

# S&P Dow Jones Indices

A Division of **S&P Global**

# Dow Jones ESG Real Estate Indices *Methodology*

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# Introduction

## Index Objective and Highlights

**Dow Jones Select ESG Real Estate Securities Indices (RESI).** The indices measure the performance of publicly traded real estate securities in an underlying index that meets the sustainability criteria defined in *Eligibility Criteria and Index Construction*.

The indices attempt to improve GRESB score exposure with respect to the underlying index by overweighting those companies with relatively high GRESB total scores and underweighting those with lower or zero total scores. Index constituents are weighted based on the constituents' weights in the underlying index, tilted such that companies with higher or lower GRESB scores are over or underweighted ("tilted") while maintaining tilting group neutrality, as described in *Eligibility Criteria and Index Construction*.

Tilting Groups are the Global Industry Classification Standard (GICS) Sub-Industries in each region in the underlying index, as described in *Eligibility Criteria and Index Construction*. The weights in any given index are tilted within each tilting group, which allows similar overall sub-industry and regional weights to be maintained with respect to the underlying index.

For more information on the GRESB scores, please refer to the [GRESB Methodology](#).

**Index Series.** The index series consists of the following:

- Dow Jones Global Select ESG RESI
- Dow Jones Global Ex-U.S. Select ESG RESI
- Dow Jones U.S. Select ESG REIT Index

**Dow Jones Developed Green Real Estate Indices.** The indices measure the performance of publicly traded real estate securities in an underlying index that meet the sustainability criteria defined in *Eligibility Criteria and Index Construction* and are weighted to be compatible with the ESG-related constraints defined in *Optimization Constraints*.

The index series' weighting strategy aims to minimize the difference in constituent weights from the underlying index. In addition, the indices incorporate a variety of specified ESG and climate-related targets, and align with certain specified criteria through the use of optimization with multiple model constraints, including:

- improved index-level GRESB ESG Score and GRESB Building Certification Aspect Score compared to the underlying universe, after 25% of the lowest scoring stocks by count are removed in each category, with weight of removed stocks redistributed
- reduced index-level greenhouse gas ('GHG', expressed in CO2 equivalents) emissions intensity compared to the underlying universe by at least 30%
- reduced index-level Physical Risk Score compared to the underlying universe by at least 10%
- capped exposure to non-disclosing carbon companies
- constituent-level weight capping to allow for greater diversification and liquidity

**Index Series.** The index series consists of the following:

- Dow Jones Developed Green Real Estate Index

## Partnership

S&P Dow Jones Indices has partnered with GRESB, a leader in measuring and assessing the ESG performance of real estate companies, to bring these indices to the market.

## GRESB Total Score

For all indices, constituents are assigned a GRESB total score, if available. The GRESB Real Estate Assessment is structured around seven aspects and contains approximately 50 indicators. The assessment evaluates performance against seven sustainability aspects, including information on performance indicators, such as energy, GHG emissions, water, and waste. The methodology is consistent across different regions, investment vehicles, and property types, and aligns with international reporting frameworks such as Global Reporting Initiative (GRI) and Principles for Responsible Investing (PRI). The GRESB Score data for each constituent is updated annually in December.

The GRESB total score is an overall measure of ESG performance and is represented as a percentage of a 100% maximum.

*For more information on the GRESB scores, please refer to the [GRESB Methodology](#).*

## Trucost's Physical Risk Data

The S&P Trucost Limited (Trucost) Physical Risk dataset<sup>1</sup> allows users to understand the risk and sensitivity of company assets to the physical risks of climate change. Climate modelling datasets and hazard models are overlaid with the asset locations of companies. Sensitivity analysis is carried out for each asset, to assess whether the company's operations would be affected by each specific physical risk, based on the asset type.<sup>2</sup>

These climate modelling datasets and hazard models have been created for each specific physical risk. Physical risk is judged by a score ranging between 1 and 100. The physical risks covered include wildfire, cold wave, heatwave, water stress, sea level rise, flood, and hurricanes. The index methodology uses a composite physical risk score that is an average of all physical risk indicators, weighted for company-specific sensitivity to each physical risk type.

## Science Based Target Initiative (SBTI)

The Science Based Targets Initiative champions science-based target setting as a powerful way of boosting companies' competitive advantage in the transition to a low-carbon economy. The initiative is a collaboration between CDP, World Resources Institute (WRI), the World Wide Fund for Nature (WWF), and the United Nations Global Compact (UNGC).

Targets adopted by companies to reduce greenhouse gas (GHG) emissions are considered "science-based" if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement—to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

*For more information on the initiative, please refer to <https://sciencebasedtargets.org/>.*

## Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific

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<sup>1</sup> The 2050 High Climate Scenario is used.

<sup>2</sup> Lord, R, Bullock, S. Birt, M. (2019). 'Understanding Climate Risk at the Asset Level: The Interplay of Transition and Physical Risks'. <https://www.spglobal.com/marketintelligence/en/documents/sp-trucost-interplay-of-transition-and-physical-risk-report-05a.pdf>.

topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	<a href="#">Equity Indices Policies &amp; Practices</a>
S&P Dow Jones Indices' Index Mathematics Methodology	<a href="#">Index Mathematics Methodology</a>
S&P Dow Jones Indices' Float Adjustment Methodology	<a href="#">Float Adjustment Methodology</a>
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	<a href="#">GICS Methodology</a>

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

# Eligibility Criteria and Index Construction

## Dow Jones Select ESG Real Estate Securities Indices (RESI)

**Index Universe.** At each rebalancing, each index universe consists of all constituents of the underlying index, as defined below:

Index	Underlying Index
Dow Jones Global Select ESG RESI	Dow Jones Global Select Real Estate Securities Index
Dow Jones Global Ex-U.S. Select ESG RESI	Dow Jones Global ex-U.S. Select Real Estate Securities Index
Dow Jones U.S. Select ESG REIT Index	Dow Jones U.S. Select REIT Index

For more information on an underlying index, please refer to the Dow Jones Select Real Estate Securities Indices Methodology available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).

