S&P Global Timber and Forestry Index Consultation on Eligibility Factors, Index Construction, Constituent Weighting, and Rebalancing Schedule

NEW YORK, JULY 29, 2022: S&P Dow Jones Indices ("S&P DJI") is conducting a consultation with market participants on potential changes to the S&P Global Timber & Forestry Index.

In order to ease liquidity limitations, improve index replication, enhance transparency, and align the index objective with sustainable investing norms, S&P DJI is considering changes to the index's methodology encompassing the following:

- Eligibility Factors
- Index Construction
- Constituent Weightings
- Rebalancing Schedule

The proposed changes are described below and on the following pages.

Eligibility Factors

S&P DJI is considering modifying four eligibility factors as detailed in the table below.

Proposed Changes	Methodology	
	Current	**Proposed**
Total Market Capitalization	Greater than or equal to US$ 250 million.	Greater than or equal to US$ 300 million.
Float-Adjustment market Capitalization ("FMC")	Greater than or equal to US$ 200 million.	Greater than or equal to US$ 100 million.
Liquidity Threshold	Average Daily Value Traded ("ADVT") of at least US$ 1 million for the three months prior to the rebalancing reference date.	Median Daily Value Traded ("MDVT") of at least US$ 3 million (US$ 2 million for current constituents) for the six months prior to the rebalancing reference date.
Domicile/Trading Location	Stocks must be trading on a developed market exchange. Locally listed stocks in Brazil, South Korea, and South Africa are also eligible.	Stocks must be trading on a developed or emerging market exchange.

Index Construction

S&P DJI is proposing to modify the index's construction process, including the constituent selection steps, by applying additional screens, increasing the target constituent count from 25 to 100, and modifying the exposure score calculation and assignment process. For the current process, please refer to the [S&P Thematic Indices Methodology](#).

Under the proposed index construction process, stocks that meet the eligibility criteria are reviewed for specific practices related to Timber and Forestry. Index constituents are drawn from the S&P Global BMI. The preliminary universe of companies is identified based on ANY of the following screens:

- Companies that derive at least 25% in aggregate revenue from Timber and Forestry-related businesses as defined by FactSet's Revere Business Industry Classification System ("RBICS") data (see Appendix I).

- Companies that have a GICS classification of Specialized REITs (and are defined as Timber REITs).
- Companies in the index universe at the previous rebalancing that were assigned an Exposure Score of at least 0.5 (including companies that were not actually selected for index inclusion).

Please refer to https://insight.factset.com/resources/factset-revere-business-industry-classifications-datafeed for more information on RBICS.

Exclusions Based on Business Activities

As of each rebalancing reference date, companies with specific business activities, as determined by Sustainalytics, are excluded from the eligible universe:

Sustainalytics Product Involvement	Sustainalytics Category of Involvement and Description	Sustainalytics Involvement Proxy	S&P DJI Level of Involvement Threshold	S&P DJI Significant Ownership Threshold
Controversial Weapons	Tailor Made and Essential: The company is involved in the core weapon system, or components/services of the core weapon system that are considered tailor-made and essential for the lethal use of the weapon.	NA	>0%	≥25%
	Non-Tailor Made or Non-Essential: The company provides components/services for the core weapon system, which are either not considered tailor-made or not essential to the lethal use of the weapon.			
Small Arms	Civilian Customers (Assault Weapons): The company manufactures and sells assault weapons to civilian customers.	Revenue	>0%	Not Relevant
	Civilian Customers (Non-Assault Weapons): The company manufactures and sells small arms (non-assault weapons) to civilian customers.			
	Military/Law Enforcement Customers: The company manufactures and sells small arms to military/law enforcement.			
	Key Components: The company manufactures and sells key components of small arms.			
	Retail/Distribution (Assault Weapons): The company is involved in the retail and/or distribution of assault weapons.			
	Retail/Distribution (Non-Assault Weapons): The company is involved in the retail and/or distribution of small arms (non-assault weapons).			
Military Contracting	Weapons: The company manufactures military weapon systems and/or integral, tailor-made components of these weapons.	Revenue	≥5%	Not Relevant
	Weapon-related products and services: The company provides tailor-made products and/or services that support military weapons.		≥10%	
Tobacco Products	Production: The company manufactures tobacco products.	Revenue	>0%	Not Relevant
	Related Products/Services: The company supplies tobacco-related products/services.		≥5%	
	Retail: The company derives revenues from the distribution and/or retail sale of tobacco products.			
Thermal Coal	Extraction: The company extracts thermal coal.	Revenue	≥5%	Not Relevant
	Generation: The company generates electricity from thermal coal.			
Oil Sands	Extraction: The company extracts oil sands.	Revenue	≥5%	Not Relevant
Shale Energy	Extraction: The company is involved in shale energy exploration and/or production.	Revenue	≥5%	Not Relevant
Arctic Oil & Gas Exploration	Extraction: The company is involved in oil and gas exploration in Arctic regions.	Revenue	≥5%	Not Relevant

