

# ESG Data Signals

## Trucost Sustainable Development Goals (SDG) Analytics



### Highlights

- Using the Trucost SDG Dataset, investors can calculate the proportion of company's "Sustainable Development Goal" revenues that are positioned for achieving the UN's 2030 Sustainable Agenda.
- Within the S&P 500 and MSCI World, equities with the highest SDG exposure (Tertile 1) outperform those with the lowest (Tertile 3) by 2.1% and 1.6% on average annually, respectively.
- Constructing SDG aligned portfolios from the S&P 500® and the MSCI World results in a positive active return over the time period of +10.4% and +12.7% respectively.

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# Sustainable development considerations

In 2015, the United Nations launched the 17 Sustainable Development Goals (SDGs) that were adopted by 193 countries. The SDGs outline a set of objectives to be achieved by 2030 that aim to end poverty, hunger and inequality, while tackling climate change, improving health and education, and spurring economic growth.



## The market opportunity

Achieving the SDGs will require US\$5 trillion to \$7 trillion in annual investment and the United Nations Conference on Trade and Development (UNCTAD) outlines how sustainable and responsible investments represent high-potential sources of capital for the SDGs.<sup>1</sup> According to the Business and Sustainable Development Commission, putting the SDGs at the heart of the world's economic strategy could unlock US\$12 trillion in opportunities and 380 million jobs a year by 2030.<sup>2</sup>

As of 2016, US\$18.2 trillion was invested in this asset class,<sup>3</sup> and the bond market for sustainable business is growing. For example, in 2018 global green bonds reached US\$155.5 billion, up 78% from the previous year.

In contrast to the earlier Millennium Development Goals, the SDGs not only emphasize the role of government and non-government sectors, but of businesses to operate responsibly and pursue opportunities to solve societal challenges.



## Trucost SDG Analytics

Trucost SDG Analytics dataset helps investors understand which companies are contributing towards the SDGs and how they are doing so through their current business models. It also provides information on how exposed a company may be to SDG-related risks, or risks that may detract from achieving the Goals. The data can be used by investors to analyze potential exposure to a variety of SDG-related risks, measure SDG-alignment, benchmark companies against each other in terms of their SDG performance, screen or optimize portfolios, and report to stakeholders.

Trucost evaluates the positive impact companies may have on the SDGs via how they generate revenue. SDG-aligned revenues evaluate the share of revenue derived from products, services, and technologies that contribute to SDGs. The share of SDG-aligned revenue is determined by mapping company revenue by product category to a database of SDG positive impact products and services, called the Trucost Positive Impact Taxonomy. This database was developed by Trucost, based on a bottom-up analysis of the 169 SDG targets to identify categories of products, services, and technologies that directly contribute to the achievement of each target. Products and services may be relevant to multiple SDG targets due to the interrelationships inherent in the SDGs.

1 See References on page 6.

2 See References on page 6.

3 See References on page 6.

# Creating an SDG Revenue Factor

Using the Trucost SDG Revenue Share dataset, investors can now calculate the proportion of company revenues that are aligned to the 17 Sustainable Development Goals. We aggregated the percentage of revenue for each company from the 17 SDGs and arrived at a total percentage of a company's revenue that is aligned to all SDGs. For example, Johnson & Johnson (JNJ) has 100% of its revenue stream in total from the 17 SDGs.<sup>4</sup>

This 'Total SDG Revenue Factor' can now serve multiple purposes, including:

Identifying companies that are positioned for achieving the UN's 2030 Sustainable Agenda

Back testing the SDG Revenue % as a Factor

# SDG Revenue Backtest

*Is there any outperformance/underperformance within equities that exhibit higher/lower percentages of SDG revenue?*

We ran a backtest on the S&P 500 and the MSCI World indices using the following criteria:

Independent/Dependent Variable:  
Total SDG Revenue Percentage/Forward Returns

SDG Revenue Percentage bucketed into 3 Tertiles (Highest SDG Revenue Percentage in Tertile 1)