**Exclusions Based on Business Activities.** As of each rebalancing reference date, exclude the following:

- companies without coverage, except for spin-offs from current constituents. Spin-offs are assigned the exclusion designations of the respective parent company as of the ex-date and retain such designation(s) until assessed at the subsequent rebalancing.
- companies with the following specific business activities:

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	<b>Tailor Made and Essential:</b> 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.	N/A	>0%	≥10%
	<b>Non-Tailor Made or Non-Essential:</b> 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		>0%	≥10%
Tobacco Products	<b>Production:</b> The company manufactures tobacco products.	Revenue	>0%	≥10%
	<b>Related Products/Services:</b> The company supplies tobacco-related products/services.		≥5%	≥10%
	<b>Retail:</b> The company derives revenues from the distribution and/or retail sale of tobacco products.		≥5%	≥10%
Thermal Coal	<b>Extraction:</b> The company extracts thermal coal.	Revenue	>0%	N/A
	<b>Generation:</b> The company generates electricity from thermal coal.		>0%	N/A
Oil Sands	<b>Extraction:</b> The company extracts oil sands	Revenue	>0%	N/A
Shale Energy	<b>Extraction:</b> The company is involved in shale energy exploration and/or production.	Revenue	>0%	N/A
Arctic Oil & Gas Exploration	<b>Extraction:</b> The company is involved in oil and gas exploration in Arctic regions.	Revenue	>0%	N/A
Oil & Gas	<b>Production:</b> The company is involved in oil and gas exploration, production, refining, transportation and/or storage.	Revenue	>0%	N/A
	<b>Generation:</b> The company generates electricity from oil and/or gas.	Revenue	>0%	N/A

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
	<b>Supporting Products/Services:</b> The company provides tailor-made products and services that support oil and gas exploration, production, refining, transportation and storage.	Revenue	≥10%	N/A
Gambling	<b>Operations:</b> The company owns and/or operates a gambling establishment.	Revenue	≥5%	N/A
	<b>Specialized Equipment:</b> The company manufactures specialized equipment used exclusively for gambling.		≥10%	N/A
	<b>Supporting Products/Services:</b> The company provides supporting products/services to gambling operations.		≥10%	N/A
Adult Entertainment	<b>Production:</b> The company is involved in the production of adult entertainment and/or owns/operates adult entertainment establishments.	Revenue	>0%	N/A
	<b>Distribution:</b> The company is involved in the distribution of adult entertainment materials.		≥5%	N/A
Alcoholic Beverages	<b>Production:</b> The company manufactures alcoholic beverages.	Revenue	≥5%	N/A
	<b>Retail:</b> The company derives revenues from the distribution and/or retail sale of alcoholic beverages.		≥10%	N/A
	<b>Related Products/Services:</b> The company is a supplier of alcohol-related products/services to alcoholic beverage manufacturers.		≥10%	N/A

S&P DJI Level of Involvement Threshold 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.

**Exclusions Based on Sustainalytics’ Global Standard Screening.** 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 United Nations (UN) Global Compact 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, exclude the following:

- companies without coverage, except for spin-offs from current constituents. Spin-offs are assigned the exclusion designations of the respective parent company as of the ex-date and retain such designation(s) until assessed by Sustainalytics at the subsequent rebalancing.
- companies classified as Non-Compliant

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

**Multiple Classes of Stock.** All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria. For more information regarding the treatment of multiple share classes, please refer to Approach A within the Multiple Share Classes section of the S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.

**Controversies: Media and Stakeholder Analysis.** In addition to the above, S&P Global uses RepRisk for daily filtering, screening, and analysis of ESG risk incidents and controversial activities related to companies within the indices<sup>3</sup>. 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 reviews constituents 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 is ineligible for re-entry into the index for at least one full calendar year, beginning with the subsequent rebalancing.

For more information on RepRisk, please refer to [www.reprisk.com](http://www.reprisk.com). This service is not considered a direct contribution to the index construction process.

**Constituent Selection.** As of the rebalancing reference date, select all eligible stocks in each underlying index to form each index.

**Constituent Weighting.** For each index, divide the underlying universes into broad regions as follows:

Index	Region
Dow Jones Global Select ESG RESI	North America Developed, EMEA Developed, Asia Pacific Developed, Emerging Market
Dow Jones Global Ex-U.S. Select ESG RESI	North America Developed, EMEA Developed, Asia Pacific Developed, Emerging Market
Dow Jones U.S. Select ESG REIT Index	U.S.

On each rebalancing reference date, the GICS Sub-Industries<sup>4</sup> in each region (“Region-Sub-Industries”) form individual Tilting Groups; for example, North America Developed Diversified REITs, North America Developed Industrial REITs, ..., North America Developed Real Estate Services; Europe Diversified REITs, Europe Industrial REITs, ..., Europe Real Estate Services etc.

At each rebalancing, the Region-Sub-Industry weights are neutral to those in the eligible universe, respectively. Determine constituents’ weights in each tilting group are determined using a GRESB Tilt Score ( $S_i$ ).

Each GRESB Tilt Score ( $S_i$ ) calculates as follows based on the universe before applying exclusions in terms of UNGC non-compliance and MSA controversies:

- The GRESB score for each company is transformed into a GRESB z-score ( $Z_i$ ) at the underlying index level by standardizing the GRESB score using the mean and standard deviation of the available GRESB scores for the unique companies within each of the underlying index universes.
- If a company does not have a GRESB score, it will be assigned a GRESB z-score ( $Z_i$ ) set as equal to the lowest available GRESB z-score value from the companies within its Tilting Group. If no companies have scores within the Tilting Group, the company will be assigned a GRESB z-score of zero.
- The GRESB z-score ( $Z_i$ ) for each company is transformed into the GRESB Tilt Score ( $S_i$ ) as follows:

$$\text{If } Z_i > 0, S_i = 1 + \lambda Z_i$$

$$\text{If } Z_i < 0, S_i = 1/(1 - \lambda Z_i)$$

<sup>3</sup> 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.