S&P DJI Level of Involvement refers to the company's direct exposure to such products, while Significant Ownership indicates where the company has indirect involvement via some specified level of ownership of a subsidiary company with involvement.

Companies without Sustainalytics coverage are ineligible for index inclusion until they receive such coverage.

CONSULTATION

Exclusions Based on the United Nations Global Compact ("UNGC")

Sustainalytics' Global Standards Screening ("GSS") provides an assessment of a company's impact on stakeholders and the extent to which a company causes, contributes or is linked to violations of international norms and standards. The basis of the GSS assessments is the UNGC Principles. Information regarding related standards is also provided in the screening, including the Organization for Economic Co-operation and Development ("OECD") Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, as well as their underlying conventions. Sustainalytics classifies companies into the following three statuses:

- **Non-Compliant.** Classification given to companies that do not act in accordance with the UNGC principles and its associated standards, conventions, and treaties.

- **Watchlist.** Classification given to companies that are at risk of violating one or more principles, for which all dimensions for Non-Compliant status could not be established or confirmed.

- **Compliant.** Classification given to companies that act in accordance with the UNGC principles and its associated standards, conventions, and treaties.

As of each rebalancing reference date, companies classified as Non-Compliant, according to Sustainalytics, are ineligible for index inclusion.

Companies without Sustainalytics coverage are ineligible for index inclusion until they receive such coverage.

Please refer to http://www.sustainalytics.com/ *for more information.*

Controversies: Media and Stakeholder Analysis Overlay

S&P Global uses RepRisk, a leading data science company, for daily filtering, screening, and analysis of ESG risk incidents and controversial activities related to companies within the index.[1]

In cases where risks are presented, S&P Global releases a Media and Stakeholder Analysis ("MSA") which includes 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 will review constituents that have been flagged by S&P Global's MSA to evaluate the potential impact of controversial company activities on the composition of the index. If the Index Committee decides to remove a company in question, that company would not be eligible for re-entry into the index for one full calendar year, beginning with the subsequent rebalancing.

For more information on RepRisk, please refer to www.reprisk.com*. This service is not considered a direct contribution to the index construction process.*

---

[1] RepRisk, an ESG data science company, leverages the 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 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.

CONSULTATION

Constituent Selection

After determining the eligible universe, the index components are selected as follows:

1. S&P DJI defines the Exposure Score for each company:

    - Companies in the "Timber REITs (60108040)" GICS sub-industry are assigned an Exposure Score of 1.

    - For all other companies, the Exposure Score is primarily based on FactSet's RBICS classifications. Other considerations include the company's business description and most recent reported revenue segment (see Appendix I).

2. Stocks are first ranked by their Exposure Score and then FMC.

3. All stocks with an Exposure Score of 1 are selected.

4. If, after step 3 there are less than 100 constituents, the highest-ranking stocks with an Exposure Score of 0.75 are selected until the target constituent count of 100 is reached.

5. If, after step 4 there are still fewer than 100 constituents, the highest-ranking stocks with an Exposure Score of 0.5 are selected until the target constituent count of 100 is reached.

6. If after step 5 there are still less than 100 constituents, then all remaining companies with an Exposure Score of 0.5 are selected.

Constituent Weightings

S&P DJI is considering modifying the constituent weightings rules. The table below summarizes the proposed change.

