A Division of S&P Global

Frequently Asked Questions

S&P SDG Indices

Company Background

- 1. Who is S&P Dow Jones Indices? S&P Dow Jones Indices (S&P DJI) is the largest global resource for essential index-based concepts, data and research, and it is home to iconic financial market indicators, such as the <u>S&P 500®</u> and the <u>Dow Jones Industrial Average®</u>. More assets are invested in products based on our indices than products based on indices from any other provider in the world. Since Charles Dow invented the first index in 1884, S&P DJI has been innovating and developing indices across the spectrum of asset classes, helping to define the way investors measure and trade the markets.
- 2. Who is S&P Global Sustainable1? S&P Global Sustainable1 serves as the central source for sustainability intelligence from S&P Global. Through the use of S&P Global Trucost's environmental data, Sustainable1 is a leader in carbon and environmental data and risk analysis and assesses risks relating to climate change, natural resource constraints and broader environmental, social and governance (ESG) factors.
- 3. Who is Impact Cubed? Impact Cubed is a London-based provider of sustainability impact data and analytics. Impact Cubed's data are based on factual and quantitative analyses that enable the company to assess a security through a range of lenses, including alignment with the United Nations Sustainable Development Goals (SDGs).¹
- 4. Why did S&P DJI choose Impact Cubed for an SDG index? The chosen dataset encapsulates a holistic framework of issuer-level data that offers 3.5 times the granularity of other data providers. This means identifying positive and negative real-world outcomes related to investees' operations, products and services. This in turn enables an understanding of what a company does, where it does it and how it aligns with the SDGs, considering geolocation.

Please refer to www.impactcubed.com for information on Impact Cubed and its processes.

- **5.** How does Impact Cubed assess alignment to the SDGs? There are two approaches in the methodology used to assess SDG alignment: revenue and operational. These approaches are translated into three different datasets.
 - a) Revenue is based on what a company makes (its products and services) and uses company-disclosed revenues, which are mapped to one of the products and services in Impact Cubed's industry classification framework. Each business activity is classified as positively aligned, neutral or negatively aligned to one or more SDGs.
 - b) Operational is based on a company's operations (how the products and services are made) and uses various operational ESG factors from Impact Cubed's corporate factor model. Each factor is mapped to one or more SDGs.
 - c) Both approaches are combined to provide a holistic view of SDG alignment based on what a company makes as well as its operations.

The UN SDGs

6. What are the UN SDGs? The SDGs² are a set of 17 goals adopted by the UN in 2015 to end poverty, protect the planet and ensure peace and prosperity by 2030.³

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

7. What are the S&P SDG Indices? The S&P SDG Indices seek to measure the performance of eligible equity securities from the underlying indices, selected and weighted to collectively enhance the alignment to the UN's 17 SDG profiles through their activities and operations, as well as reduce the carbon footprint at the index level.

 $^{^{2}\,\,}$ For more information, please see the $\underline{\text{UN SDG website}}.$

³ Learn more about the UN 2030 Agenda for Sustainable Development here.

- 8. Does this mean that all the stocks in this index need to meet or align with the 17 SDGs? No. Stocks in the index have to align with at least one of the 17 UN SDGs. At the index level, companies collectively enhance the alignment to the aggregated goals.
- 9. Why were the S&P SDG Indices created? The UN SDGs can serve as a foundation for building effective, transparent and consistent indices focusing on the specific outcomes. The S&P SDG Indices seek to measure the performance of eligible equity securities from the underlying indices, selected and weighted to collectively enhance the SDG profiles and reduce the carbon footprint at the index level, expanding and complementing the range of sustainable indices that S&P DJI offers.
- **10. Why are the S&P SDG Indices relevant to market participants?** S&P DJI develops and offers indices that measure market performance and trends. Index providers and indices are part of the financial market ecosystem. S&P DJI provides transparency to financial markets through the indices it offers.

