Quantifying Company Impact on the U.N. Sustainable Development Goals

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Introduction to Trucost and S&P Global

- Four major business lines:
 - S&P Global Ratings
 - S&P Global Indices
 - S&P Global Market Intelligence
 - S&P Global Platts
- Within S&P Global Market Intelligence
 - Trucost ESG Analysis
 - Acquired 2016
 - Asses risks relating to climate change, natural resource constraints, and broader environmental, social, and governance (ESG) factors.

Trucost ESG Analysis

S&P Global

The SDGs are supported, but businesses lack guidance on their implementation

193 countries, 9000 companies, and investors with more than \$4 trillion in assets have pledged their support to the United Nations Sustainable Development Goals (SDGs).

While the SDGs garner support a challenge prevails in transitioning to transformative action on SDG-aligned **business strategies** and capital allocation.































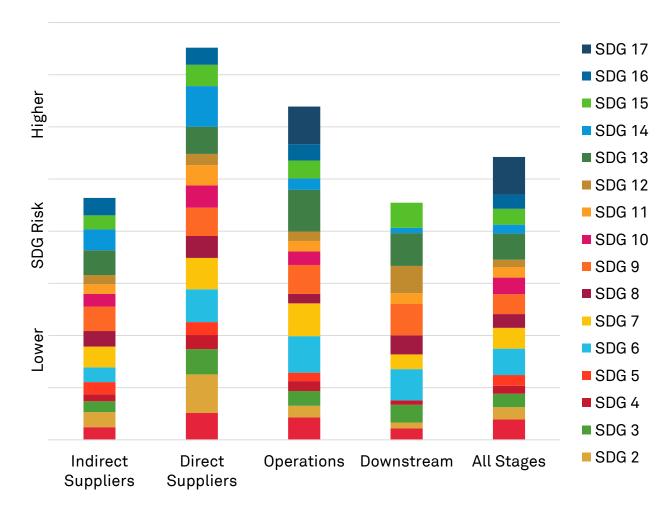




The Trucost SDG Evaluation Tool provides measurement of company impact on the SDGs

In 2018, Trucost developed and launched an SDG evaluation tool for use by companies. It has successfully been used to measure both the positive and negative impact of companies and their contribution to countries' SDG progress.

The Trucost SDG Evaluation was launched in partnership with 13 leading companies. With this inaugural cohort, we uncovered \$233 billion of **SDG-aligned business revenues** – equivalent to 87% of total revenues generated by the companies.



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How it works: SDG Risk, Mitigation and Positive Impact

The Trucost SDG Evaluation Tool assesses company performance on the SDGs by building a map of SDG exposure across the value chain.

Then, a company's efforts to manage and mitigate its exposure to each SDG is evaluated, along with positive impacts created by a company.

The output of this analysis is an overall SDG Evaluation score for use in **benchmarking against peers and tracking performance** over time, plus a series of visualizations to aid businesses in targeting and enhancing their SDG strategy.



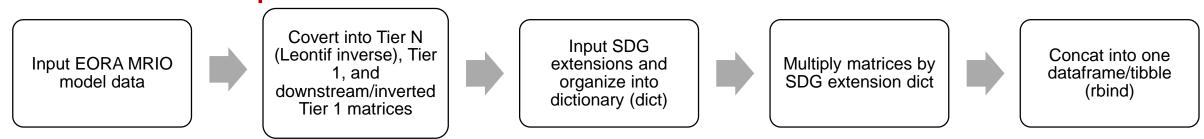
How it works: SDG Risk Exposure

The SDG risk exposure analysis is built upon a multi-regional input output (MRIO) model that captures global economic flows, overlaid with environmental, social and governance-related (ESG) extensions that represent metrics related to the SDG targets.

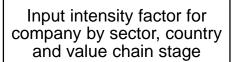
The MRIO is a large matrix, representing the financial transactions between 189 countries with 26 industry sectors each.

We then extended the matrix by 45 SDG-related metrics, and did this for each stage of the value chain.

SDGI-O Model Set-Up



Company SDG Risk Exposure Analysis





Compare to highest risk to all sectors in global value chains in SDGI-O Model



Run custom function for percentile rank



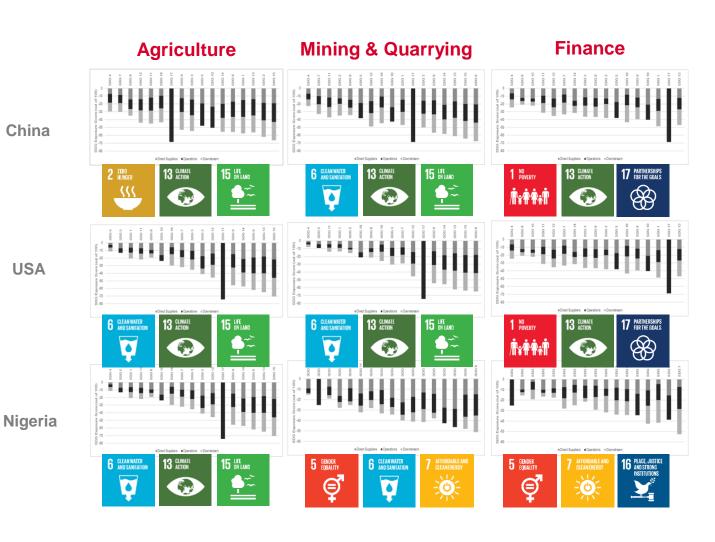
Output SDG risk exposure values for company

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Sensitivity Analysis: SDG Risk Exposure

The SDGs encompass a broad range of ESG issues that may be of greater or lesser relevance to any given company based on the nature of their operations and business model, and the different countries in which they operate, source materials, and sell their products.