Proposed Change	Methodology	
	Current	**Proposed**
Constituent Weightings	At each rebalancing, constituents are weighted based on the product of each constituent's FMC and Exposure Score, subject to the following single constituent caps: • Constituents with Exposure Scores of 1 are capped at 8%. • Constituents with Exposure Scores of 0.5 are capped at 4%.	At each rebalancing, constituents are weighted based on the product of each constituent's FMC and Exposure Score, subject to the following constraints: • Constituents with an Exposure Score of 1 are capped at the lower of 8% or five times the constituent's liquidity weight. • Constituents with an Exposure Score of 0.75 are capped at the lower of 6% or five times the constituent's liquidity weight. • Constituents with an Exposure Score of 0.5 are capped at the lower of 4% or five times the constituent's liquidity weight. • The cumulative weight of all constituents within the index which have a weight greater than 4.5% cannot exceed 40%. This is done using an optimization procedure that chooses the final weights in such a way to minimize the sum of the squared difference of the capped and uncapped weights, divided by the uncapped weight for each stock.

CONSULTATION

Rebalancing Schedule

S&P DJI is considering modifying the index's rebalancing schedule. The table below summarizes the proposed change.

Proposed Change	Methodology	
	Current	**Proposed**
Rebalancing Schedule	The index is rebalanced semi-annually after the close of the last trading date of March and September. The reference date for the rebalancings is after the close of the last trading date of February and August, respectively.	The index is reconstituted semi-annually after the close of the last business day in March and September. The reference date for the reconstitutions is after the close of the last business day of February and August, respectively.
		In addition, the index is reweighted quarterly after the close on the last business day of March, June, September, and December. The pricing reference date used for re-weighting purposes is seven business days prior to the effective date.

IMPACT ANALYSIS

A hypothetical basket using the proposed changes for the most recent reconstitution can be found here.

IMPLEMENTATION TIMING

With the exception of the proposed change to the Domicile/Trading Location Eligibility Factor, S&P DJI is proposing to implement the proposed changes, if adopted, in conjunction with the upcoming rebalancing, which takes effect prior to the market open on **Monday, October 3, 2022**. If adopted, these changes will first be visible to clients in pro-forma files beginning on **Friday, September 23, 2022**. S&P DJI is proposing to implement the change to the Domicile/Trading Location Eligibility Factor, if adopted, prior to the open of **Monday, April 3, 2023**. If adopted, this change will first be visible to clients in pro-forma files beginning on **Friday, March 24, 2023**.

QUESTIONS

Please answer the following questions and provide S&P DJI with the reasoning behind your answers:

1. **Do you agree with the proposal to modify the market cap and liquidity thresholds?**
2. **Do you agree to allow emerging market listings to be eligible for the index?**
3. **Do you agree with the proposed changes to the index construction process, including the constituent selection steps and changing the target constituent count from 25 to 100?**
4. **If any of the proposed changes are adopted, do you agree with the proposed implementation dates?**
5. **Do you have any other comments or feedback regarding the proposed changes outlined above?**

Your participation in this consultation is important as we gather information from various market participants in order to properly evaluate your views and preferences. Please respond to this survey by **August 29, 2022**. After this date, S&P DJI will no longer accept survey responses. Prior to the Index Committee's final review, S&P DJI may request clarifications from respondents as part of that review.

To participate in this consultation, please visit the online survey available here.

CONSULTATION

For further information about this consultation, please contact S&P Dow Jones Indices at SPDJI_Index_Governance@spglobal.com.

Please be advised that all comments from this consultation will be reviewed and considered before a final decision is made; however, S&P DJI makes no guarantees or is under any obligation to comply with any of the responses. The survey may result in no changes or outcome of any kind. If S&P DJI decides to change the index methodology, an announcement will be posted on our website.

Thank you for taking the time to complete this survey.

For more information about S&P Dow Jones Indices, please visit www.spglobal.com/spdji.

Appendix I – FactSet's Revere Business Industry Classification System (RBICS) Data

RBICS is a comprehensive structured taxonomy designed to offer precise classification of global companies and their individual business units. The RBICS taxonomy structure offers six levels of classifications starting with the most general (Economies) to the most specialized (Sub-Industries).

L1 Economies > L2 Sectors > L3 Sub-Sectors > L4 Industry Groups > L5 Industries > L6 Sub-Industries

RBICS standardizes and assigns revenue percentages into the most granular sectors of the RBICS taxonomy based on reported revenue by segment of companies under coverage.

Companies in the following L6 categories can be assigned a score and cluster based on aggregate revenue in each respective L6. Companies that have a Revenue Adjustment Factor between 0 and 1 can be assigned a score based on the segmentation of the revenue within these L6s that are relevant to the Timber and Forestry Industry. This adjustment is based on factors such as a company's business description and most recent reported revenue segment. See below for more details on the Revenue Adjustment Factor.