<sup>4</sup> For more information on the GICS Sub-Industries, please see Appendix A.

If  $Z_i = 0$ ,  $S_i = 1$

Where  $\lambda$  = Tilt Scaling Factor (as defined in the table below).

### Tilt Scaling Factors

Select ESG Index	Tilt Scaling Factor
Dow Jones Global Select ESG RESI	0.5
Dow Jones Global Ex-U.S. Select ESG RESI	0.5
Dow Jones U.S. Select ESG REIT Index	0.5

- d. GRESB Tilt Score ( $S_i$ ) are winsorized to reduce the impact of outliers and handle extreme scenarios. For securities with GRESB Tilt Score above 2 or below 0.5, their value is set as equal to 2 or 0.5, whichever is applicable.

The indices are Region-Sub-Industry Tilted, and constituent weights then calculate as follows:

1. A Tilting Group's weight in the index is calculated as the sum of constituents' weights in the Tilting Group divided by the sum of all index constituents' weights.

$$Weight_{Tilting\ Group} = \frac{\sum Index\ Weight,\ for\ all\ constituents\ in\ Tilting\ Group}{\sum Index\ Weight,\ for\ all\ index\ constituents}$$

2. Within each Tilting Group, constituents' weights are multiplied by their company GRESB Tilt Score ( $S_i$ ). The constituents' weights within the Tilting Group are determined by dividing the constituent's tilted weight by the sum of all tilted weights within the Tilting Group.

$$Weight_{Constituent\ in\ Tilting\ Group} = \frac{Constituent\ Index\ Weight * S}{\sum Index\ Weight * S,\ for\ all\ constituents\ in\ Tilting\ Group}$$

3. To ensure Tilting Group neutrality, the final constituent weight in each index is the product of Step 1 and Step 2 above.

$$Weight_{Constituent} = Weight_{Tilting\ Group} * Weight_{Constituent\ in\ Tilting\ Group}$$

For Region-Sub-Industries with only one constituent, the single constituent is 100% of the total tilting group weight.

For a given rebalancing, the maximum weight of each security is the lower of 10% and 3 times its market capitalization weight in the underlying index universe for multi-region indices. For single-region indices, the maximum weight of each security is the lower of 15% and 3 times its market capitalization weight in the underlying index universe. Note that the capping algorithm used redistributes the excess weight to the other stocks across the universe in proportion to their GRESB tilted weights (pre-optimization weights).

## Dow Jones Developed Green Real Estate Indices

**Index Universe.** At each rebalancing, the index universe is all constituents of the Dow Jones Developed Markets Select RESI Index (the underlying index).

For more information on the Dow Jones Developed Markets Select RESI Index, please refer to the Dow Jones Select Real Estate Securities Indices Methodology available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).

**Index Exclusions Based on Listing Country.** As of each rebalancing reference date, companies must be listed on a developed market exchange.

For more information on country classification, please refer to the S&P Dow Jones Indices Country Classification Methodology, available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).

**Index Exclusions Based on Business Activities.** As of each rebalancing reference date, exclude the following:

- companies not covered by S&P Global's Business Involvement Screening, except for spin-offs from current constituents. Spin-offs are assigned the exclusion designations of the respective parent company as of the ex-date and retain such designation(s) until assessed at the subsequent rebalancing.
- companies with the following specific business activities, at the relevant level of involvement, as determined by S&P Global. Revenue is used as a proxy for all categories.

S&P Global Business Involvement	S&P Global Category of Involvement and Description	S&P DJI Level of Involvement Threshold	S&P DJI Significant Ownership Threshold
Controversial Weapons	<b>Customized Weapons:</b> The screen covers companies involved in the manufacturing of the components of a weapon. These components are intended solely for use in the production and are essential for the functioning of Anti-Personnel Mines, Biological and Chemical Weapons, Blinding Laser Weapons, Cluster Munitions, Depleted Uranium, Incendiary Weapons and Nuclear Weapons.	>0%	≥25%
	<b>Related Products and Services:</b> The screen covers companies that supply products and/or services such as stockpiling and transferring, and sales for Anti-Personnel Mines, Biological and Chemical Weapons, Blinding Laser Weapons, Cluster Munitions, Depleted Uranium and Incendiary Weapons and Nuclear Weapons.	>0%	≥25%
Tobacco	<b>Production:</b> The screen covers companies that are involved in the manufacturing of tobacco..	>0%	≥25%
	<b>Related Products and Services:</b> The screen covers companies that supply essential products/services for the tobacco industry.	≥5%	N/A
	<b>Retail and Distribution:</b> The screen covers companies involved in the retail and/or distribution of tobacco as part of their offerings	≥5%	N/A
Coal	<b>Thermal Coal Mining:</b> The screen covers companies that own/and or operate coal mines that engage in thermal coal mining.	≥5%	N/A
Thermal Coal	<b>Generation:</b> The screen covers companies involved in electricity generation using coal power plants	≥5%	N/A
Small Arms	<b>Production of Small Arms Weapons for Civilian Use:</b> The screen covers companies involved in the manufacturing of small arms weapon for civilian use	>0%	≥25%
	<b>Production of Small Arms Weapons for Non-Civilian Use:</b> This screen covers companies which are involved in the manufacturing of small arms weapon for non-civilian use.	>0%	≥25%
	<b>Key components:</b> The company manufactures and sells key components of small arms.	>0%	≥25%
	<b>Retail/Distribution (assault weapons):</b> The company is involved in the retail and/or distribution of assault weapons.	≥5%	N/A
	<b>Retail/distribution (non-assault weapons):</b> The company is involved in the retail and/or distribution of small arms (non-assault weapons).	≥5%	N/A
Military Contracting	<b>Weapons:</b> The company manufactures military weapon systems and/or integral, tailor-made components or these weapons.	≥10%	N/A

S&P Global Business Involvement	S&P Global Category of Involvement and Description	S&P DJI Level of Involvement Threshold	S&P DJI Significant Ownership Threshold
	<b>Weapon-related products and services:</b> The company provides tailor-made products and/or services that support military weapons.	≥10%	N/A
Oil Sands or Tar Sands	<b>Extraction:</b> The company extracts oil sands	≥5%	N/A

S&P DJI Level of Involvement Threshold 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.

