings and scores that only hide this complexity.

2 Ratings are uncorrelated: A recent study characterized the field of ESG metrics as one of “aggregate confusion,” in which correlations among providers are worryingly low.⁵ The same companies considered top quartile by one provider are often bottom quartile for another, rendering these ratings somewhat useless to investors.

3 Analysis is disconnected: We believe that ESG metrics and analysis remain mostly disconnected from a company’s financial or operational analysis. We believe that many investors append their ESG analysis to an investment memo rather than factoring it into their financial projections, models, or valuations.

Annual surveys carried out by the Callen Group over the last five years suggest that many institutional investors still do not consider ESG factors to be material to financial performance, and that only a minority of respondents incorporate ESG into their investment decisions⁶. When they do, they often say the more important factors in ESG investing are stakeholder pressures, values or impact-based arguments, and potential correlations with risk. Significantly, the prospect of “higher long-term returns” is one of the weakest incentives they report.

In the absence of investment managers who are able to produce superior ESG performance and financial returns, investors have understandably focused on cost and convenience. The largest growth segment in the ESG space has been comprised of low-fee funds that largely mirror passive indexes, modified by the exclusion of certain stocks with unfavorable ESG ratings and, in some cases, the overweighting of more highly rated counterparts.⁷

From values to value

Early responsible-investing pioneers were focused on moral values, not financial value. Many of these investors were religious investors who, for centuries, identified “sin stocks” and removed them from their portfolios.⁸ Much of the ESG investing world is still influenced by that thinking.

An increasing number of investors are asking more pragmatic questions: “What impact do my investments have?” and “How will these impacts influence future financial returns?” To answer these, they must understand how their investing decisions affect a company’s operations and externalities, and how those operations and externalities then influence the company’s performance. Through our Total Value Framework, we are evaluating investment opportunities through a new lens, which addresses investor’s concerns spanning materiality, impact, and financial performance over the long-term.

¹ Governance & Accountability Institute (2020) “Trends on the Sustainability Reporting Practices of the Russell 1000 index companies.” p. 2

² Global Sustainable Investment Alliance. 2021. Global Sustainable Investment Review 2020. <http://www.gsi-alliance.org/wp-content/uploads/2021/07/GSIR-2020.pdf>

³ Huw Van Steenis (2019) Defective data is a big problem for sustainable investing Financial Times January 21, 2019 <https://www.ft.com/content/c742edfa-30be-328e-8bd2-a7f887017e4>

⁴ Kotsantonis, S., & Serafeim, G. 2019. Four Things No One Will Tell You About ESG Data. *Journal of Applied Corporate Finance*, 31(2).

⁵ Berg, F., Koelbel, J. F., & Rigobon, R. 2019. Aggregate Confusion: The Divergence of ESG Ratings: MIT Sloan School of Management.

⁶ Callan Institute (2020; 2019; 2018; 2017; 2016) “ESG Survey” (San Francisco, CA)

⁷ Chuah, Kevin, James McGlinch and Witold Henisz (2021) “Greenwash or Green: What Attracts Inflows into ESG Equity Funds?” Wharton ESG Analytics Lab Working Paper (unpublished).

⁸ Eccles, R. G., Lee, L.-E., & Strohle, J. C. 2020. The Social Origins of ESG: An Analysis of Innovent and KLD. *Organization & Environment*, 33(4): 575-596, Townsend, B. 2020. From SRI to ESG: The Origins of Socially Responsible and Sustainable Investing. *The Journal of Impact and ESG Investing*, 1(1): 10-25.

When investors focus on impact and long-term economic returns, interests align across shareholders and stakeholders

Building a better way

At Engine No. 1, we developed our Total Value Framework to address the current deficiencies in ESG data and help investors generate lasting impact on corporate behavior and long-term financial returns—not just the warm glow of a “pure” portfolio.

• **Value for stakeholders:** Through the Total Value Framework, we seek to measure the value that companies create or destroy for all their stakeholders—their employees, customers, and communities, and the environment. We seek to quantify, where possible, the impact in dollars instead of using ESG scores and ranks, the latter of which, in our view, constitute little more than emojis and are quite difficult to incorporate into valuation models. Instead, we use independent sources and estimates to assess the firm-level cost of emissions, resource use, waste, social practices, and a number of other ESG factors. We then calculate the societal impact of these estimates in dollars—for instance, the social cost of carbon—through the use of science-based conversion factors.

• **Value for shareholders:** Armed with these new metrics, we can proceed to focus on how the value delivered to stakeholders affects the value a company can deliver to shareholders and the timeline over which that value will be realized. This forces us to examine drivers like potential regulation, changes in customer or employee preferences, technological disruption, and other relevant contributors to a company’s risk or growth.

The Total Value Framework can show changes in the pattern of value creation or destruction over time—strongly predicting future shifts in the company’s financial value, including in revenues, worker productivity, earnings, net income, market capitalization, and earnings multiples. Our analysis also shows the association between stakeholder value and these financial outcomes is far stronger than the correlations observed between traditional ESG metrics and these same outcomes.

Crucially, and for the first time, the Total Value Framework informs our decisions as investors, the investments we make, as well as what we do as owners once we make them. Our approach, rooted in data, connected to value, and integrated with our investing process, provides the foundation for active ownership and lasting change.

Our initial analysis also suggests the Total Value Framework can guide investment strategy, offering asset managers substantial value by identifying top ESG performers in each industry—meaning those companies with the smallest negative ESG impacts. We have preliminarily found that these companies dramatically outperform their peers in share-price performance, EBITDA, and net income.