Timber Management & Processing

Sub-Industry (L6) Name	Sub-Industry (L6) ID	Revenue Adjustment Factor
Logging and Timber Property Management	452010101510	
Lumber Processing and Sawmill Products	452010151510	1
Pulp Mills	452010202020	
Diversified Pulp and Paper Mills	452010202010	0.75

Wood Products Manufacturing

Sub-Industry (L6) Name	Sub-Industry (L6) ID	Revenue Adjustment Factor
Engineered Wood Products Manufacturing	452010101010	
Oriented Strand Board (OSB) Manufacturing	452010102010	0.5 or 1
Other Construction Wood Products Makers	452010102510	
Plywood, Hardwood and Softwood Veneer Products	452010103010	

Paper Products Manufacturing

Sub-Industry (L6) Name	Sub-Industry (L6) ID	Revenue Adjustment Factor
Diversified Forestry and Paper Product Makers	452010151010	
Diversified Paper and Paper Products Manufacturing	452010201010	
Printing and Stationary Paper Products	452010201510	
Paper Mills	452010202015	0 or 0.5
Corrugated Container Manufacturing	452015201010	
Folding Carton Manufacturing	452015201510	
Other Paper Packaging Products Manufacturing	452015202010	

Revenue Adjustment Factor

The Revenue Adjustment Factor is defined based on each company's engagement in the ownership or management[2] of forests, timberlands or pulp mills as a captive raw material source. If a company has such an engagement, the higher Revenue Adjustment Factor of each L6 is used in calculating the Revenue Score (Appendix II). Otherwise, the lower Revenue Adjustment Factor is used.

---

[2] For companies with a range of Revenue Adjustment Factors, the max Factor is used in defining the eligible universe.

CONSULTATION

Appendix II – Exposure Score Calculation

The calculation and thresholds used to determine the Exposure Scores used in the constituent selection and weighting are as follows:

1. Calculate a Timber & Forestry Revenue Score for all eligible companies by aggregating the percentage of timber & forestry related revenue across all in-scope sub-industries based on RBICS data described in Appendix I:

$$\text{Revenue Score} = \sum_{i=1}^{n} (Revenue_i \times Revenue\ Adjustment\ Factor_i)$$

where:

i = a company's i^{th} RBICS sub-industry (L6)

$Revenue_i$ = the revenue percentage of the company's i^{th} L6

$Revenue\ Adjustment\ Factor_i$ = the share of $Revenue_i$ that relates to the Timber & Forestry theme (see Appendix I)

2. Calculate Exposure Score

Scores are assigned based on the following revenue thresholds:

Criteria	Exposure Scores		
	0.5	0.75	1
Aggregated percentage revenue based on relevant sub-industries (L6)	<50%	>=50% and <75%	>=75%

3. Companies with an Exposure Score of 0 after the above steps, but were assigned an Exposure Score of at least 0.5 as of the previous rebalancing, can be assigned a non-zero score based on factors such as a company's business description and its most recently reported revenue by segment.

CONSULTATION

Appendix III – Liquidity Weight Computation

The liquidity weight of a given stock is defined as:

$$lw_i = \frac{l'_i}{\sum_1^N l'_j}$$

where:

N = number of selected stocks

l'_i = stock liquidity

Stock liquidity is the six-month MDVT and is calculated as the median of the number of shares traded each day multiplied by that day's closing price over the six months prior to the relevant reference date. The rebalancing reference date is used for the MDVT calculation for rebalancings. The pricing reference date is used for the MDVT calculation for quarterly re-weightings, which is seven business days prior to the effective date.

CONSULTATION

ABOUT S&P DOW JONES INDICES

S&P Dow Jones Indices is the largest global resource for essential index-based concepts, data and research, and home to iconic financial market indicators, such as the S&P 500® and the Dow Jones Industrial Average®. 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.

S&P Dow Jones Indices is a division of S&P Global (NYSE: SPGI), which provides essential intelligence for individuals, companies and governments to make decisions with confidence. For more information, visit www.spglobal.com/spdji.

FOR MORE INFORMATION:

S&P Dow Jones Indices
index_services@spglobal.com

CONSULTATION