### Index Exclusions Based on Revenue Thresholds in Fossil Fuel Operations and Power Generation.

As of each rebalancing reference date, exclude companies if the sum of the company's revenue derived from the relevant Trucost sectors breach the following revenue thresholds:

Exclusion Type	Trucost Revenue Sectors	Revenue Threshold
Coal Exploration or Processing	<ul style="list-style-type: none"> <li>• Bituminous Coal and Lignite Surface Mining</li> <li>• Bituminous Coal Underground Mining</li> <li>• All Other Petroleum and Coal Products Manufacturing</li> <li>• Pipeline Transportation</li> </ul>	≥ 1%
Oil Exploration or Processing	<ul style="list-style-type: none"> <li>• All Other Petroleum and Coal Products Manufacturing</li> <li>• Crude Petroleum and Natural Gas Extraction</li> <li>• Drilling Oil and Gas Wells</li> <li>• Support Activities for Oil and Gas Operations</li> <li>• Petroleum Lubricating Oil and Grease Manufacturing</li> <li>• Mining and Oil and Gas Field Machinery Manufacturing</li> <li>• Tar Sands Extraction</li> <li>• Petroleum Refineries</li> <li>• Petrochemical Manufacturing</li> <li>• Pipeline Transportation</li> </ul>	≥ 10%
Natural Gas Exploration or Processing	<ul style="list-style-type: none"> <li>• Crude Petroleum and Natural Gas Extraction</li> <li>• Drilling Oil and Gas Wells</li> <li>• Support Activities for Oil and Gas Operations</li> <li>• Mining and Oil and Gas Field Machinery Manufacturing</li> <li>• Natural Gas Liquid Extraction</li> <li>• Natural Gas Distribution</li> <li>• Industrial Gas Manufacturing</li> <li>• Pipeline Transportation</li> </ul>	≥ 50%
Power Generation	<ul style="list-style-type: none"> <li>• Coal Power Generation</li> <li>• Petroleum Power Generation</li> <li>• Natural Gas Power Generation</li> <li>• Biomass Power Generation</li> </ul>	≥ 50%

These exclusions use a sector revenues dataset from Trucost.

**Index 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 United Nations (UN) Global Compact 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, exclude the following:

- companies without coverage, except for spin-offs from current constituents. Spin-offs are assigned the exclusion designations of the respective parent company as of the ex-date and retain such designation(s) until assessed by Sustainalytics at the subsequent rebalancing.
- companies classified as Non-Compliant

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

**Multiple Classes of Stock.** All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria. For more information regarding the treatment of multiple share classes, please refer to Approach A within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

**Controversies: Media and Stakeholder Analysis.** In addition to the above, S&P Global uses RepRisk for daily filtering, screening, and analysis of ESG risk incidents and controversial activities related to companies within the indices<sup>5</sup>.

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 reviews constituents 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 is ineligible 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](http://www.reprisk.com). This service is not considered a direct contribution to the index construction process.

**Constituent Selection.** As of the rebalancing reference date, select all eligible stocks in the underlying index to form each index, subject to the below optimization constraints.

**Constituent Weighting.** At each rebalancing reference date, determine constituents' weights to minimize the below objective function. Parent Weights are considered at the company level.

*Objective Function*

$$\begin{aligned}
 &= \frac{1}{N} \sum_{i=1}^N \left( \frac{(\text{Parent Weight}_i - \text{Optimized Weight}_i)^2}{\text{Parent Weight}_i} \right) \\
 &+ \frac{1}{K} \sum_{k=1}^K \left( \frac{(\text{Parent Industry Weight}_k - \text{Optimized Industry Weight}_k)^2}{\text{Parent Industry Weight}_k} \right) \\
 &+ \frac{1}{M} \sum_{j=1}^M \left( \frac{(\text{Parent Country Weight}_j - \text{Optimized Country Weight}_j)^2}{\text{Parent Country Weight}_j} \right)
 \end{aligned}$$

where:

$N$  = The number of companies selected

$K$  = The number of industries in the universe

<sup>5</sup> 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.

$M$  = The number of countries in the universe

**Optimization Constraints.** As of each rebalancing reference date, the optimizer seeks to minimize the above objective function while satisfying the criteria that index constituents will have an index weight of at least 0.01% and all applicable combinations of the below transition risk, physical risk, and index construction constraints.

**Table 1. Transition Risk Constraints**

Constraint*	Target	Data Source
Weighted-average Carbon Intensity (WACI) Target	$\leq$ underlying universe WACI $\times$ 70%	Trucost
Weight of Non-Disclosing Carbon Companies	$\leq$ 200% $\times$ weight in underlying universe	Trucost
Weight of Eligible Science Based Target Companies	$\geq$ 130% $\times$ weight of group in underlying index	Trucost / Science Based Targets Initiative
Weighted-average GRESB Score (waGRESB)	$\geq$ underlying universe waGRESB after 25% of the lowest GRESB scoring stocks by count are removed and their weight redistributed*	GRESB
Weighted-average GRESB Building Certification Aspect Score (waBC)	$\geq$ underlying universe waBC after 25% of the lowest GRESB Building Certification scoring stocks by count are removed and their weight redistributed*	GRESB

\* Missing scores are filled using an iterative procedure where the values are first filled using the pro-rata weighted-average score of companies in the same country and GICS sub-industry, then country and GICS industry, country and GICS sector, and finally, the parent index. A minimum of 4 observations must be used to fill missing values. The calculation of the lowest 25% of stocks by GRESB Score selects stocks with GRESB scores less than the GRESB score associated with the 25th percentile of GRESB scores among all stocks in the underlying universe.