The UN created the SDGs in 2015 as a call to solve some of the most urgent problems the world is facing. Market participants are incorporating ways to contribute to the SDGs through their investment decisions. As newer investment themes emerge, the need for adequate indices and benchmarks also grows.

11.What's the difference between ESG and SDGs? Conceptually, SDG alignment differs from the general risk-focused ESG ratings approach, as seen in Exhibit 1.

Exhibit 1: Differences between ESG and SDGs

Metric	ESG		SDGs				
Relevance of:							
Industry Affiliation	Minor	Companies in sensitive industries (e.g., tobacco, gambling, alcohol, and adult entertainment) may have high ESG ratings. Industry-adjusted ratings are common.	High	SDG contribution is highly dependent on companies' industry affiliation.			
Products and Services	Minor	Only a subset of ESG indicators relates to products and services.	High	Products and services determine impact and contribution to the SDGs.			
Financial Materiality	High	Several data providers consider financial materiality for the inclusion (and sometimes weighting) of indicators in ESG ratings.	Low	Companies may contribute to SDGs, irrespective of financial materiality.			
Perspective of the Analysis:							
Outside-In	High	ESG ratings generally consider indicators that can have an impact the financial performance of the company.	Low	SDG contribution is not determined by the financial materiality of external factors on companies.			
Inside-Out	Low	ESG ratings commonly consider companies' impact on society and the environment only to the extent that said impact is financially material.	High	SDG contribution is measured in terms of the companies' impact on society and the environment.			

Source: The Global Investors for Sustainable Development (GISD) Alliance, "Sustainable Development Investing | Creating a Scalable SDI-Aligned Index," Page 18. Table is provided for illustrative purposes.

12. What sustainability datasets are used in the S&P SDG Indices methodology?

Exhibit 2: Datasets and Data Sources

Category	Dataset/Model	Data Source			
	SDG Revenue Factors	Impact Cubed			
Index Eligibility	Business Involvement Dataset	S&P Global Sustainable1			
	Global Standards Screening (United Nations Global Compact)	Sustainalytics			
	SDG Revenue Factors	Impact Cubed			
Constituent Weighting	SDG Operational Factors	Impact Cubed			
	Greenhouse Gas Emissions	S&P Global Trucost Environmental Data			

Source: S&P Dow Jones Indices LLC. Table is provided for illustrative purposes.

13. Why are these datasets used in the S&P SDG Indices methodology? The datasets selected (see question 12) are the ones that better align with the index objective of improved index-level positively aligned SDG revenue relative to the underlying index; reduced index-level negatively aligned SDG revenue relative to the underlying index; improved index-level SDG operational performance (measured by the SDG Operation Score) relative to the underlying index; and reduced index-level greenhouse gas (GHG; expressed in CO2 equivalents) emissions intensity compared to the underlying index. One of the purposes of the index methodology is to minimize the deviation in constituent index weights from their benchmark weights, while satisfying multiple constraints. The datasets help achieve that purpose and help manage the constraints, revenue alignment, SDG operational scores and decarbonization targets. The constraints are defined using the datasets from the data sources noted in Exhibit 1.

For more information on how the indices are calculated, see the index methodology.

14. What indices are in the series? As of Jan. 8, 2023, the indices available in this series are:

S&P Global LargeMidCap SDG Index

S&P 500 SDG Index

- **15.Can more indices be added to the series?** S&P DJI has the framework to expand the series to different regions where needed.
- **16. Is the S&P SDG Indices methodology the only approach?** S&P DJI can review the possibility to implement a subset of SDGs, overlays or thematics.

17. How are ESG controversies dealt with in the S&P SDG Indices methodology? S&P Global's Media and Stakeholder Analysis (MSA)⁴ monitors ESG controversies, which include a range of issues such as economic crime and corruption, fraud, illegal commercial practices, human rights issues, labor disputes, workplace safety, catastrophic accidents and environmental disasters.