Given this, it is possible to **assess a company's exposure to each SDG** based on the sectors it operates in, and the geographic distribution of its value chain.



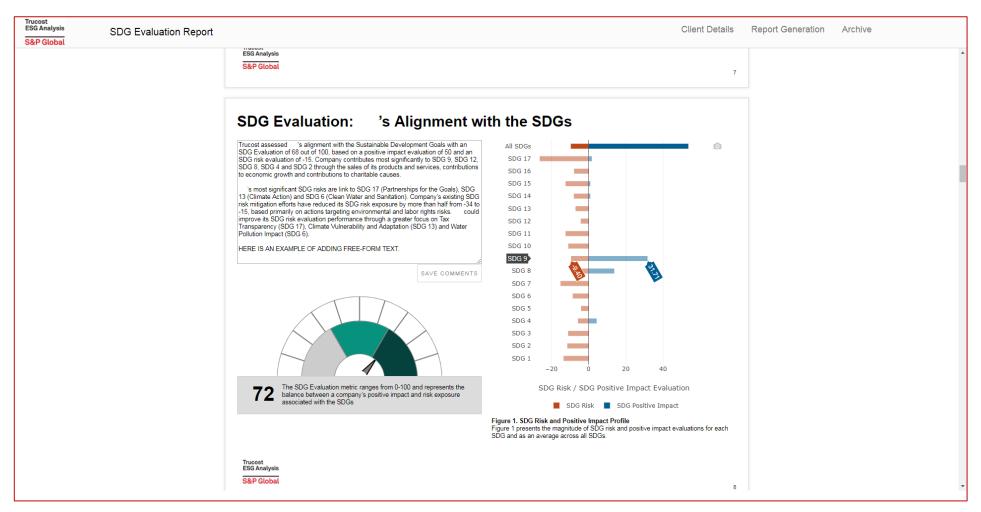
Putting it together: Plotly Dash App

To streamline tool delivery, Trucost and Plotly built a Dash App to quickly create client-ready reports.



Putting it together: Plotly Dash App

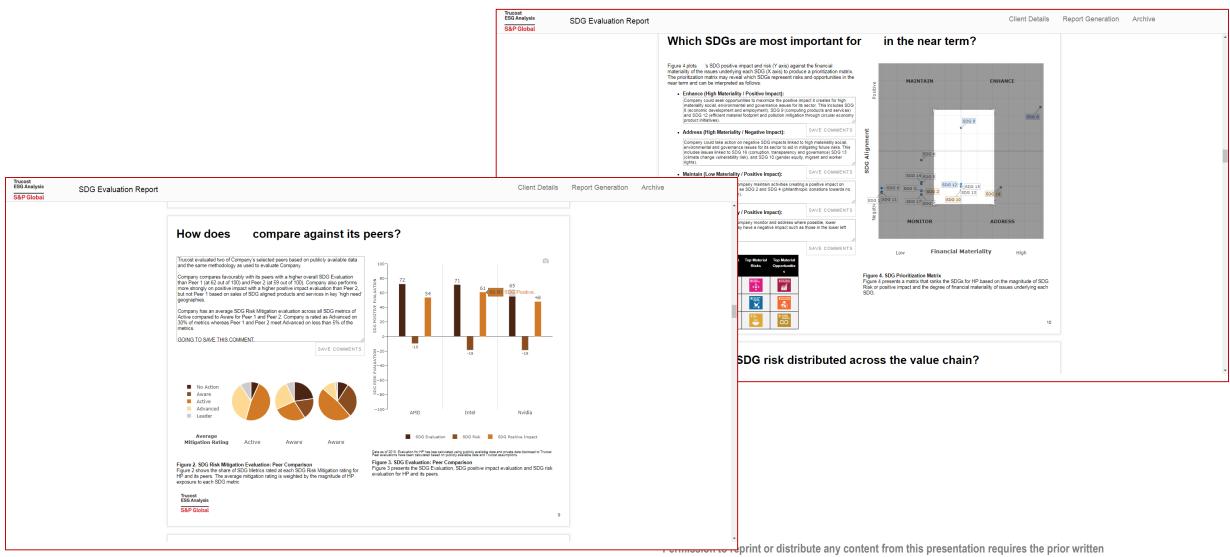
The App enables generation of client-ready reports with interactive visualizations and editable commentary.





Putting it together: Plotly Dash App

Analysts can enter commentary – a project value-add – directly on the App.



Conclusion

The SDG Evaluation Tool is a quantitative data-driven tool to support companies in tracking their performance towards the U.N. Sustainable Development Goals (SDGs). The Tool relied on robust exploratory data analysis (EDA) in R + Python to create its underlying model, and its process is now more efficient via a Plotly Dash App for generating client-ready reports.

Trucost will continue to integrate cutting-edge technologies and techniques to improve our clients' ability to transform and create value in a more sustainable economy.

Thank You!

Rochelle J. March

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