S&P Global Water Index Consultation on Eligibility Factors, Index Construction, Constituent Weighting, and Rebalancing Schedule — Results

NEW YORK, SEPTEMBER 8, 2022: S&P Dow Jones Indices ("S&P DJI") has conducted a consultation with market participants on potential changes to the S&P Global Water 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 making changes to the index's methodology encompassing the following:

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

Also, in order to ensure index constituents better reflect the index objective, S&P DJI is adding a quarterly eligibility check to review current index constituents for continued compliance with the Business Activities and United Nations Global Compact ("UNGC") eligibility criteria.

Eligibility Factors

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

	Methodology	
Changes	**Previous**	**Updated**
Total Market Capitalization	Greater than or equal to US$ 250 million.	Greater than or equal to US$ 300 million.
Liquidity Threshold	Average Daily Value Traded ("ADVT") of at least US$ 1 million (US$ 0.5 million for current constituents) 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.	Stocks must be trading on a developed or an emerging market exchange.

Index Construction

S&P DJI is modifying the index's construction process, including the constituent selection steps by applying additional screens, increasing the target constituent count from 50 to 100, and modifying the exposure score calculation and assignment process.

Under the updated index construction process, stocks that meet the eligibility criteria are reviewed for specific practices related to Water. 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 Water-related businesses as defined by FactSet's Revere Business Industry Classification System ("RBICS") data (see Appendix I).
- Companies that belong to the "Water Utilities" GICS sub-industry.

- 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).

For more information on RBICS, please refer here.

Exclusions Based on Business Activity

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/or services: The company provides tailor-made products and/or services that support military weapons.		≥5%	
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.

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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[1] for daily filtering, screening and analysis of ESG risk incidents and controversial activities related to companies within the index.

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 indices. If the Index Committee decides to remove a company in question, that company would not be eligible for re-entry into the indices for one full calendar year, beginning with the subsequent rebalancing.

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

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[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.

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Constituent Selection

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

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

   - **Exposure Score.** This is primarily based on FactSet's RBICS classifications. Other considerations include the company's business description and most recently reported revenue segment (see Appendix II).

   - **Water Cluster.** Based on the revenue exposure and business description, companies are classified as being in one of two water clusters (see Appendix III):

     - Water Equipment Instruments & Materials, or
     - Water Utilities & Infrastructure

2. Within each Water Cluster:

   a. Stocks are first ranked by the Exposure Scores and then FMC.

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

   c. If, after step b there are less than 50 constituents within each cluster, the highest-ranking stocks with an Exposure Score of 0.75 are selected until the target constituent count of 50 is reached.

   d. If, after step c there are still fewer than 50 constituents within each cluster, the highest-ranking stocks with an Exposure Score of 0.5 are selected until the target constituent count of 50 is reached or all the companies with Exposure Score of 0.5 are selected. If there are not enough stocks with an Exposure Score of 0.5, the clusters may have less than 50 constituents.

Constituent Weightings

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

Methodology		
Change	**Previous**	**Updated**
Constituent Weightngs	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%. • The aggregate weight of each Cluster is set to 50%. 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.

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Rebalancing Schedule

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

	Methodology	
Change	**Previous**	**Updated**
Rebalancing Schedule	The index is rebalanced semi-annually after the close of the third Friday of April and October. The reference date for the rebalancings is after the close of the third Friday of March and September, respectively.	The index is reconstituted semi-annually after the close of the third Friday of April and October. The reference date for the reconstitutions is after the close of the third Friday of March and September, respectively.
		In addition, the index is reweighted quarterly after the close on the third Friday of January, April, July, and October. The pricing reference date used for re-weighting purposes is seven business days prior to the effective date.

Quarterly Eligibility Review

Index constituents are reviewed on a quarterly basis for ongoing eligibility under the Business Activities and UNGC exclusion criteria. Companies determined to be ineligible are removed from the index, effective after the close of the last business day of January, April, July and October. The reference date for all reviews is the last business day of the previous month. No constituent is added to the index as a result of any deletion that may take place.