The Index Committee reviews constituents that have been flagged by the S&P Global MSA to evaluate the potential impact of controversial company activities on the composition of the indices. In the event that the Index Committee decides to remove a company, that company would not be eligible for re-entry into the indices for one full calendar year, beginning with the subsequent rebalancing.⁵

- **18. When are indices rebalanced?** The indices rebalance semiannually, effective after the close of the third Friday of June and December. The rebalancing reference date is the third Friday of May and November.
- **19. How do the indices perform relative to their benchmarks?** Index performance statistics are presented for all S&P DJI indices on their index factsheets, found at www.spglobal.com/spdji.

S&P SDG Indices Methodology and Specific Concepts

Index Eligibility

20. What exclusions affect the indices?

Coverage:

- Carbon Emissions Coverage: Constituents must have all Scope 1, Scope 2 and Scope 3 (upstream and downstream)_GHG emissions data, as provided by S&P Global Trucost.
- SDG Factors: As of each rebalancing reference date, companies without SDG revenue factors or SDG operation factors coverage are excluded from the index.

S&P Global uses RepRisk for daily filtering, screening and analysis of ESG risk incidents and controversial activities related to companies within the indices. RepRisk, an ESG data science company, leverages a combination of AI and machine learning with human intelligence to systematically analyze public information in 23 languages and identify material ESG risks. With daily data updates across more than 100 ESG risk factors, RepRisk provides consistent, timely and actionable data for risk management and ESG integration across a company's operations, business relationships and investments.

⁵ For more information on the approach used in S&P Global's MSA, please see the MSA Methodology Guidebook.

- Business Involvement: Companies not covered by S&P Global's Business Involvement Screening are ineligible for index inclusion until receiving such coverage.
- Sustainalytics Global Standards Screening (GSS): Companies not covered by Sustainalytics are excluded from the index.

SDG Exclusions:

The S&P SDG Indices exclude stocks based on the following SDG characteristics.

- Companies with a negative net SDG revenue (calculated as the positively aligned SDG revenue minus the negatively aligned SDG revenue)
- Companies with an SDG Operation Score lower than the worst fifth percentile of the SDG Operation Score in the S&P Global LargeMidCap

Business Activities:

The S&P SDG Indices exclude stocks involved in certain business activities. For more information on index eligibility criteria, see the <u>S&P SDG Indices methodology</u>.

Index Optimization and Constraints

- 21. Why is optimization used to determine constituent weighting? The S&P SDG Indices target the achievement of many specific outcomes as part of the overall index objective. Optimization is used to ensure objectives are met simultaneously in an efficient manner. The indices weight eligible constituents to minimize active risk, while fulfilling the following objectives.
 - Index-level carbon intensity reduction of 30% relative to the benchmark
 - Improve index-level positively aligned revenue to twice that of the benchmark
 - Improve positively aligned revenue by SDG group to ensure it is greater than the benchmark
 - Increase the weighted-average SDG Operation Score relative to the benchmark
 - Increase the weighted-average SDG Operation Score by SDG group relative to the benchmark
 - Minimum stock threshold to ensure tradability

For more information on the specifics of these index constraints, see the <u>S&P SDG</u> Indices methodology.

22. How is the percentage of positive SDG revenue of the index measured? The index uses enterprise value including cash (EVIC) to allocate each dollar of revenue to the equity index, corresponding to how many dollars of revenue there are in the index per dollar invested.

Aggregate Positively Aligned SDG Revenue

$$\frac{\sum w_i \times \frac{\text{PaRev}\%_i \times TR_i}{EVIC_i}}{\sum w_i \times \frac{TR_i}{EVIC_i}}$$

where:

w_i = Weight of the company i in the index

PaRev%i = Total percentage of revenues of the company i positively aligned across all SDGs

TR_i = Total revenue of the company

EVICi = EVIC of the company i

Note that Wi/EVICi is the proportion of the company one would own if one dollar were invested in the index. The same approach is used for the aggregate negatively aligned SDG revenue.

23. What are the SDG groups? S&P DJI has classified the 17 SDG categories into three broader SDG groups, as seen in Exhibit 3.