Tertiles are Country & Sector Neutral

End of Month Rebalancing

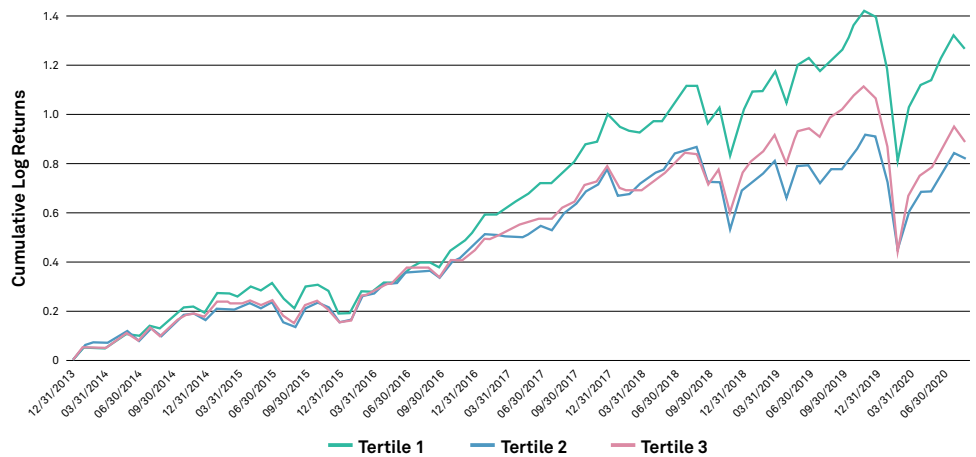
1 Month Forward Equally Weighted Tertile Return

<sup>4</sup> Under Trucost's Positive Impact Taxonomy, this refers to medical devices and pharmaceuticals that align to all SDG 3 Targets, and personal hygiene projects that align to SDG 3 Target 3.9.2. and SDG 6 Target 6.2.

# S&P 500

Tertile 1 (contains the companies that have the highest exposure to SDG revenue) outperforms Tertile 3 on average by 19bps/month, or an average Top/Bottom Spread of 2.1% annually.<sup>5</sup> Interestingly, Tertile 3 outperforms Tertile 2 in 2018 until the Covid-19 sell off in 2020, this would require further analysis as to ascertain why.

**Figure 1: S&P 500® SDG Revenue Tertile Cumulative Log Returns**



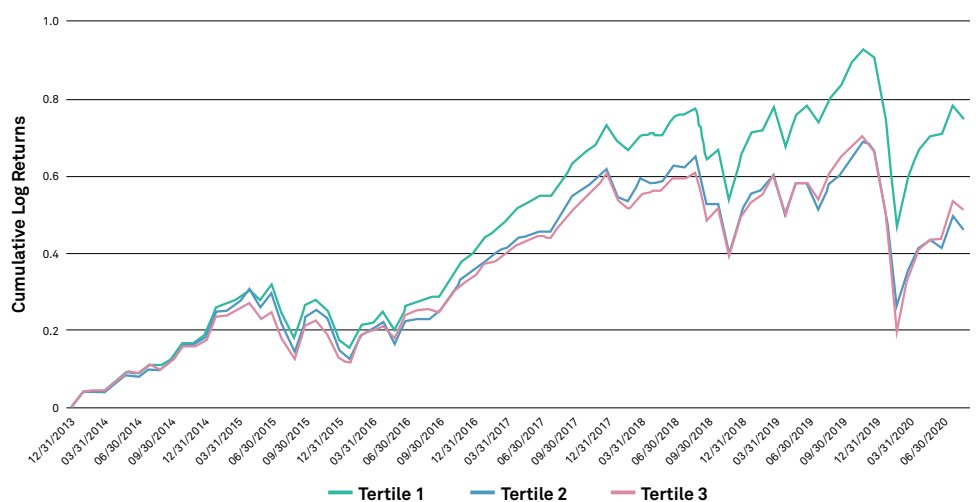
Source: Trucost analysis. Current as at October 2020.

*Back tested performance has inherent limitations. The returns shown are hypothetical, do not represent the results of actual trading of investor assets, and are constructed with the benefit of hindsight. Thus, the performance shown does not reflect the impact that material economic and market factors had or might have had on decision making if actual investor money had been managed. Returns do not include payments of any sales charges or fees. Such costs would lower performance. Past performance is not a guarantee of future results.*

# MSCI World

Tertile 1 (which contains the companies that have the highest exposure to SDG revenue) consistently outperforms Tertile 3 on average by 14bps/month, or an average Top/Bottom Spread of 1.6% annually.<sup>6</sup>

**Figure 2: MSCI World SDG Revenue Tertile Cumulative Log Returns**



Source: Trucost analysis. Current as at October 2020.

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<sup>5</sup> T-Stat 1.404 (>10% Confidence Level), Monthly Top-Bottom Spread: 0.19%.

<sup>6</sup> T-Stat 1.349 (>10% Confidence Level), Monthly Top-Bottom Spread: 0.14%.

# Aligning portfolios with the **SDGs**

After analyzing the SDG revenue dataset within the S&P 500 and the MSCI World, we can see that the Top Tertile outperforms.