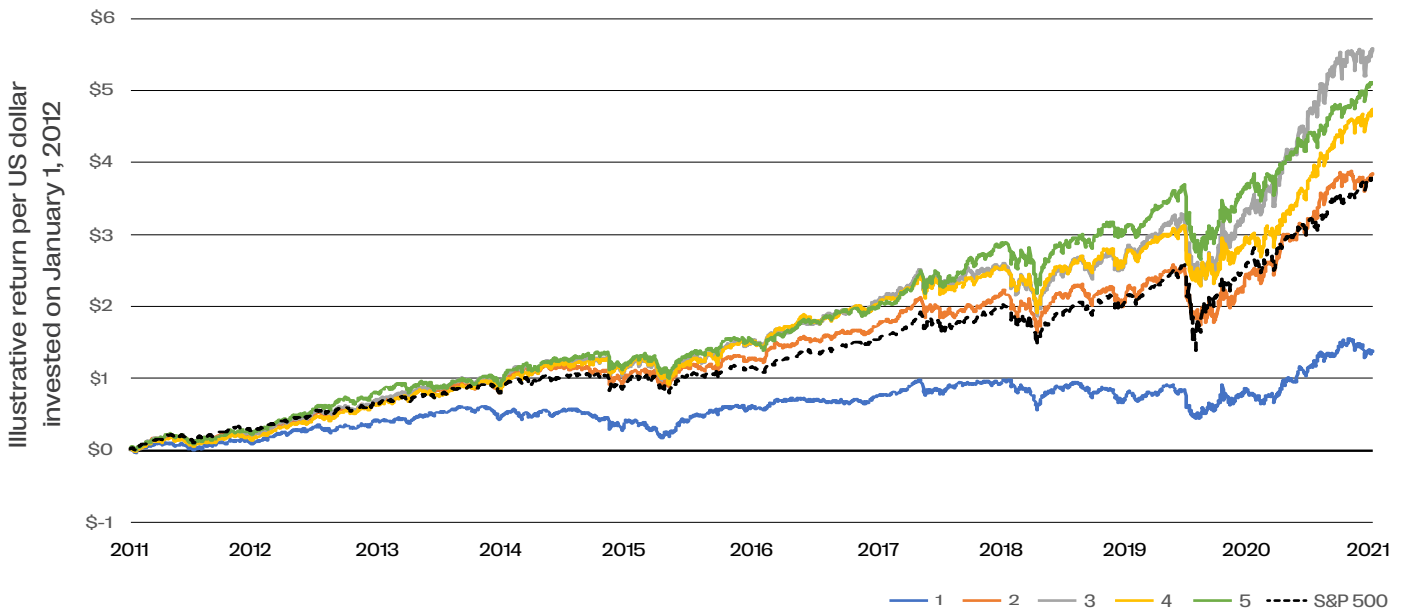
We believe that our Total Value Framework will redefine what financially superior ESG investing can be. However, this will be an evolving process, where we seek to continually refine and enrich our framework with new data, methodologies, and quantification metrics. Even at this nascent stage, we believe we can examine and evaluate illustrative returns using the Total Value Framework as a proxy for performance.

In the chart below, using the Total Value Framework, we analyzed the performance of 700 S&P 500 firms between December 2, 2011 and August 9, 2021, and separated the firms into quintiles. Quintile designation on this chart is represented with '1' representing firms with the lowest Total Value Score (or largest negative impacts) which substantially underperformed the benchmark, and '5' representing the highest Total Value Score (or smallest negative impacts) which outperformed the benchmark.

While this does not account for an evolving data framework and it holds assumptions over the time period constant, we can

still see in the chart that the framework can be an important and impactful methodology to deploy towards generating favorable financial returns, while at the same time quantifying the requisite ESG impact (as opposed to the aforementioned ranking and rating methods). Subsequent versions of the Total Value Framework will seek to employ a deeper sector-specific analysis, with better defined weighting schemes and more direct attribution statistics. We are seeking to bring a new framework to ESG investing which may carry significant upside potential.

Illustrative return based on Total Value Score (from 1 to 5) vs. S&P 500



Note: Provided for illustrative purposes only. **The chart does not represent the performance results of any existing or proposed investment vehicle managed by Engine No. 1.** The above chart represents the application of the Total Value Framework to approximately 700 companies included in the S&P 500 Index from December 2, 2011 – August 9, 2021 to demonstrate the correlation of performance of companies with lower and higher Total Value Scores.

The Total Value Framework employs a variety of ESG-related data factors to quantify and connect the material impact of a company to financial performance. The framework identifies material and high-impact actions a company can take, and assigns dollar values to those actions, highlighting where a business is under or overvalued based on impact. This process determines each company's Total Value Score. The companies were then separated into quintiles, with Band 1 including the companies having the lowest Total Value Score, and Band 5 having the highest Total Value Score. Portfolio quintile and S&P index composition adjusted annually.

The chart shows the hypothetical performance of an investment in December 2, 2011 of \$1 USD per each Band as of August 9, 2021 and assumes that the basket of securities composing each quintile is rebalanced on January 1 of each year. Hypothetical performance is not actual performance and has inherent limitations and should not form the basis for an investment decision. None of the information set forth above constitutes an offer to purchase or an offer to sell, or a promotion or recommendation of, any security, financial instrument, product or trading strategy. Past performance is not indicative or a guarantee of future results. Please see "Important Information" at the end of this White Paper.

Additional information regarding Engine No. 1's Total Value Framework and methodology is available upon request.

By embracing the principles outlined above, we believe ESG investing can harness capital on the scale needed to address systemic challenges. Only then will the potential of ESG funds

translate into the better financial returns and the corporate, societal, and environmental outcomes they were always meant to deliver.

Engine No. 1 is an investment firm that drives performance through impact. The firm was founded on the shared belief that a company's ability to create long-term shareholder value depends on the investments it makes in its employees, customers, communities, and the environment.



Learn more at www.engine1.com.

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