**Table 2. Physical Risk Constraints**

Constraint	Target	Data Source
Weighted-average Physical Risk Score (waPR)	$\leq$ 90% $\times$ waPR of underlying universe	Trucost
Physical Risk Max Company Weight	$\leq A_i * \text{Parent Weight}_i$ <p>where:</p> $A_i = \rho * \frac{PR_i - 100}{PR_i - 10}$ <p><math>PR_i</math> = is the Physical Risk score of the company <math>i</math></p> $\rho = \frac{\text{Physical Risk Score 95th percentile} - 10}{\text{Physical Risk Score 95th percentile} - 100}$ <p>See <i>Appendix A</i> for more details. (This constraint is only applied to companies with a PR such that <math>A_i \leq 4</math> and a Physical Risk Score higher than 10)</p>	Trucost

**Table 3. Index Construction Constraints**

Constraint	Target
Diversification Relative Company Weight	$\pm$ min(2%, 5x underlying universe company weight) Where the above thresholds are measured relative to the underlying universe company weight
Diversification Absolute Max Company Weight	$\leq$ max(5%, underlying company weight)
Liquidity Max Stock Weight	$\leq \frac{\text{Hypothetical Days to Buy/Sell} \times \text{Daily Participation} \times \text{Liquidity}_i}{\text{Notional Portfolio Size}}$ <p>where:</p>

Constraint	Target
	Hypothetical Days to Buy/Sell = 5
	Daily Participation = 20%
	Liquidity = 3-month Median Daily Value Traded
	Notional Portfolio Size = 500 million USD
Minimum Stock Weight Lower Threshold	Existing constituents: $\geq 0.01\%$ New constituents: $\geq \max(0.01\%, \min(0.05, 0.5 \times \text{underlying stock weight}))$

**Constraint Relaxation Hierarchy.** If the optimization fails to find a solution, the optimizer partially relaxes each constraint in the order listed below, and repeats, if necessary, until a solution is found. In each attempt at optimization the constraints are further relaxed in the stated order, however, the Index Committee may revise the order of relaxation hierarchy if a particular constraint prevents the optimizer from finding a solution.

- Weighted-Average Physical Risk Score<sup>6</sup>
- Weight of Non-Disclosing Carbon Companies
- Diversification Absolute Max Company Weight
- Diversification Relative Company Weight
- Liquidity Max Stock Weight
- Physical Risk Max Company Weight

The following constraints are considered hard constraints and will not be relaxed:

- Weighted-Average Carbon Intensity (WACI) Target
- Weighted-Average GRESB and GRESB Building Certification Scores
- Weight of Eligible Science Based Targets Companies

### Constraint-Related Definitions

#### Weighted-Average Carbon Intensity (WACI)

$$\sum w_i \times \frac{GHG1_i + GHG2_i + GHG3_i}{EVIC_i}$$

where:

$w_i$  = Weight of the company  $i$  in the index

$GHG1_i$  = Scope 1 GHG emissions in tCO<sub>2e</sub> for the company  $i$

$GHG2_i$  = Scope 2 GHG emissions in tCO<sub>2e</sub> for the company  $i$

$GHG3_i$  = Scope 3 (upstream and downstream) GHG emissions in tCO<sub>2e</sub> for the company  $i$ <sup>7</sup>

$EVIC_i$  = Enterprise value including cash of the company  $i$

This metric is calculated using the GHG emissions dataset provided by Trucost.

**Eligible Science Based Targets.** Eligible Science Based Targets Companies are those companies with publicly disclosed near-term targets from the Science Based Targets Initiative (SBTI), subject to the following conditions:

1. The target is publicly disclosed and is 1.5°C aligned

<sup>6</sup> The Weighted-Average Physical Risk Score is not relaxed beyond the score level of the index universe.

<sup>7</sup> For history prior to launch, only scopes 1 and 2 are used. Scope 3 emissions were incorporated from the index's Anchor Date (see *Appendix D*).

2. The targets set include all scope 1, scope 2 and scope 3 (upstream and downstream) emissions
3. The company discloses their scope 1, scope 2 and scope 3 emissions sufficiently
4. Companies must show a 7% decarbonization year-on-year, for the past 3 years
5. Companies' targets must represent an annualized decarbonization rate of 7% when accounting for scopes 1, 2 and 3 (upstream and downstream) targets assuming the companies' current composition of emissions.

This metric is calculated using the GHG emissions dataset and the 1.5°C Climate Transition Pathway Model Scenario dataset provided by Trucost, and the register of approved science-based company targets from the SBTi.

**Non-Disclosing Carbon Companies.** Non-disclosing carbon companies are those companies identified by Trucost as having insufficiently disclosed their GHG emissions (expressed in CO<sub>2</sub> equivalents). A 'Disclosed' status is achieved when Trucost identifies companies as having full or partial disclosure in its largest GHG emissions scope in absolute emissions terms (between scope 1 and 2).

This metric is calculated using the GHG emissions disclosure level dataset provided by Trucost.

# Index Maintenance

## Index Calculations

The indices calculate by means of the divisor methodology used in all S&P Dow Jones Indices' equity indices.

*For more information on the index calculation methodology, please refer to the Non-Market Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.*

## Rebalancing

**Dow Jones Select ESG Real Estate Securities Indices (RESI).** The indices rebalance quarterly, effective after the close of the third Friday of March, June, September, and December. The rebalancing reference date is the last business day of the prior month. The reference universe is the composition of the underlying index at the open of the upcoming rebalancing effective date. As part of the rebalancing process, index composition, shares, and Investable Weight Factors (IWFs) are adjusted, if necessary.