*Using these results how would a portfolio constructed from the Top tertile equities perform versus its underlying benchmark?*

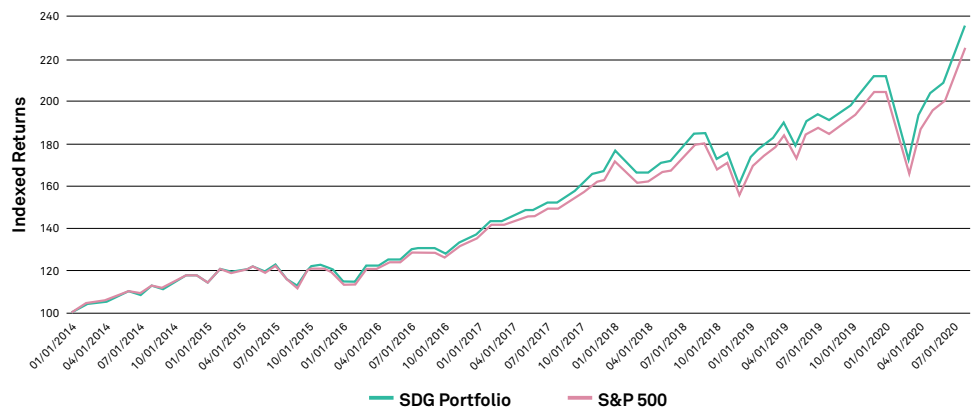
We constructed portfolios based on the S&P 500 and the MSCI World indices using the following parameters:

- Top Tertile of equities from SDG Revenue rebalanced monthly
- Country & Sector Neutral
- Equally weighted positions within Sector/Country Exposures

## SDG Portfolio – S&P 500

From January 2014 to August 2020 the S&P 500 went up 125.8%, in the same period the SDG Portfolio went up 136.2%, a difference of +10.4% over the course of the analysis. The realized tracking error of the portfolio is just 0.58%, with a Sharpe of 0.7 versus 0.645 for the S&P 500.

**Figure 3: SDG Portfolio vs S&P 500® Returns**



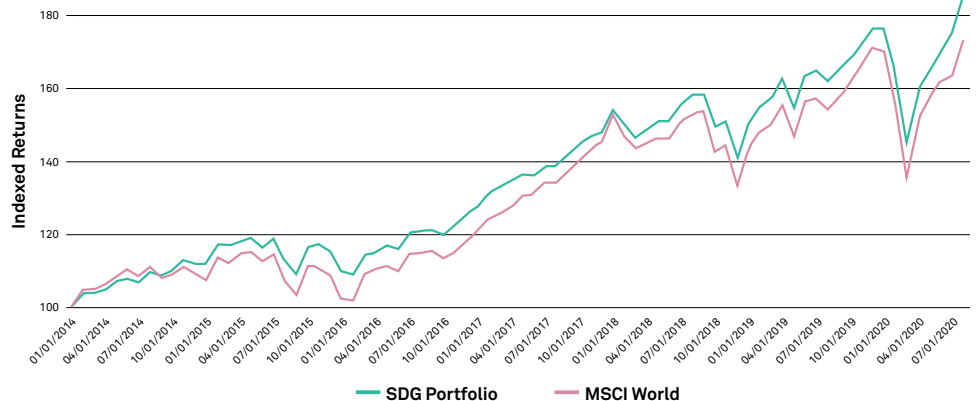
Source: Trucost analysis. Current as at October 2020.

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## SDG Portfolio – MSCI World

From January 2014 to August 2020 the MSCI World went up 73.3%, in the same period the SDG Portfolio went up 86%, a difference of +12.7% over the course of the analysis. The tracking error of the portfolio is just 1.09%, with a Sharpe of 0.58 versus 0.56 for the MSCI World.

**Figure 4: SDG Portfolio vs MSCI World Returns**



Source: Trucost analysis. Current as at October 2020.

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# Summary

Investors can calculate the proportion of company's "Sustainable Development Goal" revenues that are positioned for achieving the UN's 2030 Sustainable Agenda. In doing so, companies can be aligned to these goals whilst also being able to identify their outperformance/underperformance versus their high/low exposures to SDG Revenue.

Portfolios can be aligned to SDG top tertile companies whilst maintaining their underlying benchmark characteristics. The SDGs have garnered widespread backing for their effective harmonization of the three dimensions of sustainable development – social inclusion, environmental protection, and economic growth. This analysis provides additional insight on companies that are pursuing sustainable development through their business models as well as historical performance.

# References

1. United Nations Programme Development, 2020, [www.undp.org/content/oslo-governance-centre/en/home/sustainable-development-goals/goal-17-partnerships-for-the-goals.html](http://www.undp.org/content/oslo-governance-centre/en/home/sustainable-development-goals/goal-17-partnerships-for-the-goals.html)
2. A release from the Business and Sustainable Development Commission, January 16, 2017, <http://businesscommission.org/news/release-sustainable-business-can-unlock-at-least-us-12-trillion-in-new-market-value-and-repair-economic-system>
3. United Nations Development Programme, 2020, [www.undp.org/content/undp/en/home/sustainable-development-goals/goal-17-partnerships-for-the-goals.html](http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-17-partnerships-for-the-goals.html)

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