IMPLEMENTATION TIMING

With the exception of the change to the Domicile/Trading Location Eligibility Factor, S&P DJI will implement these changes in conjunction with the upcoming rebalancing, which takes effect prior to the market open on **Monday, October 24, 2022.** These changes will first be visible to clients in pro-forma files beginning on **Friday, October 14, 2022.**

S&P DJI will implement the change to the Domicile/Trading Location Eligibility Factor prior to the open of **Monday, October 23, 2023**. This change will first be visible to clients in pro-forma files beginning on **Friday, October 13, 2023.**

Please note that the S&P Thematic Indices Methodology on S&P DJI's website is being updated to reflect these changes after the October rebalancing.

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.

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

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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 the 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 Water 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.

L6 ID	L6 NAME	Water Equipment & Materials	Water Utilities & Infrastructure	Revenue Adjustment Factor Range
101025251010	Wastewater Treatment Services		X	
101025303510	Wastewater Residual Management		X	
401020101025	Liquid and Water Purification/Filtration Products	X		
451020252010	Water Treatment Agents Manufacturing	X		
651015101010	Americas Water Utilities		X	1
651015101015	Asia/Pacific Water Utilities		X	
651015101020	Europe, Middle East and Africa Water Utilities		X	
651015151010	United States Water Utilities		X	
651015201010	Multi-National Water Utilities		X	
401020101040	Utility Meter Manufacturing	X		
401020101510	Air, Liquid and Gas Control Equipment Products	X		
401020101515	Compressor and Pumping Equipment Manufacturing	X		
401020101520	Other Fluid Power and Control Equipment Products	X		0-1
401020101530	Valves and Fluid Control Products	X		
451510101510	Fabricated Pipes and Pipe Fittings Products	X		
451535101525	Utilities Pipes and Pipe Fittings Manufacturing	X		
451535101515	Pipes and Pipe Fittings Manufacturing	X		

Water Equipment & Materials

Sub-Industry (L6) Name	Sub-Industry (L6) ID	Revenue Adjustment Factor
Liquid and Water Purification/Filtration Products	401020101025	1
Water Treatment Agents Manufacturing	451020252010	
Utility Meter Manufacturing	401020101040	between 0 and 1
Air, Liquid and Gas Control Equipment Products	401020101510	
Compressor and Pumping Equipment Manufacturing	401020101515	
Other Fluid Power and Control Equipment Products	401020101520	
Valves and Fluid Control Products	401020101530	
Fabricated Pipes and Pipe Fittings Products	451510101510	
Utilities Pipes and Pipe Fittings Manufacturing	451535101525	
Pipes and Pipe Fittings Manufacturing	451535101515	

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Water Utilities & Infrastructure

Sub-Industry (L6) Name	Sub-Industry (L6) ID	Revenue Adjustment Factor
Wastewater Treatment Services	101025251010	
Wastewater Residual Management	101025303510	
Americas Water Utilities	651015101010	
Asia/Pacific Water Utilities	651015101015	1
Europe, Middle East and Africa Water Utilities	651015101020	
United States Water Utilities	651015151010	
Multi-National Water Utilities	651015201010	

Revenue Adjustment Factor

Some L6 names relate to Water, but do not solely relate to Water. For companies involved in such L6 names, S&P DJI defines the Revenue Adjustment Factor. The assessment is based on factors such as a company's business description and its most recently reported revenue by segment. Please note the Revenue Adjustment Factor is both L6 specific and company specific.

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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 Water Revenue Score for all eligible companies by aggregating the percentage of water 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 Water 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 from above steps but had an Exposure Score of at least 0.5 as of the previous rebalancing are possible being assigned a non-zero score based on factors such as a company's business description and its most recent reported revenue by segment.

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Appendix III – Water Clusters

Stocks are classified as being in one of the two clusters:

- Water Equipment Instruments & Materials, or
- Water Utilities & Infrastructure.

The assessment is based on which Cluster is the primary source of revenue.

For instance, if a company generates 80% of its revenue from the Water Utilities & Infrastructure Cluster and 20% from the Water Equipment Instruments & Materials Cluster, the company is classified as being in the Water Utilities & Infrastructure Cluster. For companies without a clear primary Cluster, S&P DJI defines the Cluster based on factors such as a company's business description and current classification.

Appendix IV – 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.

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.

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