**Dow Jones Developed Green Real Estate Indices.** The indices rebalance quarterly, effective after the close of the third Friday of March, June, September, and December. The rebalancing reference date is the third Friday in February, May, August, and November, respectively. As part of the rebalancing process, index composition, shares, and Investable Weight Factors (IWFs) are adjusted, if necessary.

**UNGC Compliance.** S&P Dow Jones Indices monitors UNGC compliance on a best efforts basis until the initial announcement of the rebalancing results. If a company's UNGC compliance status changes to an ineligible status any time prior to the rebalancing results announcement S&P Dow Jones Indices may, at its discretion, exclude that company in conjunction with the rebalancing.

## Additions/Deletions

**Additions.** Except for spin-offs, no companies are added to an index between rebalancings.

**Spin-offs.** In general, both the parent and spin-off companies remain in the index until the subsequent rebalancing, provided each company continues to be classified as a publicly traded real estate company or REIT.

**Deletions.** Companies removed from the underlying indices are removed from the indices simultaneously. In addition, at the discretion of the Index Committee, a deletion may occur if an MSA is raised.

## Corporate Actions

Corporate actions (such as stock splits, stock dividends, spin-offs, and rights offerings) are applied after the close of trading on the day prior to the ex-date. Share changes resulting from exchange offers are applied on the ex-date.

*For more information on corporate actions and spin-offs, please refer to the Non-Market Capitalization Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.*

## Currency of Calculation and Additional Index Return Series

The indices calculate in U.S. dollars and euros.

Real-time spot Forex rates, as supplied by WMR, are used for ongoing real-time index calculation. WMR foreign exchange rates are taken daily at 4:00 PM London Time and used in the calculation of the indices. These mid-market fixings are calculated by WMR based on LSEG data and appear on LSEG pages.

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to the following: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to the [S&P DJI Methodology & Regulatory Status Database](#).

*For information on the calculation of different types of indices, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.*

*For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

### **Other Adjustments**

In cases where there is no achievable market price for a stock being deleted, it may be removed at a zero or minimal price at the Index Committee's discretion, in recognition of the constraints faced by investors in trading bankrupt or suspended stocks.

### **Base Dates and History Availability**

Index history availability, base dates, and base values are shown in the table below.

<b>Index</b>	<b>Launch Date</b>	<b>First Value Date</b>	<b>Base Date</b>	<b>Base Value</b>
Dow Jones Global Select ESG RESI	04/26/2021	12/31/2014	12/31/2014	1000
Dow Jones Global Ex-U.S. Select ESG RESI	04/26/2021	12/31/2014	12/31/2014	1000
Dow Jones U.S. Select ESG REIT Index	04/26/2021	12/31/2014	12/31/2014	1000
Dow Jones Developed Green Real Estate Index	07/24/2023	12/31/2016	12/31/2016	1000

# Index Data

## Calculation Return Types

S&P Dow Jones Indices calculates multiple return types which vary based on the treatment of regular cash dividends. The classification of regular cash dividends is determined by S&P Dow Jones Indices.

- Price Return (PR) versions are calculated without adjustments for regular cash dividends.
- Gross Total Return (TR) versions reinvest regular cash dividends at the close on the ex-date without consideration for withholding taxes.
- Net Total Return (NTR) versions, if available, reinvest regular cash dividends at the close on the ex-date after the deduction of applicable withholding taxes.

In the event there are no regular cash dividends on the ex-date, the daily performance of all three indices will be identical.

For a complete list of indices available, please refer to the daily index levels file (“.SDL”).

*For more information on the classification of regular versus special cash dividends as well as the tax rates used in the calculation of net return, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.*

*For more information on the calculation of return types, please refer to S&P Dow Jones Indices’ Index Mathematics Methodology.*

# Index Governance

## **Index Committee**

An Index Committee maintains the indices. All committee members are full-time professional members of S&P Dow Jones Indices' staff. The committee meets regularly. At each meeting, the Committee reviews pending corporate actions that may affect index constituents, statistics comparing the composition of the indices to the market, companies that are being considered as candidates for addition to an index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

*For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.*

# Index Policy

## Announcements

All index constituents are evaluated daily for data needed to calculate index levels and returns. All events affecting the daily index calculation are typically announced in advance via the Index Corporate Events report (.SDE), delivered daily to all clients.

*For more information, please refer to the Announcements section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.*

## Pro-forma Files

In addition to the corporate events file (.SDE), S&P Dow Jones Indices provides constituent pro-forma files each time the indices rebalance. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents as well as their corresponding weights and index shares effective for the upcoming rebalancing. Since index shares are assigned based on prices prior to the rebalancing effective date, the actual weight of each stock at the rebalancing differs from these weights due to market movements.

*Please visit [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/) for a complete schedule of rebalancing timelines and pro-forma delivery times.*

## Holiday Schedule

The indices are calculated daily, throughout the calendar year. The only days an index is not calculated are on days when all exchanges where an index's constituents are listed are officially closed or if WMR's exchange rates services are not published.

*A complete holiday schedule for the year is available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

## Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

## Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

## Recalculation Policy

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

## Real-Time Calculation

Real-Time, intra-day, index calculations are executed for certain indices during applicable trading hours. Real-time indices are not restated.

*For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.*

**Contact Information**

For questions regarding an index, please contact: [index\\_services@spglobal.com](mailto:index_services@spglobal.com).

# Index Dissemination

Index levels are available through S&P Dow Jones Indices' Web site at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/), major quote vendors (see codes below), numerous investment-oriented Web sites, and various print and electronic media.

## Tickers

The table below lists headline indices covered by this document. All versions of the below indices that may exist are also covered by this document. Please refer to the [S&P DJI Methodology & Regulatory Status Database](#) for a complete list of indices covered by this document.