Exhibit 3: SDG Categories by Classification Group

SDG Group	SDG Number	SDG Category
	1	No Poverty
	2	Zero Hunger
	3	Good Health and Well-Being
	4	Quality Education
Society	5	Gender Equality
	6	Clean Water and Sanitation
	7	Affordable and Clean Energy
	11	Sustainable Cities and Communities
	16	Peace, Justice and Strong Institutions
	_8	Decent Work and Economic Growth
	9	Industry, Innovation and Infrastructure
Economy	10	Reduced Inequalities
	12	Responsible Consumption and Production
	17	Partnerships for the Goals
	_13	Climate Action
Environment	1	Life under Water
	15	Life on Land

Source: S&P Dow Jones Indices LLC. Table is provided for illustrative purposes.

The dimensions used to group are the ones mentioned in *The 2030 Agenda for Sustainable Development*, which was adopted at the 2015 UN Summit.⁶ The specific groupings were set based on academic research.⁷

24. Why are the indices using SDG groupings? The objective of targeting group-level improvements is to have increased assurance that the indices provide broad improvement across all 17 SDGs. The group constraints are implemented in the index to ensure the improvements to the revenue and operational scores do not derive from one single SDG category.

25. What is the constraint relaxation hierarchy in the S&P SDG Indices methodology?

The index constraints are used to ensure the various specific index outcomes required by the methodology. In the case that the index optimization does not reach a feasible solution at rebalance, index constraints can be partially relaxed to facilitate the optimization's objective function. The constraints are relaxed in the order listed in the methodology. The relaxation process proceeds iteratively until a feasible solution is achieved.

⁶ Read more <u>here</u> about The 2030 Agenda for Sustainable Development.

Ricardo Vinuesa, Hossein Azizpour, Iolanda Leite, et al. The role of artificial Intelligence in achieving the Sustainable Development Goals. Nature Communications 11, Article number: 233 (2020).

For more information on the specifics of the relaxation hierarchy, see the <u>S&P SDG</u> <u>Indices methodology</u>.

Index Data and Licensing

- 26. If I subscribe to the S&P SDG Indices, will I also receive the underlying SDG datasets used in the S&P SDG Indices methodology? No. Access to other datasets used in the methodology requires direct licensing with each vendor.
- **27. How much index history data are available?** The S&P 500 SDG Index and S&P Global LargeMidCap SDG Index were launched on Dec. 18, 2023. The first value date for the indices is June 21, 2019. Data are available for the index back to the first value date, while live performance data are available for each index from its launch date.
- 28. How can I access the data for the S&P SDG Indices? S&P SDG Index data are calculated and delivered daily and available on S&P DJI's SPICE® platform or daily Secured File Transfer Protocol (SFTP) scheduled data feeds, delivered using S&P DJI's Enterprise Data Xchange (EDX) platform.
- 29. What is SPICE, and how can I access it? SPICE is S&P DJI's web-based index and constituent data-delivery platform. SPICE provides subscribers with access to timely, comprehensive data, corporate action alerts and developments that affect index composition and weighting. Subscribers can customize and schedule reports to suit their respective investment criteria. For more information on SPICE, please see https://www.spice-indices.com/idp/#/.
- **30. What does SFTP mean?** Secured File Transfer Protocol (SFTP) is a secured means of transferring data files on a Secure Shell (SSH) data stream. SFTP is a secure version of File Transfer Protocol (FTP) and is part of the SSH Protocol. This term is also known as SSH FTP.
- **31. Do I need a license from S&P DJI in order to use the indices and their data?** Yes, in order to access, receive, use or distribute all index data or any related information, a subscription or license agreement with S&P DJI is required.
- **32. Do I need a license from S&P DJI to use the indices in connection with financial products?** Yes, in order to use the indices in connection with a financial product or transaction, a license agreement with S&P DJI is required.
- **33. How can I find out the constituents of these indices?** For information on the index constituents, please contact your S&P DJI account representative or visit www.spglobal.com/spdji/en/contact-us/.

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