Index	Return Type	BBG
Dow Jones Global Select ESG RESI (USD)	Price Return Total Return Net Total Return	DJGSGRUP DJGSGRUT DJGSGRUN
Dow Jones Global Ex-U.S. Select ESG RESI (USD)	Price Return Total Return Net Total Return	DJEUGRUP DJEUGRUT DJEUGRUN
Dow Jones U.S. Select ESG REIT Index (USD)	Price Return Total Return Net Total Return	DJUSGRUP DJUSGRUT DJUSGRUN
Dow Jones Global Select ESG RESI (AUD)	Price Return Total Return Net Total Return	DJGSGRAP DJGSGRAT DJGSGRAN
Dow Jones Global Ex-U.S. Select ESG RESI (AUD)	Price Return Total Return Net Total Return	DJEUGRAP DJEUGRAT DJEUGRAN
Dow Jones U.S. Select ESG REIT Index (AUD)	Price Return Total Return Net Total Return	DJUSGRAP DJUSGRAT DJUSGRAN
Dow Jones Global Select ESG RESI (NZD)	Price Return Total Return Net Total Return	DJGSGRNP DJGSGRNT DJGSGRNN
Dow Jones Global Ex-U.S. Select ESG RESI (NZD)	Price Return Total Return Net Total Return	-- -- --
Dow Jones U.S. Select ESG REIT Index (NZD)	Price Return Total Return Net Total Return	-- -- --
Dow Jones Developed Green Real Estate Index (USD)	Price Return Total Return Net Total Return	DJDGREUP DJDGREUT DJDGREUN
Dow Jones Developed Green Real Estate Index (EUR)	Price Return Total Return Net Total Return	DJDGREEP DJDGREEE DJDGREEN

## Index Data

Daily stock level and index data are available via subscription.

For product information, please contact S&P Dow Jones Indices, [www.spglobal.com/spdji/en/contact-us](http://www.spglobal.com/spdji/en/contact-us).

# Appendix A

<b>GICS Name</b>	<b>GICS Code</b>
Diversified REITs	60101010
Industrial REITs	60102510
Hotel & Resort REITs	60103010
Office REITs	60104010
Health Care REITs	60105010
Multi-Family Residential REITs	60106010
Single-Family Residential REITs	60106020
Retail REITs	60107010
Other Specialized REITs	60108010
Self-Storage REITs	60108020
Telecom Tower REITs	60108030
Timber REITs	60108040
Data Center REITs	60108050
Diversified Real Estate Activities	60201010
Real Estate Operating Companies	60201020
Real Estate Development	60201030
Real Estate Services	60201040

# Appendix B

## Indices in this Methodology Employing Backward Data Assumption

Dow Jones Global Select ESG RESI  
Dow Jones Global Ex-U.S. Select ESG RESI  
Dow Jones U.S. Select ESG REIT Index  
Dow Jones Developed Green Real Estate Index

### Backward Data Assumption

The indices employ a “Backward Data Assumption” method for some datapoints used in the derivation of historical index membership prior to the Live Data Effective Date (defined below). The “Backward Data Assumption” method involves applying the earliest available actual live data point for an index constituent to all prior, historical instances of that constituent in the index universe.

Backward Data Assumption affects only the historical, hypothetical constituents of any index back-test. Only actual live data is ever used in live index rebalancings and in the historical rebalancing calculation of an index after its Live Data Effective Date.

*For more information on S&P DJI’s principles and processes for using Backward Data Assumption, please refer to the [FAQ](#).*

### Designated Datasets Subject to Backward Data Assumption

The Backward Data Assumption within the historical back-test, with respect to the indices identified above, applies only to designated datasets and associated time horizons as defined below. For each designated dataset, all historical rebalancing events prior to the Live Data Reference Date listed below are subject to use of the Backward Data Assumption.

Data Provider	Designated Dataset	Live Data Reference Date	Live Data Effective Date
Sustainalytics	Business Activity Exclusions	02/28/2020	03/31/2020
Trucost	Physical Risk	02/28/2020	03/31/2020

The Live Data Reference Date refers to the first rebalancing reference date from which only actual live data is used.

The Live Data Effective Date refers to the first date from which index constituents are determined solely on actual live data for each respective dataset.

### Exclusions Based on Missing Coverage

This index excludes companies based on missing coverage with respect to the designated datasets above. However, for rebalancing dates prior to each respective Live Data Reference Date, the eligibility of companies is determined based on the coverage after applying the Backward Data Assumption and is not dictated by actual live data coverage.

### Historical Coverage Assessment per Designated Dataset

**Sustainalytics Business Activity Exclusions Coverage** (with respect to underlying index universe):

**Dow Jones Global Select ESG RESI**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2014	216	128	83.7%	206	97.6%
2015	218	191	97.5%	216	99.9%
2016	221	202	98.4%	220	100%
2017	212	212	100%	212	100%
2018	210	210	100%	210	100%
2019	219	219	100%	219	100%
2020	256	256	100%	n/a	n/a

**Dow Jones Global Ex-U.S. Select ESG RESI**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2014	124	85	88.5%	118	96.7%
2015	120	94	94.0%	118	99.7%
2016	119	100	95.6%	118	99.9%
2017	111	111	100%	111	100%
2018	113	113	100%	113	100%
2019	125	125	100%	125	100%
2020	140	140	100%	n/a	n/a

**Dow Jones U.S. Select ESG RESI**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2014	92	43	80.2%	88	98.2%
2015	98	97	99.9%	98	100%
2016	102	102	100%	102	100%
2017	101	101	100%	101	100%
2018	97	97	100%	97	100%
2019	94	94	100%	94	100%
2020	116	116	100%	n/a	n/a

**Dow Jones Developed Green Real Estate Index**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2016	219	188	96.8%	218	100%
2017	220	198	98.1%	219	100%
2018	211	196	98.1%	211	100%
2019	210	210	100%	210	100%
2020	217	217	100%	n/a	n/a
2021	254	254	100%	n/a	n/a
2022	258	257	100%	n/a	n/a
2023	252	251	100%	n/a	n/a

Trucost Physical Risk Coverage (with respect to underlying index universe):

**Dow Jones Developed Green Real Estate Index**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2016	210	0	0%	185	90.3%
2017	211	0	0%	188	91.0%
2018	203	0	0%	192	93.0%
2019	202	0	0%	198	97.2%
2020	208	204	98.0%	n/a	n/a
2021	243	236	97.4%	n/a	n/a
2022	247	241	98.9%	n/a	n/a
2023	242	239	99.9%	n/a	n/a

# Appendix C

## Physical Risk Max Stock Weight Constraint

This constraint is designed to avoid excessively overweighting companies with high physical risk score. The constraint is applied in proportion to the weight in the parent index.

$$\text{Strategy Weight}_i \leq A_i * \text{Parent Weight}_i$$

where:

$$A_i = \rho * \frac{\text{Physical Risk Score}_i - 100}{\text{Physical Risk Score}_i - 10}$$

$$\text{and } \rho = \frac{\text{Physical Risk Score 95th percentile} - 10}{\text{Physical Risk Score 95th percentile} - 100}$$

where *Physical Risk Score 95th percentile* is the Physical Risk Score value greater than the 95% of the parent index

This constraint is only applied to companies that have a Physical Risk Score higher than 10 and such that  $A_i \leq 4$ .

Any stock with Physical Risk value greater than *Physical Risk Score 95th percentile* cannot have a weight greater than its parent index weight ( $A_i \leq 1$ ). If the Physical Risk score is 100,  $A_i$  will be zero.

For example, if the 95th percentile Physical risk value for the stocks in the universe is 40, if a company has a Physical Score of 30 and a weight in the parent of 2%, the maximal allowed weight in the Dow Jones Developed Green Real Estate Index strategy is  $2\% * 1.75 = 3.5\%$ . If instead its Physical Risk Score were 70, the maximum allowed weight would be  $2\% * 0.25 = 0.5\%$ .

The following table shows the values of the multiplier  $A$  for each Physical Risk Score rounded to the third decimal point, for when the 95th percentile Physical risk value for the stocks in the universe is 40.

Physical Risk Score	A	Physical Risk Score	A	Physical Risk Score	A	Physical Risk Score	A
20	4.000	40	1.000	60	0.400	80	0.143
21	3.591	41	0.952	61	0.382	81	0.134
22	3.250	42	0.906	62	0.365	82	0.125
23	2.962	43	0.864	63	0.349	83	0.116
24	2.714	44	0.824	64	0.333	84	0.108
25	2.500	45	0.786	65	0.318	85	0.100
26	2.313	46	0.750	66	0.304	86	0.092
27	2.147	47	0.716	67	0.289	87	0.084
28	2.000	48	0.684	68	0.276	88	0.077
29	1.868	49	0.654	69	0.263	89	0.070
30	1.750	50	0.625	70	0.250	90	0.063
31	1.643	51	0.598	71	0.238	91	0.056
32	1.545	52	0.571	72	0.226	92	0.049
33	1.457	53	0.547	73	0.214	93	0.042
34	1.375	54	0.523	74	0.203	94	0.036
35	1.300	55	0.500	75	0.192	95	0.029
36	1.231	56	0.478	76	0.182	96	0.023
37	1.167	57	0.457	77	0.172	97	0.017
38	1.107	58	0.438	78	0.162	98	0.011
39	1.052	59	0.418	79	0.152	99	0.006
						100	0.000

# Appendix D

## Methodology Changes

Methodology changes since April 26, 2021, are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
Constituents Weighting - Region	09/20/2024	For each index, divide the underlying universes into broad regions as follows: <ul style="list-style-type: none"> <li>- North America Developed</li> <li>- Europe Developed</li> <li>- Asia Pacific Developed</li> <li>- Emerging Market</li> </ul>	For each index, divide the underlying universes into broad regions as follows: <ul style="list-style-type: none"> <li>- North America Developed</li> <li>- EMEA Developed</li> <li>- Asia Pacific Developed</li> <li>- Emerging Market</li> </ul>
Rebalancing	12/15/2023	Dow Jones Select ESG Real Estate Securities Indices (RESI). The indices rebalance quarterly, effective after the close of the last business day of March, June, September, and December. The rebalancing reference date is the third Friday of March, June, September, and December. The reference universe is the composition of the underlying index at the open of the upcoming rebalancing effective date. As part of the rebalancing process, index composition, shares, and Investable Weight Factors (IWFs) are adjusted, if necessary.	Dow Jones Select ESG Real Estate Securities Indices (RESI). The indices rebalance quarterly, effective after the close of the third Friday of March, June, September, and December. The rebalancing reference date is the last business day of the prior month. The reference universe is the composition of the underlying index at the open of the upcoming rebalancing effective date. As part of the rebalancing process, index composition, shares, and Investable Weight Factors (IWFs) are adjusted, if necessary.
Index Names	09/30/2021	The index names are: <ul style="list-style-type: none"> <li>• Dow Jones Global Select Green RESI</li> <li>• Dow Jones Global Ex-U.S. Select Green RESI</li> <li>• Dow Jones U.S. Select Green REIT Index</li> </ul>	The index names are: <ul style="list-style-type: none"> <li>• Dow Jones Global Select ESG RESI</li> <li>• Dow Jones Global Ex-U.S. Select ESG RESI</li> <li>• Dow Jones U.S. Select ESG REIT Index</li> </ul>
Business Activity Exclusions	09/30/2021	--	As of each rebalancing reference date, companies with specific business activities are excluded from the eligible universe (see table in <i>Eligibility Criteria</i> ).

# Disclaimer

## Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients by providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

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